Radio Structures Ltd

Product catalogue

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Radio Structures Ltd, TRS Complex, Gatelodge close, Round Spinney Industrial Estate, Northampton, NN3 8RJ
Telephone: +44 (0) 1604 790005 Fax: +44(0) 1604 790797 Email: sales@radiostructures.com
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Scope of services

Basic principle of our ethos - If it can be done, then we'll do it!!

Antenna Manufacture

Innovative research, design, testing and manufacture of antennas at our Northampton UK base since 1979, we are proud to have some of the quickest turnaround times in the industry.
Radio Structures antennas have proven to be out performers in the field and our antennas are built to last. Our sometimes unconventional aggressive testing has been able to produce some of the most robust and reliable antennas on the market today. All of our in house manufactured antennas come with full 3 year warranties and are trusted by governments and blue chip companies worldwide.

Supply of Other Manufacturers Goods

Radio Structures have high quality standards and as such we will only supply quality goods from reputable manufacturers, All manufacturers are fully vetted and have to go through numerous ongoing checks including ethical sourcing, environmental and safety standards, we also regularly perform random quality control and safety checks on all products.

Mast, Tower and Structure Fabrications

Radio Structures has been designing, manufacturing, installing, repairing and maintaining masts, towers and structures for over 30 years.
Our structures are supplied fully galvanised to BS EN ISO 1461:2009 and are built to BS specifications.
We have designed and manufactured thousands of bespoke and standard range structures that have various uses - CCTV, Radio links, Wind generators and solar panels to name just a few.
We are fully equipped with the latest equipment to manufacture items from mild Steel and Aluminium.

Laser cutting and engineering

Complete with the latest technically advanced laser cutting and engineering facilities available, Radio Structures are able to produce brackets and parts for almost all types of application, from small part cutting, major steelwork engineering and one off projects, Radio Structures have the facilities to help. Bespoke services suited to the customer needs.

Galvanising / Coating protections

We offer a galvanising service that conforms to BS EN ISO 1461:2009, we also offer additional services such as powder coating and Tower protection painting.

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Scope of services

Installation, Maintenance and Remedial

The Radio Structures IMR service is a leading and innovative response to the current market needs. From installation and maintenance contracts to the yearly safety certification of man safe Latchways and Railok fall protection systems, Radio Structures covers it all.
We also offer discounts on 3+ year contracts.

Delivery

Radio Structures have worldwide delivery options for all of our products and we also offer a worldwide installation service.

Business Partners / Distributor contracts / Trade discounts

We currently have opportunities in the UK and overseas for business partners and distributors.
If you have any interest in becoming a partner or distributor in the UK or overseas and are a professional trading company that has a proven track record for quality control, ethical sourcing and have high health and safety standards then please feel free to contact us for an informal chat, alternatively drop us an email.
We also offer trade discounts on certain product ranges to account customers.

Quality control and warranties

Radio Structures believes in offering only the best quality products and service.
We offer full 3 year no quibble warranties against defects on any of our in house manufactured antennas. Our quality control management systems go past that of our own manufacturing processes to the quality control processes that our suppliers use, we regularly perform random checks on all suppliers and products.

WORLDWIDE
✓ DELIVERY

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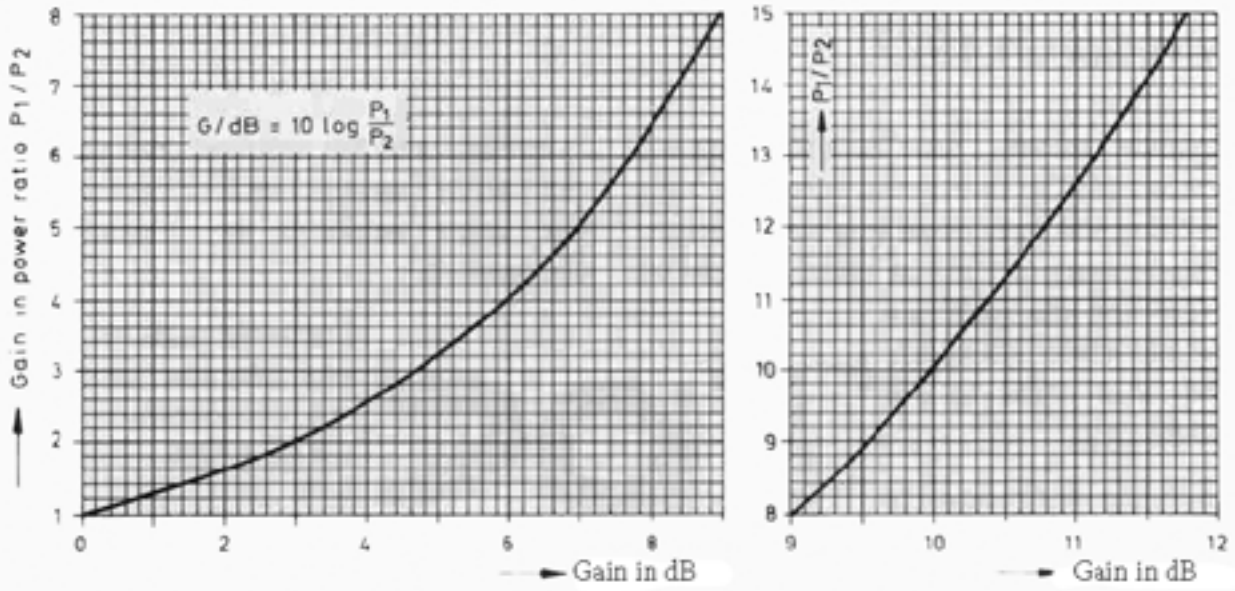
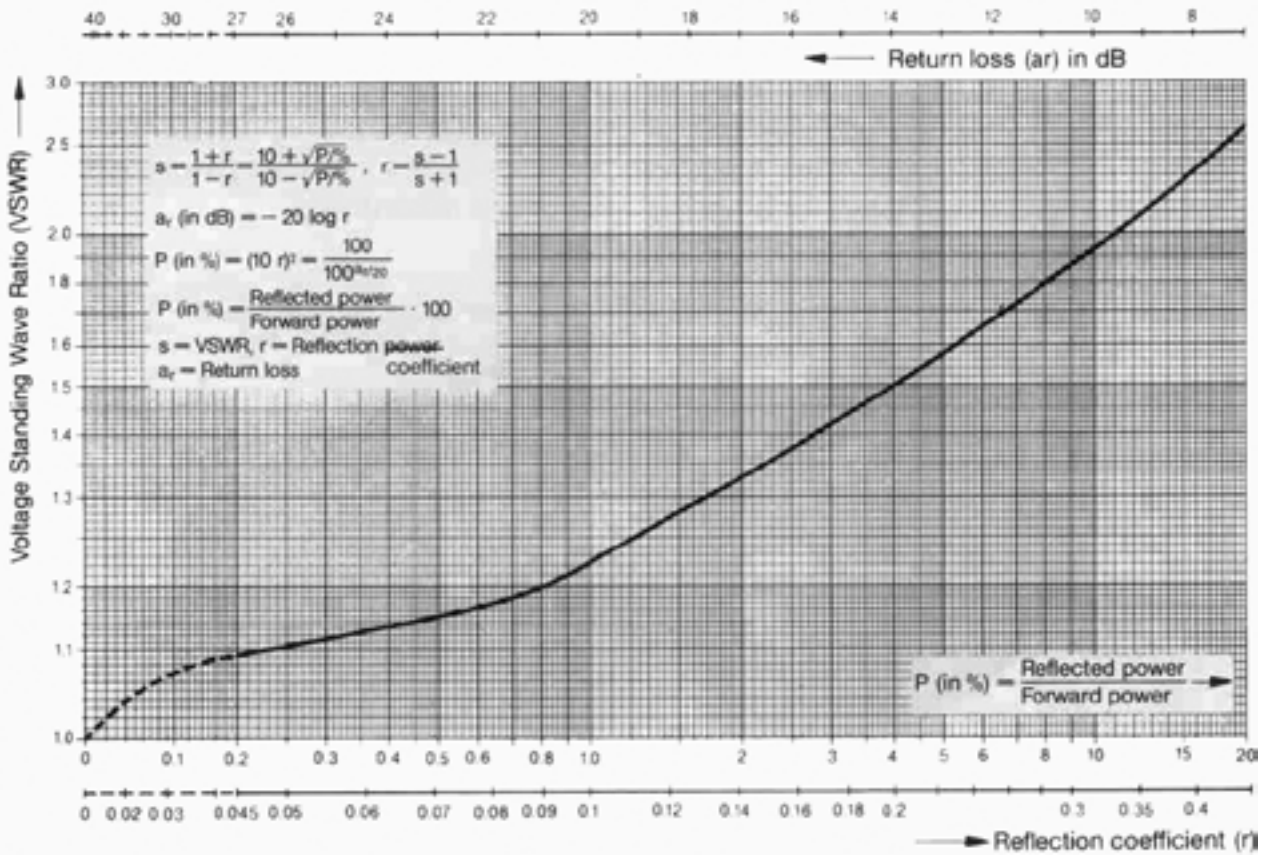
ANTENNA GAIN VSWR / REFLECTED POWER

Antenna Gain in power ratio vs gain in dB



Voltage Standing Wave Ratio (VSWR) vs Reflected Power



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MATCHING HARNESS'S MH/2 - MH/4

Antenna arrays can be built up by stacking and/or baying. This will achieve additional gain and directivity, by phasing two dipoles vertically with the MH2 harness this will obtain a gain of 3bB or 6dB using four dipoles with the MH4 harness

The recommended spacing for particular antenna's vertically stacked are listed in the section below. It is recommended that distances be doubled for talk through applications. The correct phase will only be obtained when the live elements on the dipoles are all upward or downward, when vertically stacked with a matching harness.

Matching harness's stacking distances

Frequency MHz	Stacking Distance	Frequency MHz	Stacking Distance
70	4270mm	190	1570mm
80	3740mm	200	1500mm
90	3330mm	250	1200mm
100	2970mm	300	990mm
120	2490mm	350	860mm
130	2310mm	400	760mm
140	2160mm	450	660mm
150	2010mm	490	610mm
160	1880mm	510	580mm
170	1750mm	550	530mm

Matching harness's type MH2 or MH4 can also be manufactured to include a 5° or 10° electrical down tilt for applications that require a down tilt from the standard E-plane configuration

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CDF/70 Frequency range 69 - 85 MHz

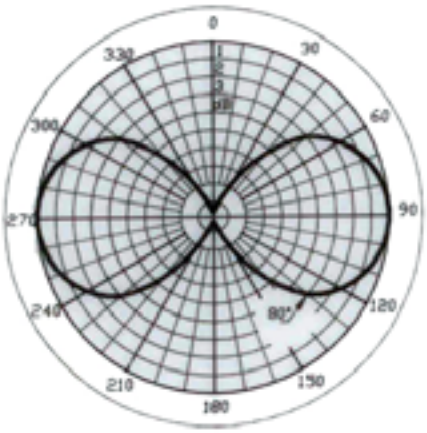
The CDF series folded dipoles are manufactured to a high degree of telecommunications specification

Ideal for wide band applications they can also be stacked vertically and fed in phase using two/four dipoles - Gains of 3dB and 6dB can be obtained

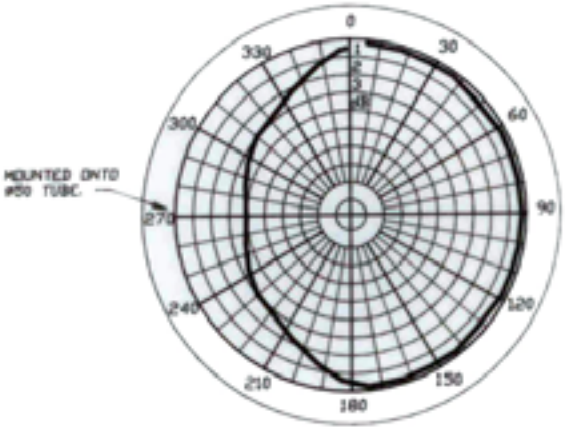
Specifications

Gain over 1/2 wave dipole	Unity
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Bandwidth	+/- 11% of the centre frequency
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg aluminium tube
Support boom length	Approx Length 1372mm
Radiating elements material	3/4" x 16swg aluminium tube
Radiating element length	Approx Length 1702 mm
Castings	Aluminium kemloc
Insulator	Black carbon polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Weight	3.3 Kg
Wind loading	14.9 Kgf (32.4 lbf) @ 160 Kph

E-Plane



H-Plane



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CDF/80 Frequency range 75 - 92 MHz

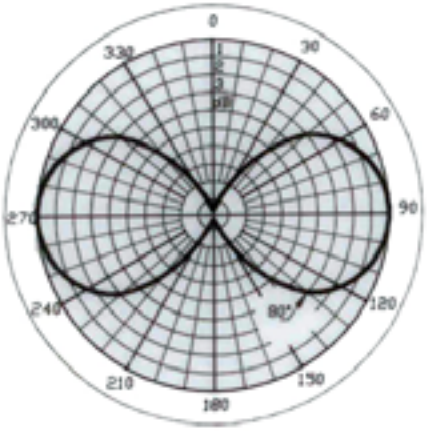
The CDF series folded dipoles are manufactured to a high degree of telecommunications specification

Ideal for wide band applications they can also be stacked vertically and fed in phase using two/four dipoles - Gains of 3dB and 6dB can be obtained

Specifications

Gain over 1/2 wave dipole	Unity
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Bandwidth	+/- 12% of the centre frequency
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213 N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg aluminium tube
Support boom length	Approx Length 1372mm
Radiating elements material	3/4" x 16swg aluminium tube
Radiating element length	Approx Length 1550 mm
Castings	Aluminium kemloc
Insulator	Black carbon polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Weight	3.3 Kg
Wind loading	14.9 Kgf (32.4 lbf) @ 160 Kph

E-Plane



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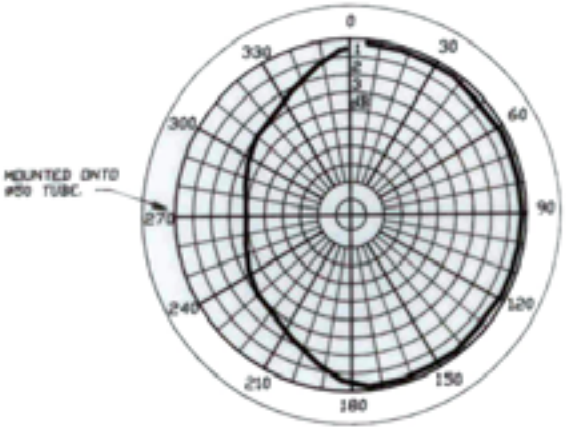

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CDF/90 Frequency range 80 - 98 MHz

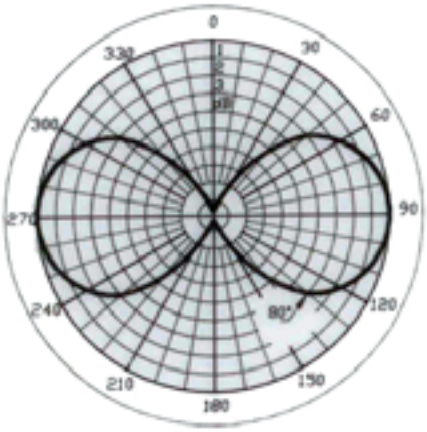
The CDF series folded dipoles are manufactured to a high degree of telecommunications specification

Ideal for wide band applications they can also be stacked vertically and fed in phase using two/four dipoles - Gains of 3dB and 6dB can be obtained

Specifications

Gain over 1/2 wave dipole	Unity
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Bandwidth	+/- 15% of the centre frequency
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg aluminium tube
Support boom length	Approx Length 1372mm
Radiating elements material	3/4" x 16swg aluminium tube
Radiating element length	Approx Length 1499 mm
Castings	Aluminium kemloc
Insulator	Black carbon polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Weight	3.3 Kg
Wind loading	14.9 Kgf (32.4 lbf) @ 160 Kph

E-Plane



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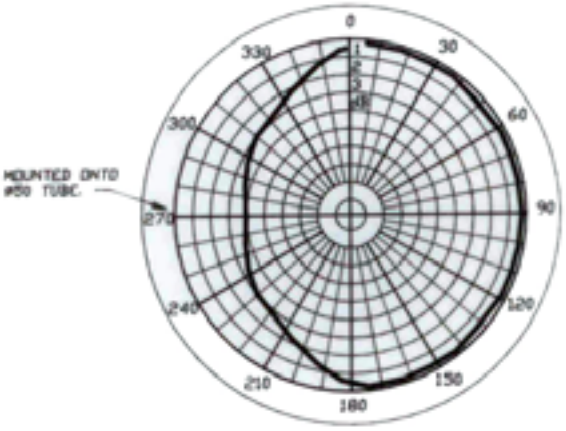

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CDF 104/140 Frequency range 104 - 140 MHz

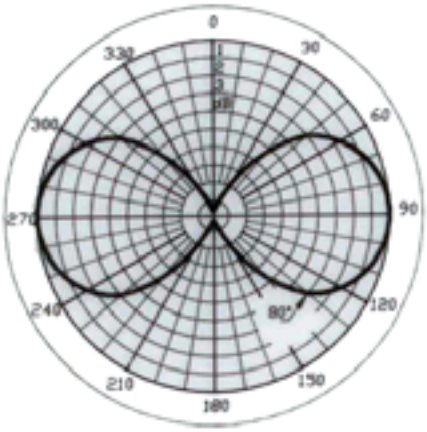
The CDF series folded dipoles are manufactured to a high degree of telecommunications specification

Ideal for wide band applications they can also be stacked vertically and fed in phase using two/four dipoles - Gains of 3dB and 6dB can be obtained

Specifications

Gain over 1/2 wave dipole	**Unity**
V.S.W.R	**<1.5:1**
Maximum input power	**150 Watts**
Input impedance	**50 Ohms**
Bandwidth	**+/- 15% of the centre frequency**
Polarisation	**Vertical or horizontal**
Connection	**3 metre length of RG213**
	N-type socket and PVC sleeve
Support boom material	**1.1/4" x 12swg aluminium tube**
Support boom length	**Approx Length 1015mm**
Radiating elements material	**3/4" x 16swg aluminium tube**
Radiating element length	**Approx Length 1016mm**
Castings	**Aluminium kemloc**
Insulator	**Black carbon polyethylene**
Nuts and bolts	**18/8 stainless steel with nyloc nut**
Weight	**3.3 Kg**
Wind loading	**14.9 Kgf (32.4 lbf) @ 160 Kph**

E-Plane



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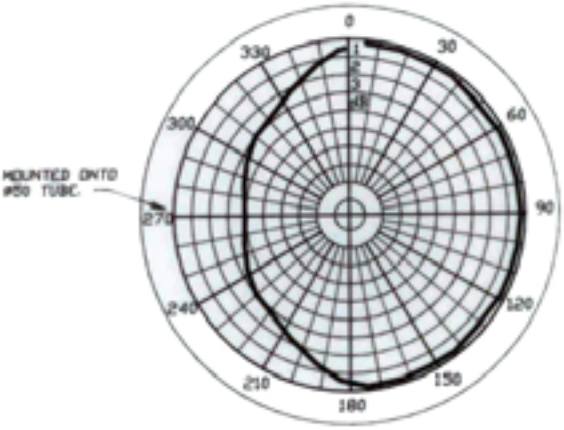

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CDF 139/148 Frequency range 130 - 160 MHz

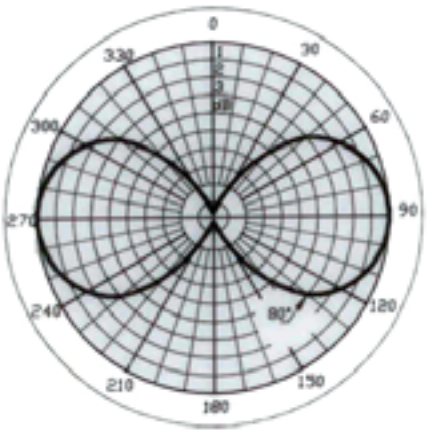
The CDF series folded dipoles are manufactured to a high degree of telecommunications specification

Ideal for wide band applications they can also be stacked vertically and fed in phase using two/four dipoles - Gains of 3dB and 6dB can be obtained

Specifications

Gain over 1/2 wave dipole	Unity
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Bandwidth	+/- 15% of the centre frequency
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213 N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg aluminium tube
Support boom length	Approx Length 1016mm
Radiating elements material	3/4" x 16swg aluminium tube
Radiating element length	Approx Length 889mm
Castings	Aluminium kemloc
Insulator	Black carbon polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Weight	3.3 Kg
Wind loading	14.9 Kgf (32.4 lbf) @ 160 Kph

E-Plane



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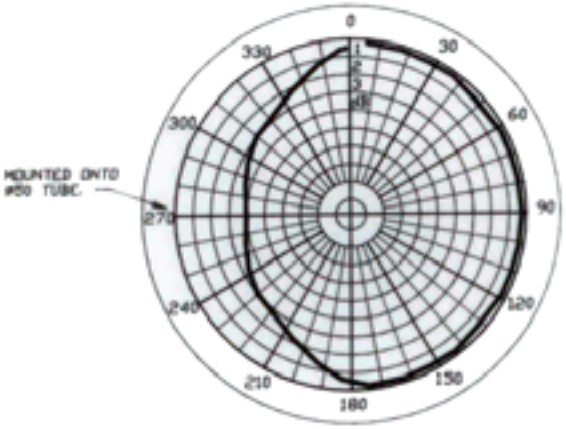

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CDF/165 Frequency range 148 - 180 MHz

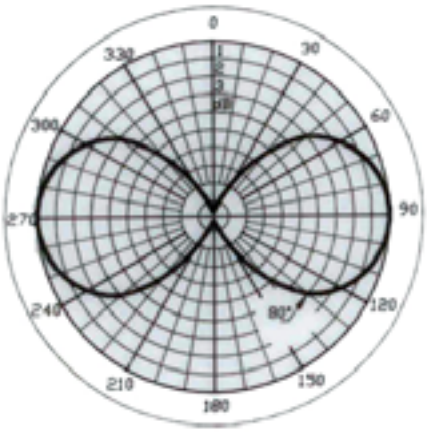
The CDF series folded dipoles are manufactured to a high degree of telecommunications specification

Ideal for wide band applications they can also be stacked vertically and fed in phase using two/four dipoles - Gains of 3dB and 6dB can be obtained

Specifications

Gain over 1/2 wave dipole	Unity
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Bandwidth	+/- 15% of the centre frequency
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg aluminium tube
Support boom length	Approx Length 1016mm
Radiating elements material	3/4" x 16swg aluminium tube
Radiating element length	Approx Length 787mm
Castings	Aluminium kemloc
Insulator	Black carbon polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Weight	3.3 Kg
Wind loading	14.9 Kgf (32.4 lbf) @ 160 Kph

E-Plane



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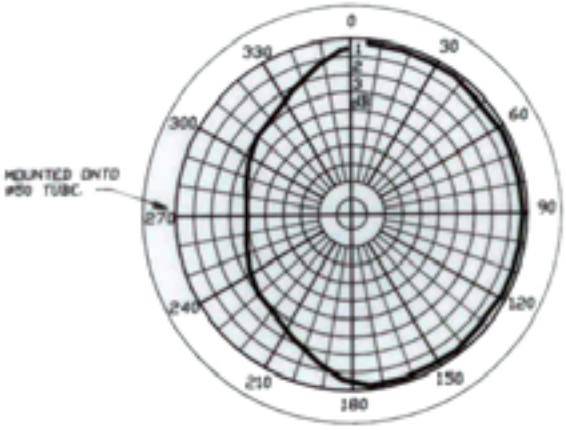

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CDF/195 Frequency range 180 - 225 MHz

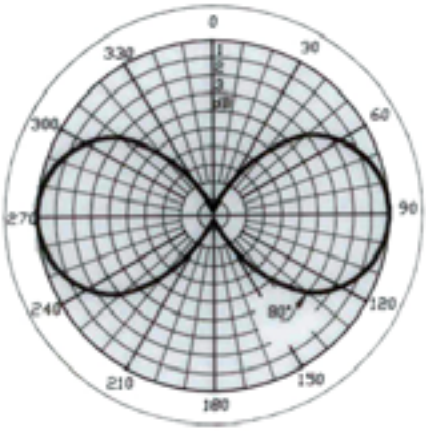
The CDF series folded dipoles are manufactured to a high degree of telecommunications specification

Ideal for wide band applications they can also be stacked vertically and fed in phase using two/four dipoles - Gains of 3dB and 6dB can be obtained

Specifications

Gain over 1/2 wave dipole	**Unity**
V.S.W.R	**<1.5:1**
Maximum input power	**150 Watts**
Input impedance	**50 Ohms**
Bandwidth	**+/- 15% of the centre frequency**
Polarisation	**Vertical or horizontal**
Connection	**3 metre length of RG213**
	N-type socket and PVC sleeve
Support boom material	**1.1/4" x 12swg aluminium tube**
Support boom length	**Approx Length 1016mm**
Radiating elements material	**3/4" x 16swg aluminium tube**
Radiating element length	**Approx Length 686mm**
Castings	**Aluminium kemloc**
Insulator	**Black carbon polyethylene**
Nuts and bolts	**18/8 stainless steel with nyloc nut**
Weight	**3.3 Kg**
Wind loading	**14.9 Kgf (32.4 lbf) @ 160 Kph**

E-Plane



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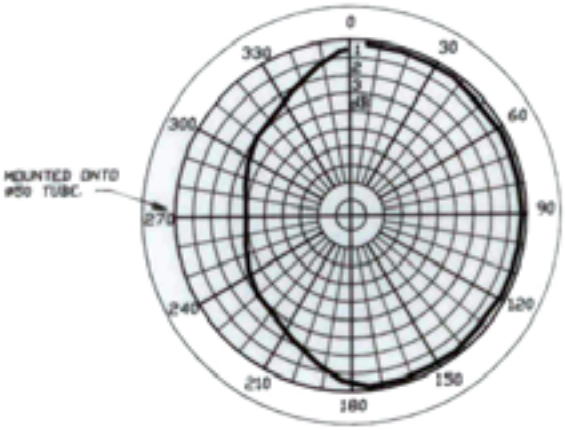

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CDF/450 Frequency range 420 - 490 MHz

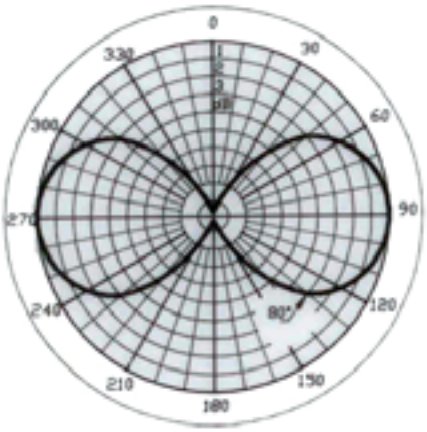
The CDF series folded dipoles are manufactured to a high degree of telecommunications specification

Ideal for wide band applications they can also be stacked vertically and fed in phase using two/four dipoles - Gains of 3dB and 6dB can be obtained

Specifications

Gain over 1/2 wave dipole	Unity
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Bandwidth	+/- 11% of the centre frequency
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213 N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg aluminium tube
Support boom length	Approx Length 914mm
Radiating elements material	3/4" x 16swg aluminium tube
Radiating element length	Approx Length 292mm
Castings	Aluminium kemloc
Insulator	Black carbon polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Weight	3.3 Kg
Wind loading	14.9 Kgf (32.4 lbf) @ 160 Kph

E-Plane



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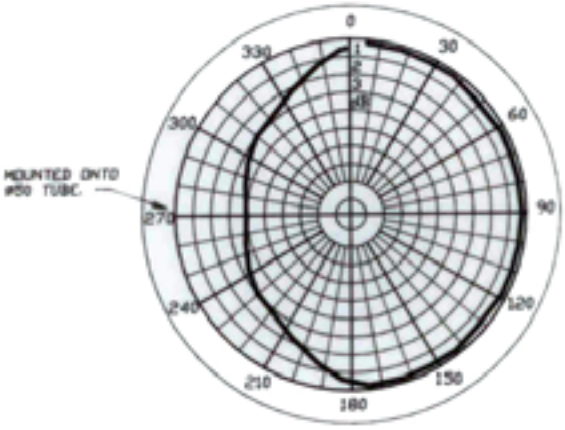

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CDF/600 Frequency range 600 - 700 MHz

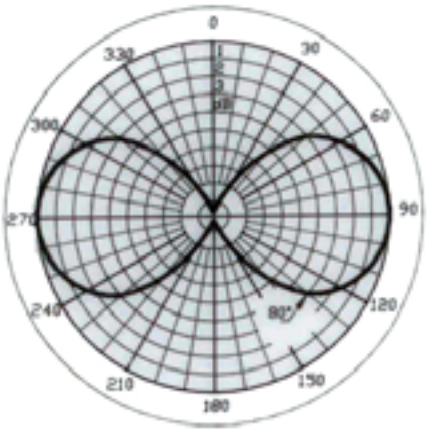
The CDF series folded dipoles are manufactured to a high degree of telecommunications specification

Ideal for wide band applications they can also be stacked vertically and fed in phase using two/four dipoles - Gains of 3dB and 6dB can be obtained

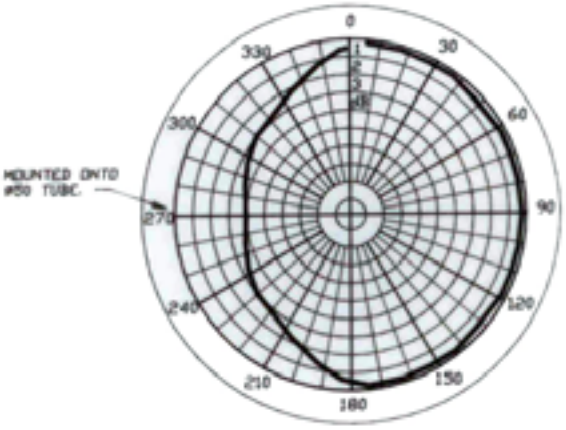
Specifications

Gain over 1/2 wave dipole	Unity
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Bandwidth	+/- 11% of the centre frequency
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg aluminium tube
Support boom length	Approx Length 660mm
Radiating elements material	3/4" x 16swg aluminium tube
Radiating element length	Approx Length 200mm
Castings	Aluminium kemloc
Insulator	Black carbon polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Weight	3.3 Kg
Wind loading	14.9 Kgf (32.4 lbf) @ 160 Kph

E-Plane



H-Plane



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CDF/900 Frequency range 880 - 980 MHz

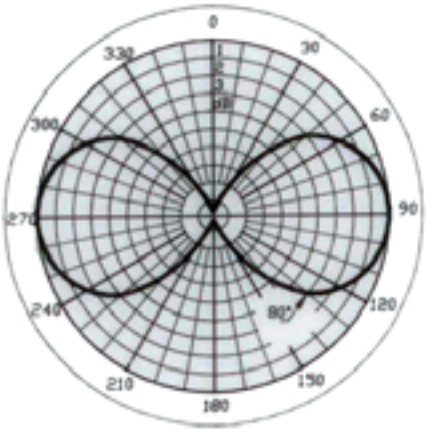
The CDF series folded dipoles are manufactured to a high degree of telecommunications specification

Ideal for wide band applications they can also be stacked vertically and fed in phase using two/four dipoles - Gains of 3dB and 6dB can be obtained

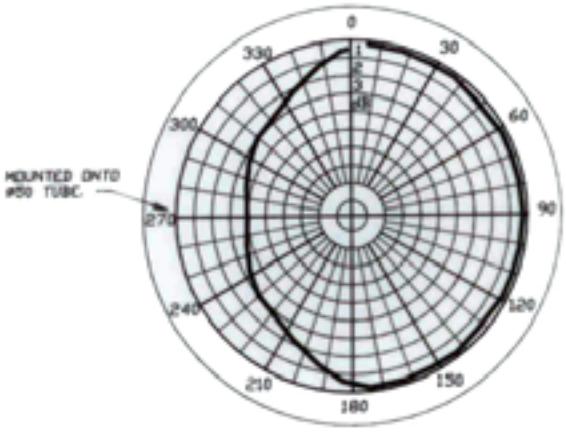
Specifications

Gain over 1/2 wave dipole	**Unity**
V.S.W.R	**<1.5:1**
Maximum input power	**150 Watts**
Input impedance	**50 Ohms**
Bandwidth	**+/- 11% of the centre frequency**
Polarisation	**Vertical or horizontal**
Connection	**3 metre length of RG213**
	N-type socket and PVC sleeve
Support boom material	**1.1/4" x 12swg aluminium tube**
Support boom length	**Approx Length 660mm**
Radiating elements material	**3/4" x 16swg aluminium tube**
Radiating element length	**Approx Length 170mm**
Castings	**Aluminium kemloc**
Insulator	**Black carbon polyethylene**
Nuts and bolts	**18/8 stainless steel with nyloc nut**
Weight	**3.3 Kg**
Wind loading	**14.9 Kgf (32.4 lbf) @ 160 Kph**

E-Plane



H-Plane



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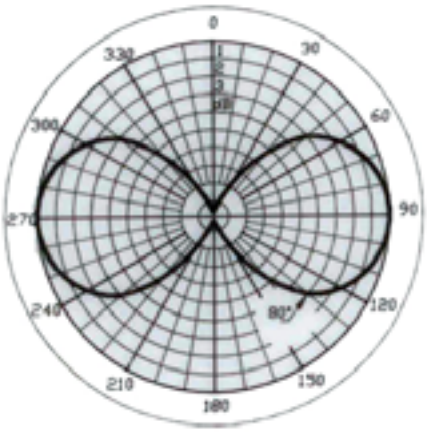
CDH Frequency range 70 - 980 MHz

The CDH series dipoles are a more robust dipole antenna and are rated to a higher maximum input power of 500 Watts.

Specifications

Gain over 1/2 wave dipole	Unity
V.S.W.R	<1.5:1
Maximum input power	500 Watts
Input impedance	50 Ohms
Bandwidth	+/- 12% of the centre frequency
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213 N-type socket and PVC sleeve
Support boom material	1.1/4" x 10swg aluminium tube
Support boom length	Dependent on frequency
Radiating elements material	3/4" x 10swg aluminium tube
Radiating element length	Dependent on frequency
Castings	Aluminium kemloc
Insulator	ABS Housed potted balun
Nuts and bolts	18/8 stainless steel with nyloc nut

E-Plane



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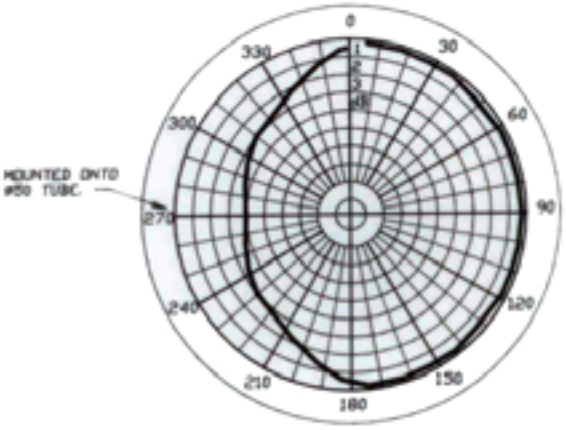

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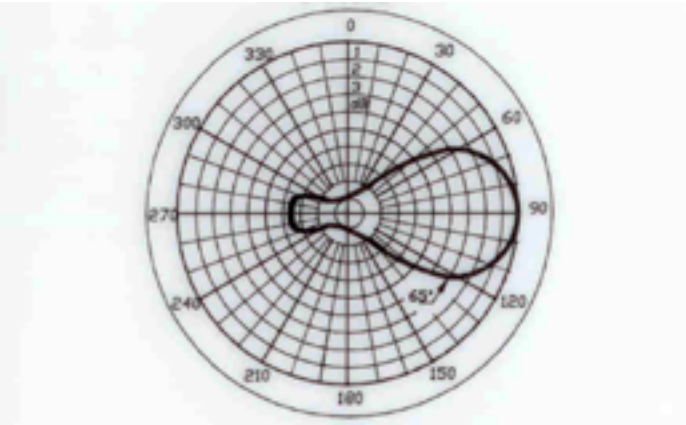
EFC/DD Frequency range 70 - 490 MHz

The EFC/DD series dual folded dipoles are manufactured to a high degree of telecommunications specification. Ideally suited to applications such as coastguards where no back signal is required and minimum interference

Specifications

Gain over 1/2 wave dipole	3dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Half power beam width	E-plane 85 ° H-plane 180 °
Bandwidth	+/- 3% of the centre frequency
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg aluminium tube
Radiating elements material	3/4" x 16swg aluminium tube
Above 390 MHz	1/2" x 16 swg Aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Front to back ratio	Better than 25 dBs

E-Plane



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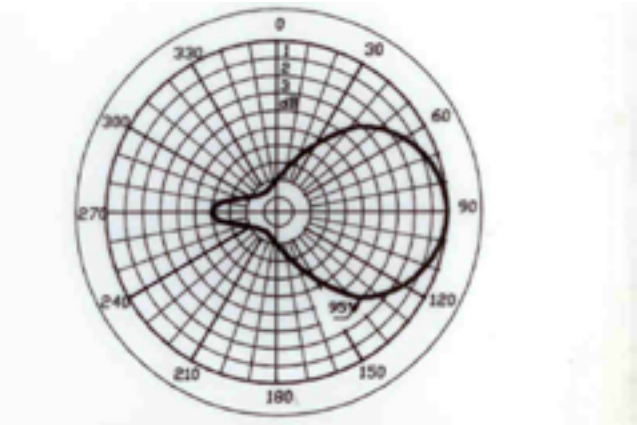

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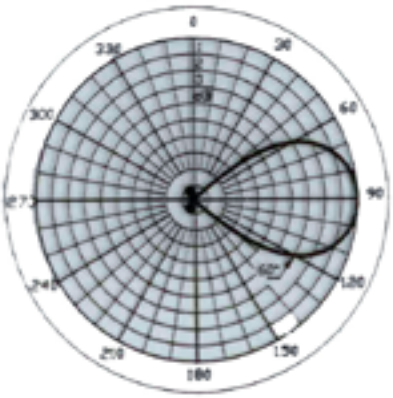
V.C.R Frequency range 130 - 225 MHz

The VCR VHF corner reflector has been designed to meet the requirements of a high gain antenna with front to back ratio better than 25 dB's

Specifications

Gain over 1/2 wave dipole	8 dB
V.S.W.R	<1.5:1
Maximum input power	750 Watts
Input impedance	50 Ohms
Bandwidth	+/- 3% of the centre frequency
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213 N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg aluminium tube
Radiating elements material	3/4" x 16swg Aluminium tube
Reflector grid	3/4" x 12 swg Aluminium tube
Radiating element length	Approx Length 170mm
Castings	Aluminium kemloc
Half power beam width	E-plane 60 ° H-plane 58 °
Front to back ratio	Better than 25 dBs
Nuts and bolts	18/8 stainless steel with nyloc nut
Weight @ 160 MHz	20 Kg
Wind loading	53 Kgf (116 lbf) @ 160 Kph

E-Plane



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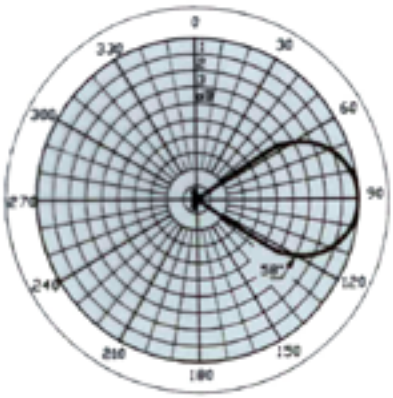

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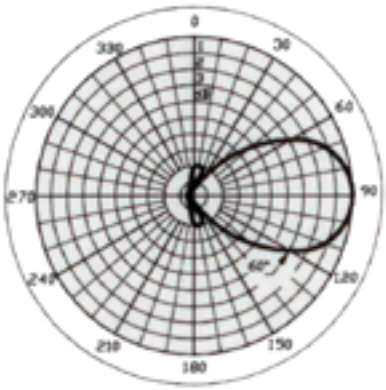
UCR Frequency range 300 - 500 MHz

The UCR UHF corner reflector has been designed to meet the requirements of a high gain antenna with front to back ratio better than 25 dB's

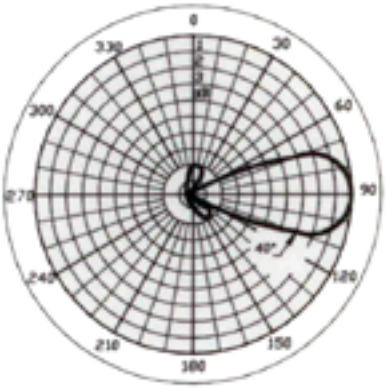
Specifications

Gain over 1/2 wave dipole	11 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Bandwidth	+/- 20% of the centre frequency
Polarisation	Vertical or horizontal
Connection	1 metre length of RG213 N-type socket and PVC sleeve
Support boom material	1.1/2" x 12swg aluminium tube
Radiating elements material	1/2" x 16swg Aluminium tube
Reflector grid	3/8" x 12 swg Aluminium tube
Radiating element length	Approx Length 170mm
Castings	Aluminium kemloc
Half power beam width	E-plane 60 ° H-plane 40 °
Front to back ratio	Better than 25 dBs
Nuts and bolts	18/8 stainless steel with nyloc nut
Weight	13.5 Kg
Wind loading	58Kgf (106 lbf) @ 160 Kph

E-Plane



H-Plane



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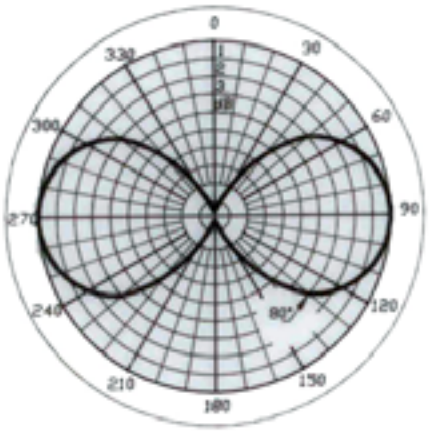
CDB Frequency range 130 - 900 MHz

The CDB series dipole has an increased maximum input power rating, incorporating DC short. ABS sealed and potted.

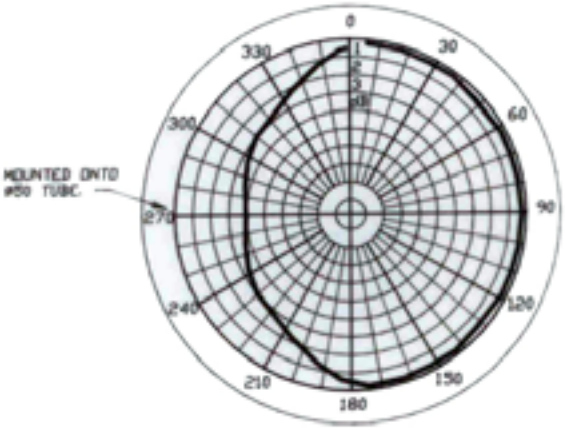
Specifications

Gain over 1/2 wave dipole	Unity
V.S.W.R	<1.5:1
Maximum input power	500 Watts
Input impedance	50 Ohms
Bandwidth	+/- 12% of the centre frequency
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg Aluminium tube
From 500 MHz - 900 MHz	1" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
From 500 MHz - 900 MHz	3/8" x 16 swg Aluminium tube
Castings	Aluminium kemloc
Insulator	ABS housed potted enclosure
Nuts and bolts	18/8 stainless steel with nyloc nut

E-Plane



H-Plane



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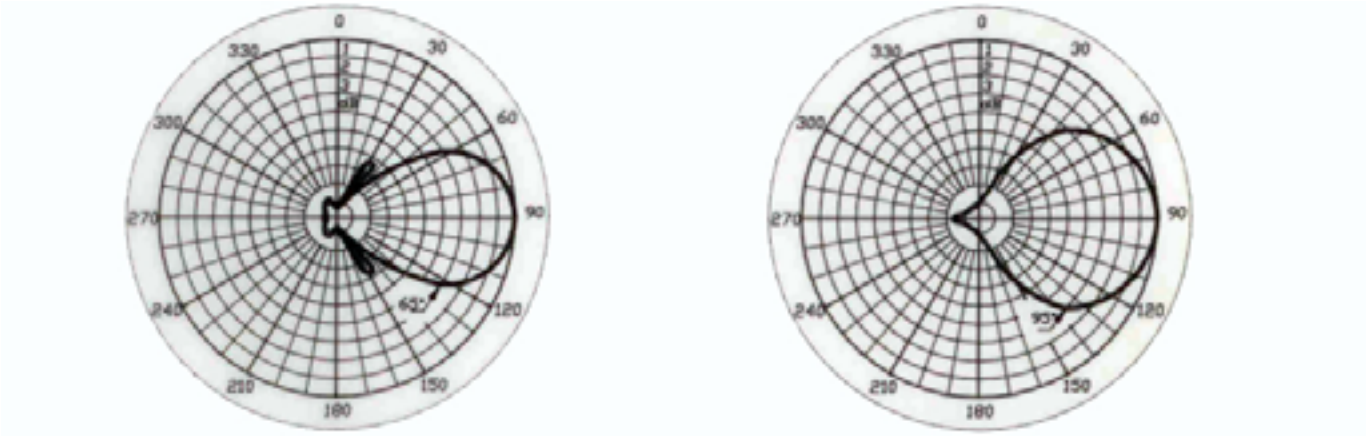
VHF/2 Frequency range 70 - 227 MHz

The 2 element Yagi high gain directional antenna is built to a high degree of telecommunications specification

Specifications

Gain over 1/2 wave dipole	3 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 65° H-plane 95°
Bandwidth	+/- 8% of the centre frequency
Front to back ratio	13 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213 N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg Aluminium tube
Radiating elements material	3/4" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	9 - 18 Kgf @ wind velocity of 160 Kph
Weight	1.7 - 3.5 Kg

E-Plane



H-Plane

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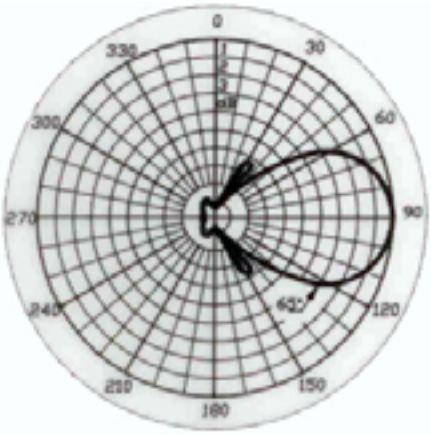
VHF/2N Frequency range 70 - 230 MHz

Twin bar grid reflector two element Yagi antenna
Excellent front to back ratio - Can be stacked or bayed for increased gain.

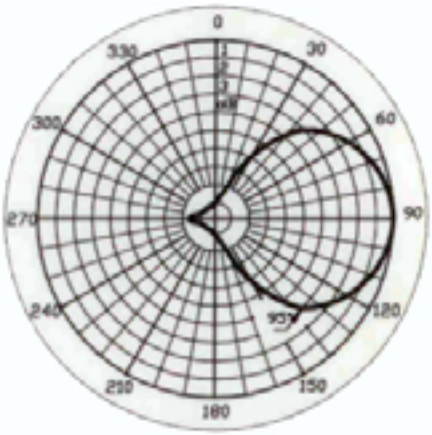
Specifications

Gain over 1/2 wave dipole	3 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 65° H-plane 95°
Bandwidth	+/- 8% of the centre frequency
Front to back ratio	20 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213 N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg Aluminium tube
Radiating elements material	3/4" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	9 - 18 Kgf @ wind velocity of 160 Kph
Weight	1.7 - 3.5 Kg

E-Plane



H-Plane



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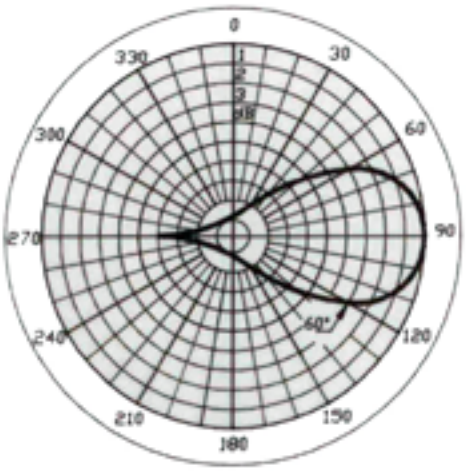
VHF/3 Frequency range 70 - 230 MHz

The 3 element Yagi high gain directional antenna is built to a high degree of telecommunications specification

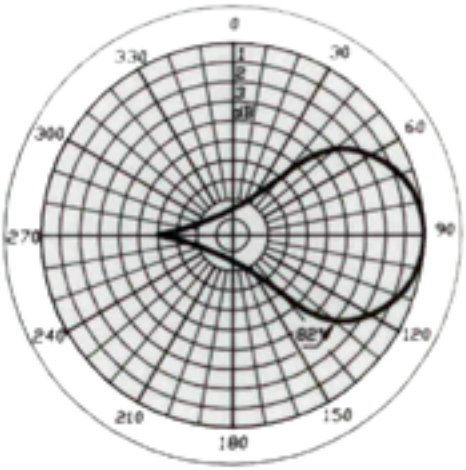
Specifications

Gain over 1/2 wave dipole	6 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 60° H-plane 82°
Bandwidth	+/- 7% of the centre frequency
Front to back ratio	18 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213 N-type socket and PVC sleeve
Support boom material	1.1/4" x 12swg Aluminium tube
Radiating elements material	3/4" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	7.4- 22 Kgf @ wind velocity of 160 Kph
Weight	2 - 4.5 Kg

E-Plane



H-Plane



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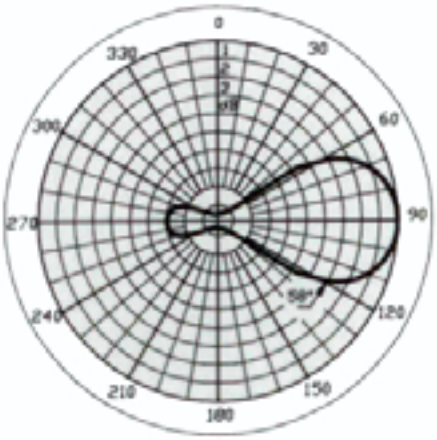
VHF/4 Frequency range 65 - 230 MHz

The 4 element Yagi high gain directional antenna is built to a high degree of telecommunications specification

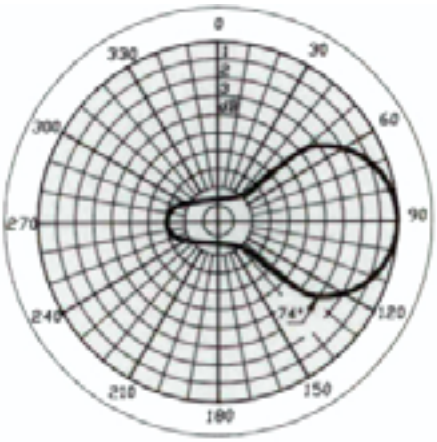
Specifications

Gain over 1/2 wave dipole	7.5 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 58° H-plane 74°
Bandwidth	+/- 6% of the centre frequency
Front to back ratio	15 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 10swg Aluminium tube
Radiating elements material	3/4" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	16 Kgf @ wind velocity of 160 Kph
Weight	4 Kg

E-Plane



H-Plane



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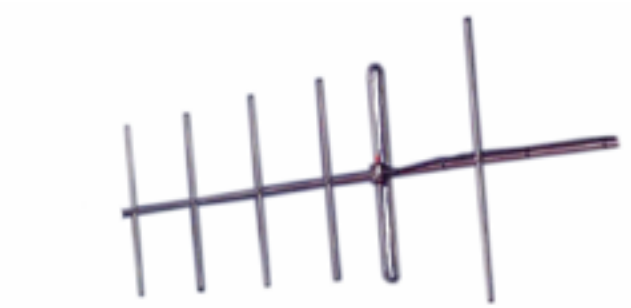
VHF/6 Frequency range 85 - 230 MHz

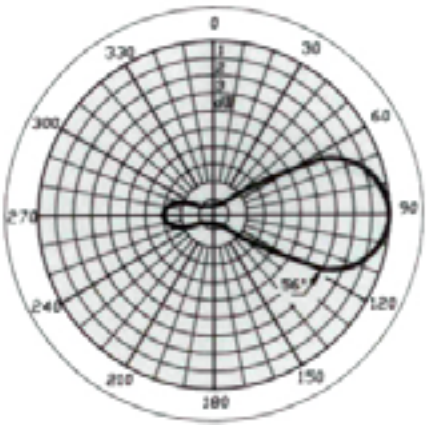


The 6 element Yagi high gain directional antenna is built to a high degree of telecommunications specification

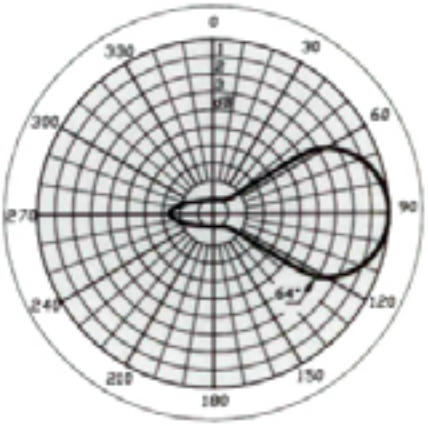
Specifications

Gain over 1/2 wave dipole	8.5 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 56° H-plane 64°
Bandwidth	+/- 5 % of the centre frequency
Front to back ratio	15 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 10swg Aluminium tube
Radiating elements material	3/4" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	18 Kgf @ wind velocity of 160 Kph
Weight	4.5 Kg

E-Plane



H-Plane



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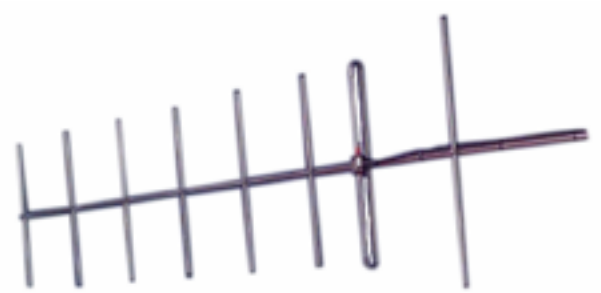
VHF/8 Frequency range 137 - 230 MHz

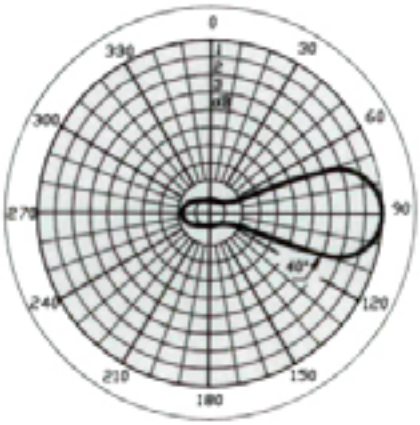


The VHF series directional Yagi antenna.
Can be stacked or bayed for increased gain
Incorporating DC short

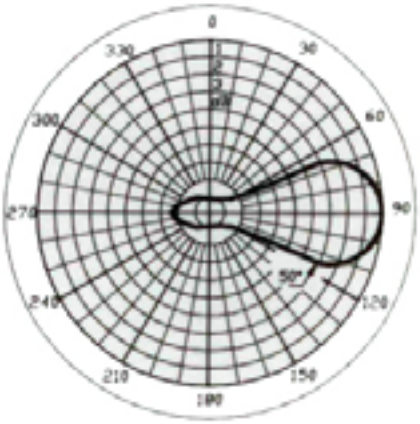
Specifications

Gain over 1/2 wave dipole	10 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 40° H-plane 50°
Bandwidth	+/- 4 % of the centre frequency
Front to back ratio	20 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 10swg Aluminium tube
Radiating elements material	3/4" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	20 Kgf @ wind velocity of 160 Kph
Weight	5 Kg

E-Plane



H-Plane



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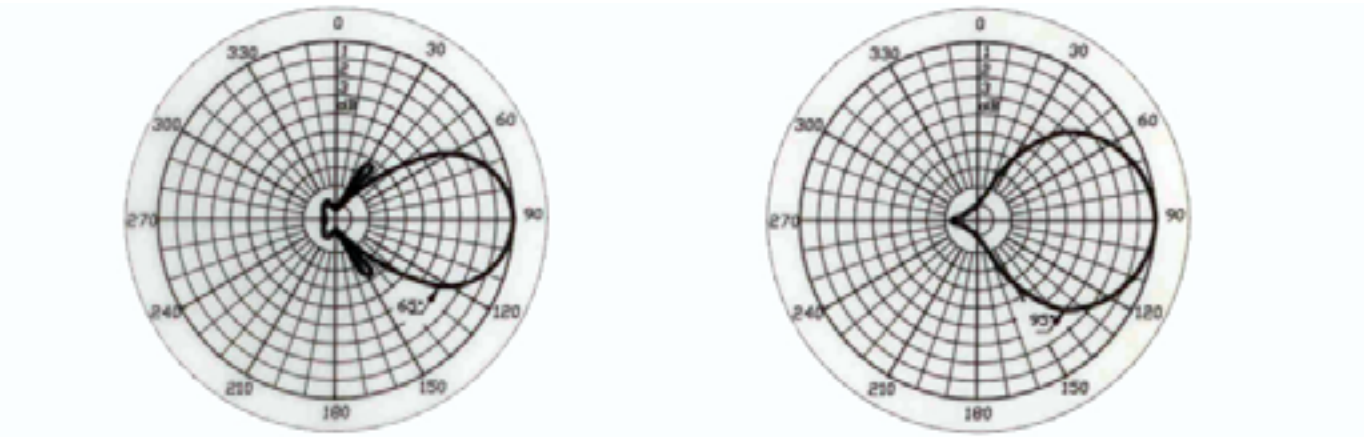
UHF/2 Frequency range 390 - 730 MHz

The UHF series directional Yagi antenna.
Can be stacked or bayed for increased gain
Incorporating DC short

Specifications

Gain over 1/2 wave dipole	3 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 65° H-plane 95°
Bandwidth	+/- 8 % of the centre frequency
Front to back ratio	13 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	5 Kgf @ wind velocity of 160 Kph
Weight	1.1 Kg

E-Plane



H-Plane

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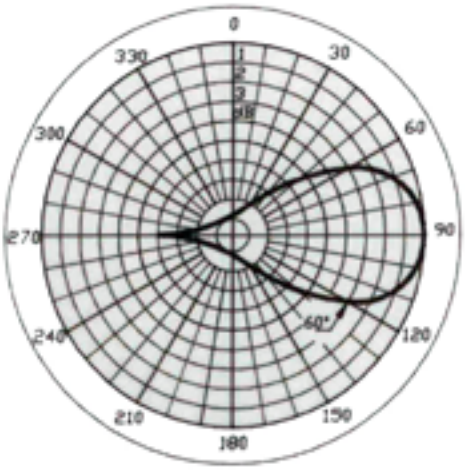
UHF/3 Frequency range 390 - 500 MHz

The UHF series directional Yagi antenna.
Can be stacked or bayed for increased gain
Incorporating DC short

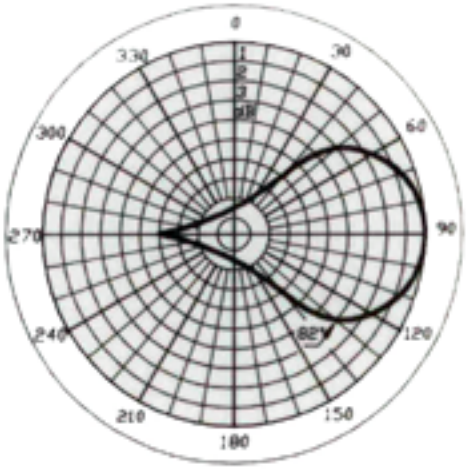
Specifications

Gain over 1/2 wave dipole	6 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 60° H-plane 82°
Bandwidth	+/- 7 % of the centre frequency
Front to back ratio	18 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	4.5 Kgf @ wind velocity of 160 Kph
Weight	1.3 Kg

E-Plane



H-Plane



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Telephone: +44 (0) 1604 790005 Fax: +44(0) 1604 790797 Email: sales@radiostructures.com
www.radiostructures.com

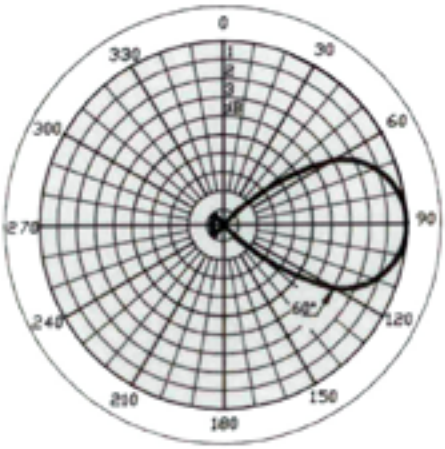
UHF/3 GR Frequency range 390 - 500 MHz

The UHF series directional grid Yagi antenna.
Can be stacked or bayed for increased gain
Incorporating DC short

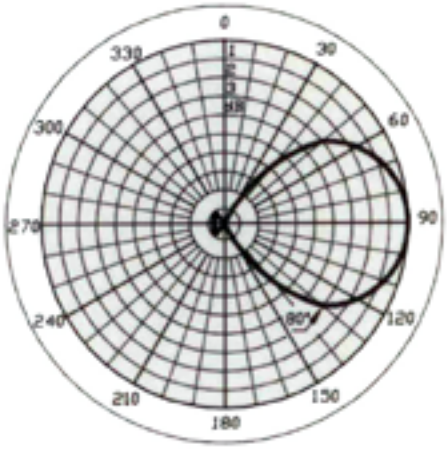
Specifications

Gain over 1/2 wave dipole	6 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 60° H-plane 80°
Bandwidth	+/- 7 % of the centre frequency
Front to back ratio	25 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	5 Kgf @ wind velocity of 160 Kph
Weight	1.7 Kg

E-Plane



H-Plane



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www.radiostructures.com 2013 product catalogue

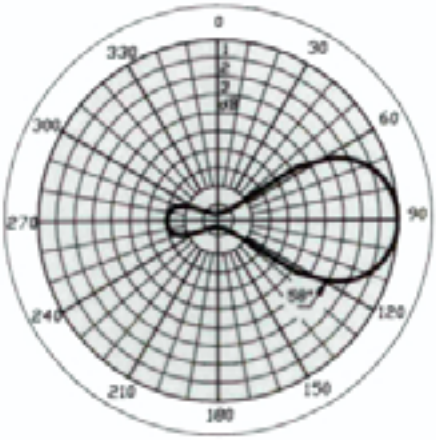
UHF/4 Frequency range 320 - 500 MHz

The UHF series directional Yagi antenna.
Can be stacked or bayed for increased gain
Incorporating DC short

Specifications

Gain over 1/2 wave dipole	7.5 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 58° H-plane 74°
Bandwidth	+/- 6 % of the centre frequency
Front to back ratio	15 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213 N-type socket and PVC sleeve
Support boom material	1.1/4" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	6 Kgf @ wind velocity of 160 Kph
Weight	2.3 Kg

E-Plane



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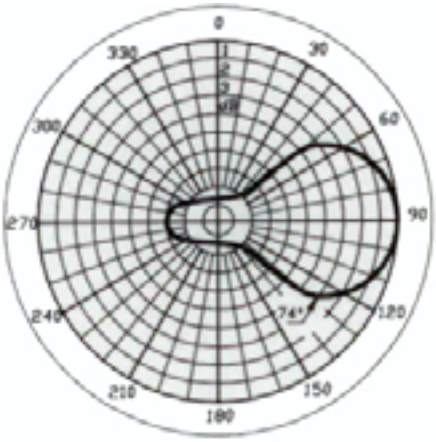

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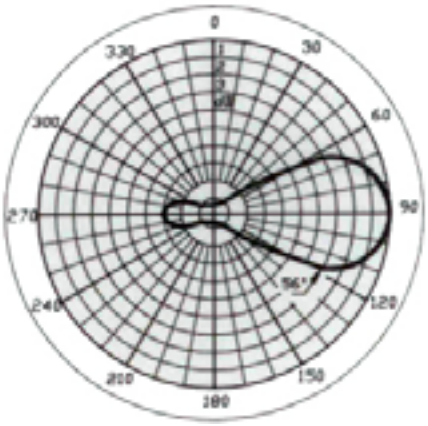
UHF/6 Frequency range 300 - 500 MHz

The UHF series directional Yagi antenna.
Can be stacked or bayed for increased gain
Incorporating DC short

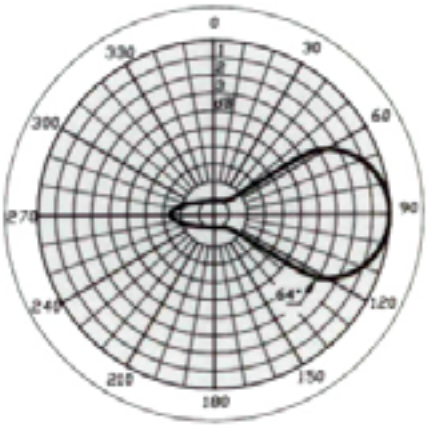
Specifications

Gain over 1/2 wave dipole	8.5 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 56° H-plane 64°
Bandwidth	+/- 5 % of the centre frequency
Front to back ratio	16 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213 N-type socket and PVC sleeve
Support boom material	1.1/4" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	10 Kgf @ wind velocity of 160 Kph
Weight	2.7 Kg

E-Plane



H-Plane



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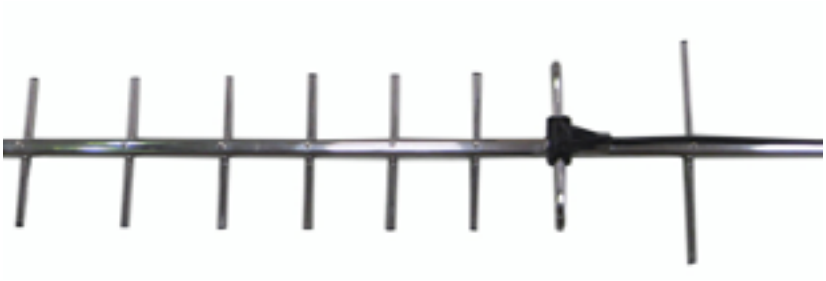
UHF/8 Frequency range 350 - 550 MHz

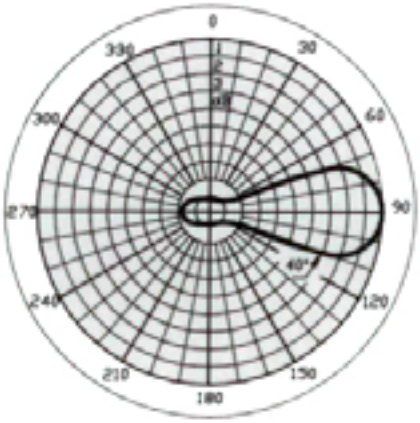


The 8 element Yagi high gain directional antenna is built to a high degree of telecommunications specification

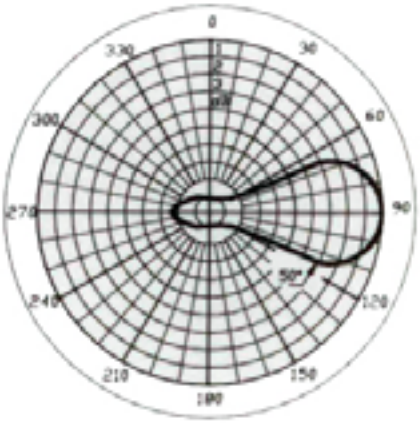
Specifications

Gain over 1/2 wave dipole	10 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 40° H-plane 50°
Bandwidth	+/- 4 % of the centre frequency
Front to back ratio	20 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	12 Kgf @ wind velocity of 160 Kph
Weight	3 Kg

E-Plane



H-Plane



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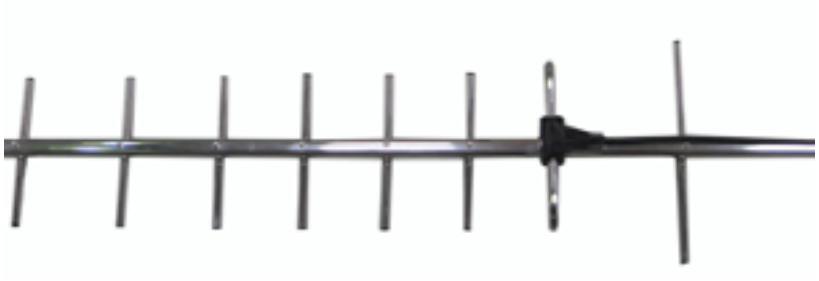
UHF/8 GR Frequency range 300 - 500 MHz

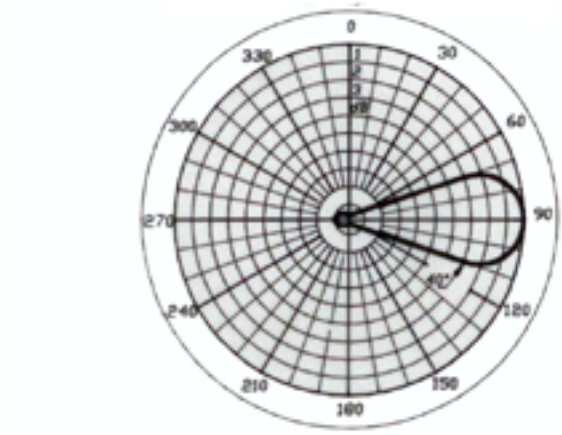


The 8 element grid Yagi high gain directional antenna is built to a high degree of telecommunications specification

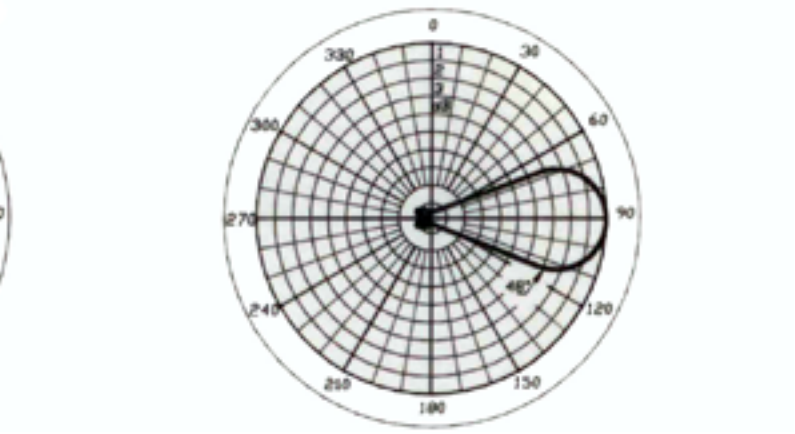
Specifications

Gain over 1/2 wave dipole	10 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 40° H-plane 48°
Bandwidth	+/- 4.5 % of the centre frequency
Front to back ratio	25 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	13 Kgf @ wind velocity of 160 Kph
Weight	3.2 Kg

E-Plane



H-Plane



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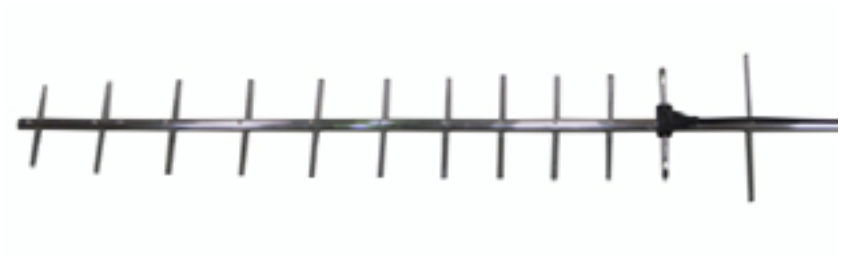
UHF/12 Frequency range 300 - 500 MHz

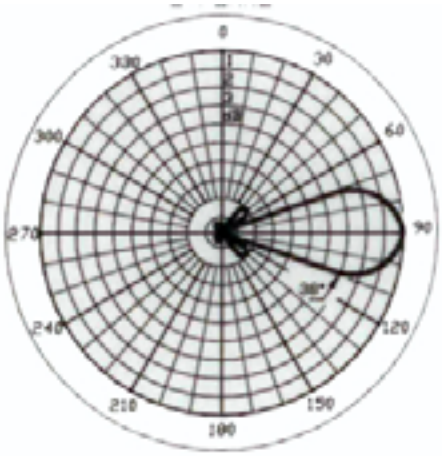


The 12 element Yagi high gain directional antenna is built to a high degree of telecommunications specification

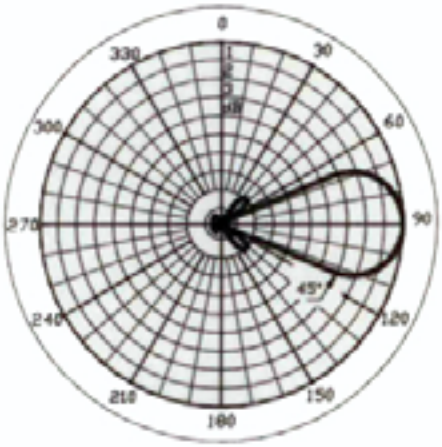
Specifications

Gain over 1/2 wave dipole	12 dB
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Beam width	E-plane 38° H-plane 45°
Bandwidth	+/- 4 % of the centre frequency
Front to back ratio	20 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213 N-type socket and PVC sleeve
Support boom material	1.1/4" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	14 Kgf @ wind velocity of 160 Kph
Weight	4 Kg
Length @ 450 MHz	2.3 metres

E-Plane



H-Plane



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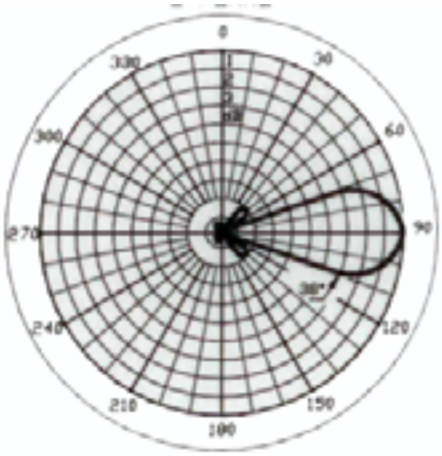
UHF/12 GR Frequency range 300 - 500

The 12 element grid reflector Yagi high gain directional antenna is built to a high degree of telecommunications specification

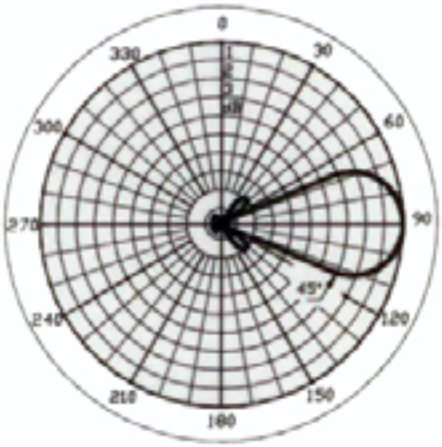
Specifications

Gain over 1/2 wave dipole	12 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 38° H-plane 45°
Bandwidth	+/- 4 % of the centre frequency
Front to back ratio	25 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	15 Kgf @ wind velocity of 160 Kph
Weight	4.5 Kg
Length @ 430 MHz	2.3 metres

E-Plane



H-Plane



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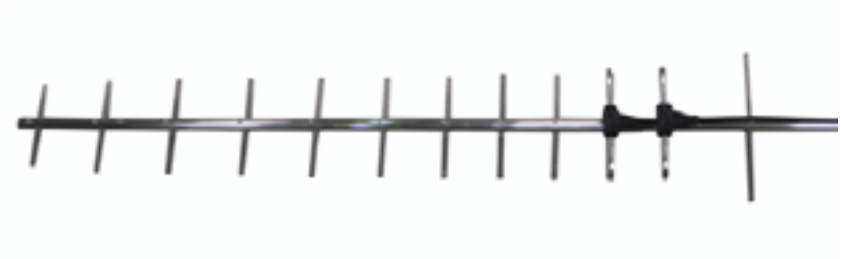
UHF/12 DD Frequency range 300 - 500 MHz

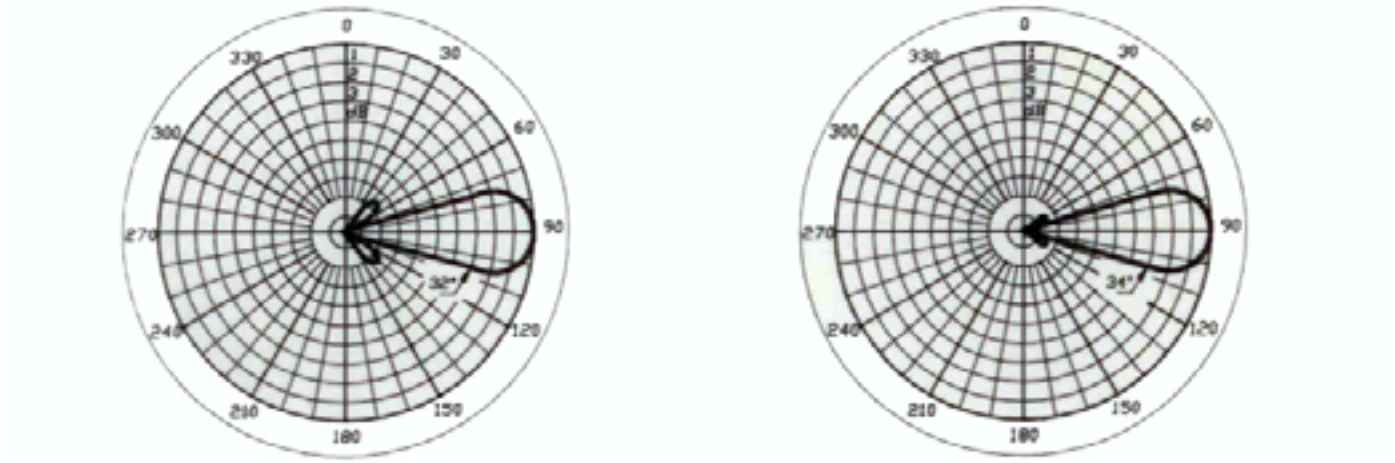


The 12 element double dipole Yagi high gain directional antenna is built to a high degree of telecommunications specification

Specifications

Gain over 1/2 wave dipole	12 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 32° H-plane 34°
Bandwidth	+/- 4 % of the centre frequency
Front to back ratio	Better than 25 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	15 Kgf @ wind velocity of 160 Kph
Weight	4.6 Kg
Length	2.4 metres

E-Plane



H-Plane

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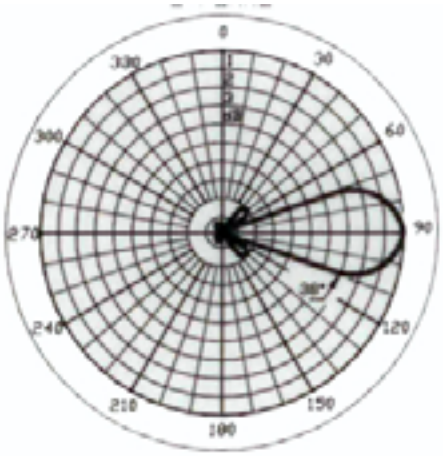
UHF/12-900 Frequency range 890 - 960 MHz

The UHF series directional Yagi antenna. Can be stacked or bayed for increased gain Incorporating DC short, ABS box sealed and potted.

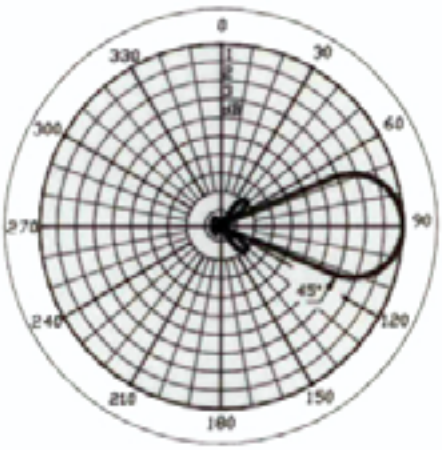
Specifications

Gain over 1/2 wave dipole	12 dB
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Beam width	E-plane 38° H-plane 45°
Polarisation	Vertical or horizontal
Connection	300mm UR67 with N-Type socket and PVC sleeve
Support boom material	1" x 12 swg Aluminium tube Length 1041mm
Radiating elements material	3/8" x 16swg aluminium tube length 118mm
Castings	Aluminium kemloc
Insulator	ABS sealed and potted
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	7.4 Kgf @ wind velocity of 160 Kph
Weight	2.4 Kg

E-Plane



H-Plane



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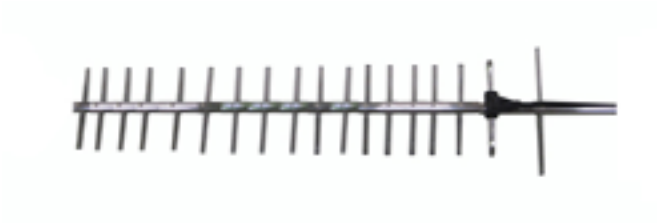
UHF/18 Frequency range 300 - 500 MHz

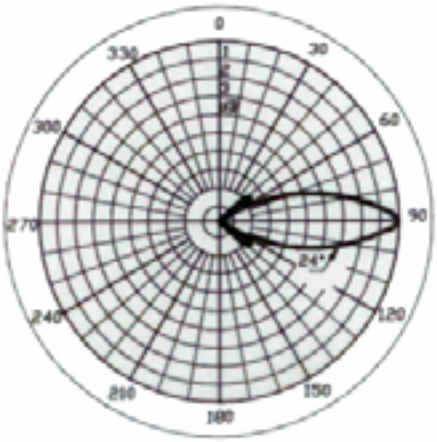


The UHF series directional Yagi antenna.
Can be stacked or bayed for increased gain
Incorporating DC short

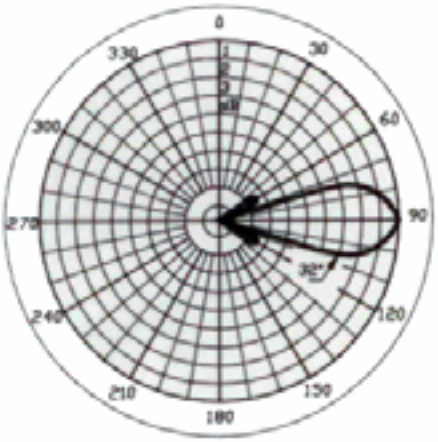
Specifications

Gain over 1/2 wave dipole	15 dB
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Beam width	E-plane 24° H-plane 32°
Bandwidth	+/- 4 % of the centre frequency
Front to back ratio	25 dB
Polarisation	Vertical or horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	21.8 Kgf @ wind velocity of 160 Kph
Weight	6.5 Kg
Length	4.3 metres

E-Plane



H-Plane



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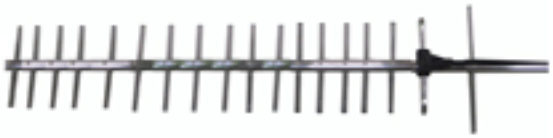
UHF/18-900 Frequency range 890 - 960 MHz

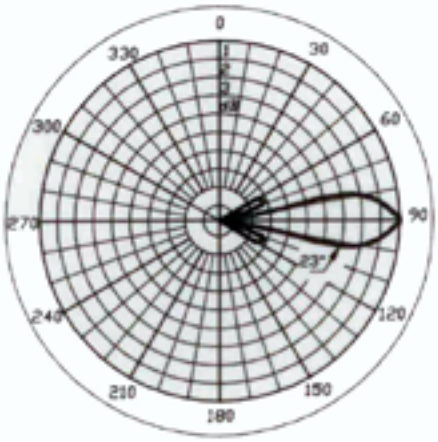


The UHF series directional Yagi antenna.
Can be stacked or bayed for increased gain
Incorporating DC short, ABS box sealed and potted.

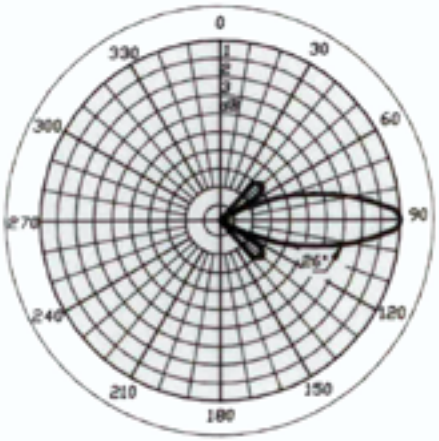
Specifications

Gain over 1/2 wave dipole	15 dB
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Beam width	E-plane 23° H-plane 26°
Bandwidth	+/- 3 % of the centre frequency
Front to back ratio	25 dB
Polarisation	Vertical or horizontal
Connection	300mm length of RG213
	N-type socket and PVC sleeve
Support boom material	1" x 10 swg Aluminium tube Length 1572mm
Radiating elements material	3/8" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	17.2 Kgf @ wind velocity of 160 Kph
Weight	3.4 Kg

E-Plane



H-Plane



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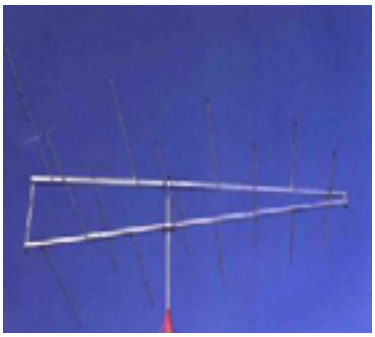
L.P.A.250 Frequency range 70 - 500 MHz



7.5 dB gain over 1/2 wave dipole

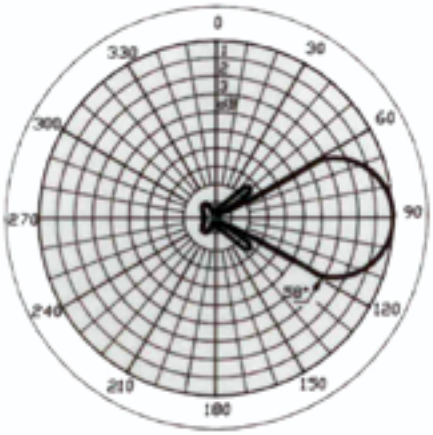
Robust and reliable

Broad bandwidth

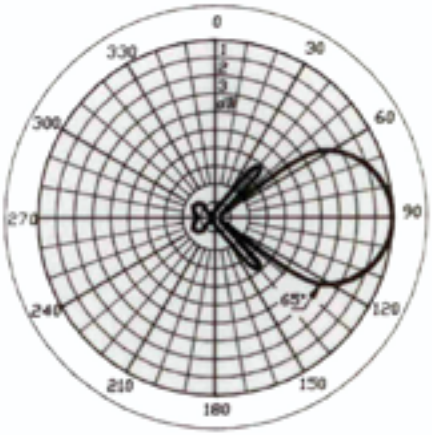
Specifications

Gain over 1/2 wave dipole	7.5 dB
V.S.W.R	<1.5:1
Input impedance	50 Ohms
Beam width	E-plane 58° H-plane 65°
Bandwidth	70 - 500 MHz
Front to back ratio	22 dB
Polarisation	Vertical or horizontal
Connection	N-type socket and PVC sleeve
Support boom material	1.1/4" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	41 Kgf @ wind velocity of 160 Kph
Weight	17 Kg
Length	2.7 metres

E-Plane



H-Plane



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Telephone: +44 (0) 1604 790005 Fax: +44(0) 1604 790797 Email: sales@radiostructures.com
www.radiostructures.com

L.P.A.650 Frequency range 450 - 980 MHz

8 dB gain over 1/2 wave dipole

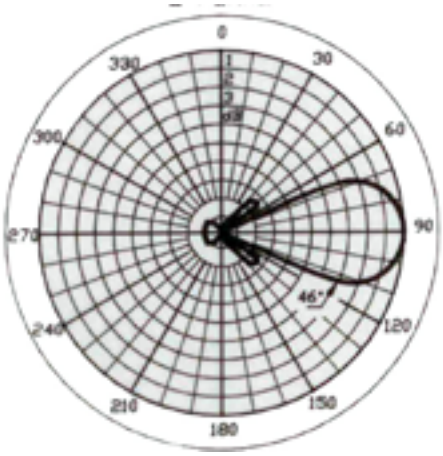
Robust and reliable

Broad bandwidth

Specifications

Gain over 1/2 wave dipole	8 dB
V.S.W.R	<1.5:1
Input impedance	50 Ohms
Maximum input power	200 Watts
Beam width	E-plane 46° H-plane 56°
Polarisation	Vertical or horizontal
Connection	RG58 cable with N-type socket and PVC sleeve
Support boom material	3/4" x 16 swg Aluminium tube
Radiating elements material	3/8" solid aluminium bar
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	11 Kgf @ wind velocity of 160 Kph
Weight	3.2 Kg

E-Plane



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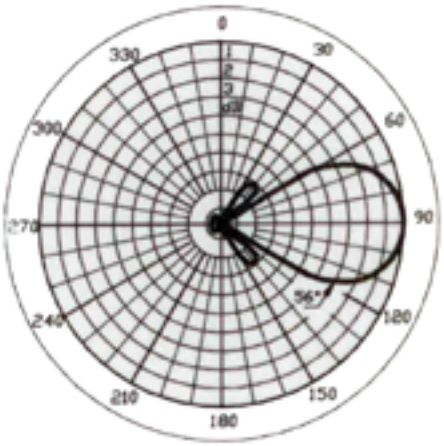

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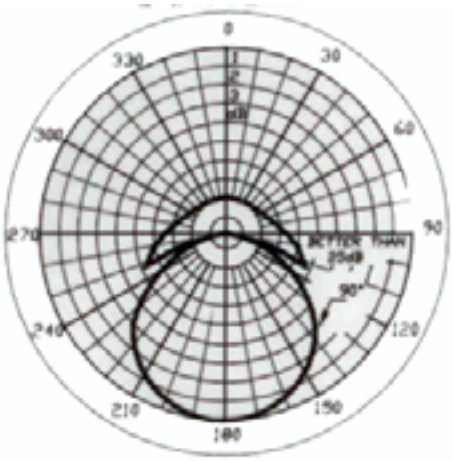
U.P.A. Frequency range 400 - 500 MHz

The UPA series antenna is a downfire antenna.
Upfire versions also available.
It was designed specifically for the purpose of onsite radio paging systems.

Specifications

Gain over 1/2 wave dipole	6 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 90° H-plane 360° (omni)
Bandwidth	+/- 4 % of centre frequency
Polarisation	Vertical
Connection	N- type socket
Support boom material	1.1/2" x 18 swg Aluminium tube
Radiating elements material	3/8" Aluminium rod
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	5 Kgf @ wind velocity of 160 Kph
Weight	1 Kg
Length	0.8 metres

E & H Plane



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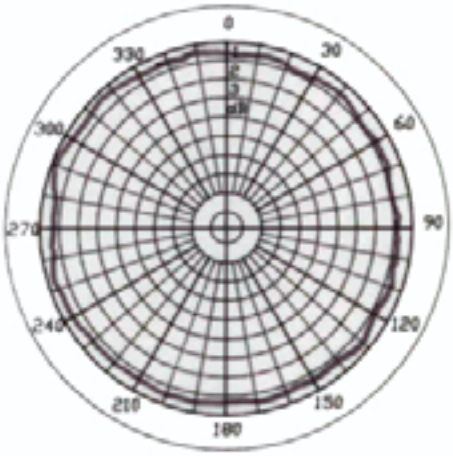

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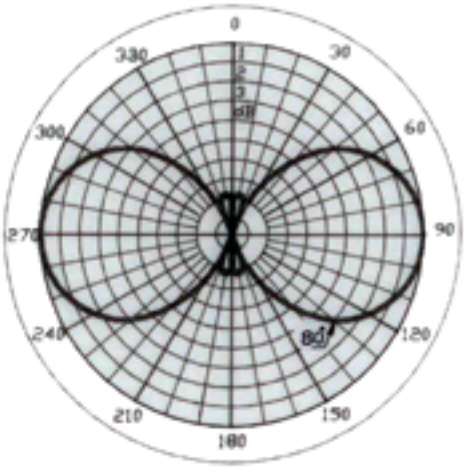
ENF series Frequency range 50 - 500 MHz

The ENF series omni directional antennas are built using only high quality and long lasting components.
These antennas have been built to a high telecommunications specification and can withstand the harshest environmental conditions

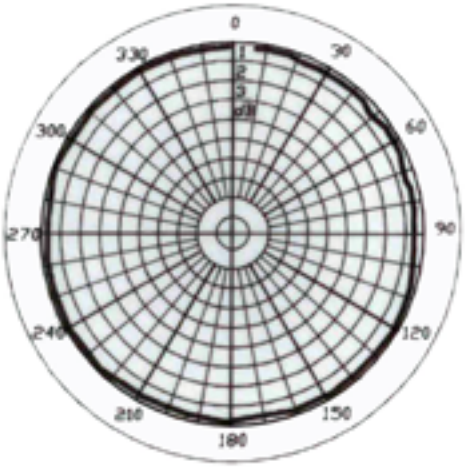
Specifications

Gain over 1/2 wave dipole	Unity
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 80° H-plane 360° (omni)
Bandwidth	+/- 4 % of centre frequency
Polarisation	Vertical
Connection	Rg213 cable with N- type socket
Shroud	Reinforced glass fibre tube
Base section	1.1/2 x 12 swg Aluminium tube
Radiating elements	Brass plasfilm coated
Wind loading	2 - 14 Kgf @ wind velocity of 160 Kph
Weight	0.9 - 1.2 Kg

E-Plane



H-Plane



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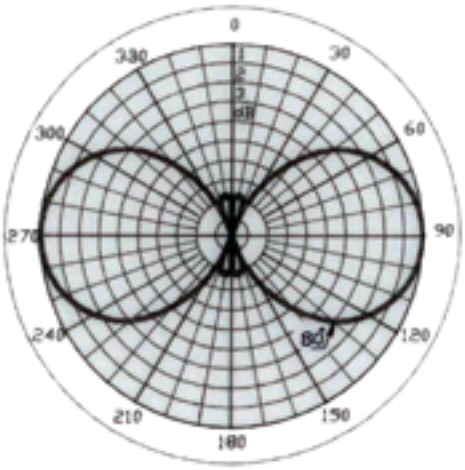
ENF/EXE Frequency range 140 - 500 MHz

The ENF/EXE series is designed for the petro chemicals industry where safety is a critical factor, completely sealed using silicone, O rings and a hawke eye glande.
Also incorporating amoured RG cable for severance safety.

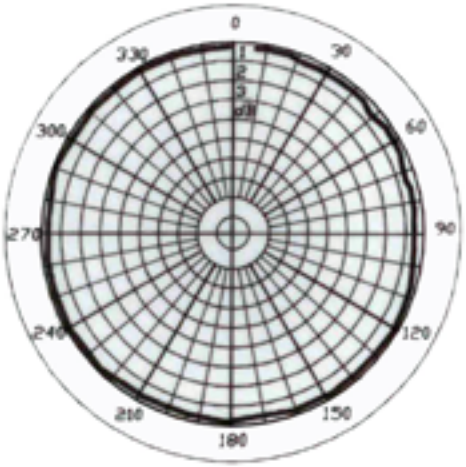
Specifications

Gain over 1/2 wave dipole	Unity
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 80° H-plane 360° (omni)
Bandwidth	+/- 4 % of centre frequency
Polarisation	Vertical
Connection	Armoured covered Rg213 cable with hawke gland assembly + sealing O rings
Shroud	Reinforced glass fibre tube
Base section	1.3/4" x 12 swg Aluminium tube
Radiating elements	Brass plasfilm coated
Encapsulation	1.1/2" O.D reinforced glass fibre coated with black UV heat shrink tubing

E-Plane



H-Plane



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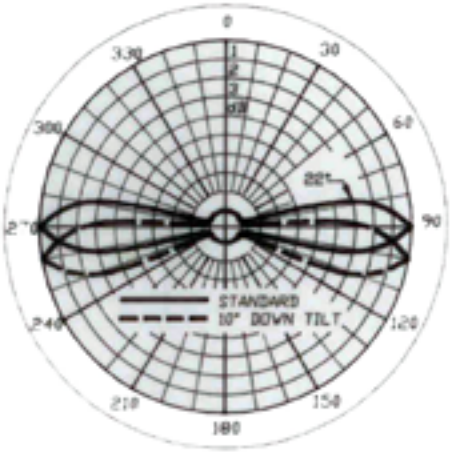
CDF/450ARRAY UHF four stack array

The CDF series arrays comprises of dipoles fed in phase for increased gain over a standard dipole antenna.
Available with 5 or 10 degree downtilts

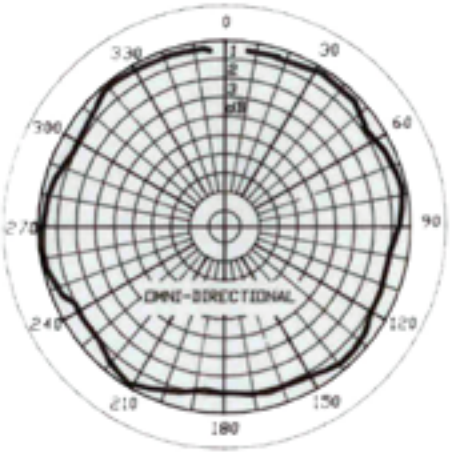
Specifications

Gain over 1/2 wave dipole	5.5 dB Omni directional
	7.5 dB Directional
V.S.W.R	<1.5:1
Maximum input power	250 Watts
Bandwidth	+/- 7 % of centre frequency
Input impedance	50 Ohms
Beam width	E-plane 22° H-plane 360° (if omni set up)
Polarisation	Vertical
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/2" x 10 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	12.5 Kgf @ wind velocity of 160 Kph
Weight	5 Kg
Length	2.3 metres

E-Plane



H-Plane



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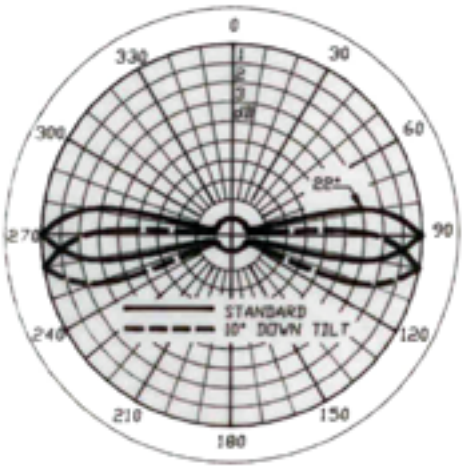
CDF/195ARRAY VHF four stack array

The CDF series arrays comprises of dipoles fed in phase for increased gain over a standard dipole antenna.
Available with 5 or 10 degree downtilts

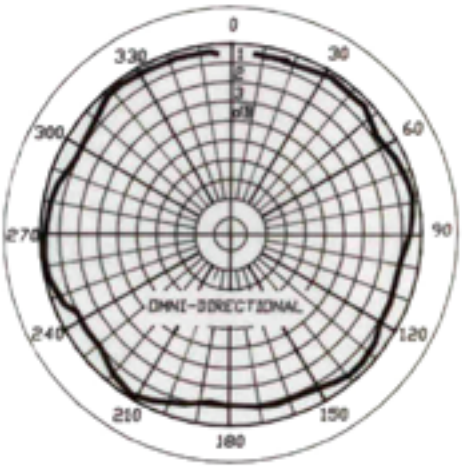
Specifications

Gain over 1/2 wave dipole	5.5 dB Omni directional
	7.5 dB Directional
V.S.W.R	<1.5:1
Maximum input power	250 Watts
Bandwidth	+/- 6 % of centre frequency
Input impedance	50 Ohms
Beam width	E-plane 22° H-plane 360° (if omni set up)
Polarisation	Vertical
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	2.1/2" x 1/4 wall Aluminium tube
Radiating elements material	3/4" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	80 Kgf @ wind velocity of 160 Kph
Weight	21 Kg
Length	5.4 metres

E-Plane



H-Plane



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www.radiostructures.com

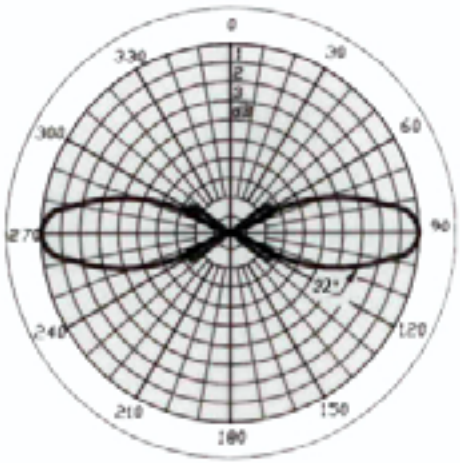
CDF/450H UHF Horizontal array

The CDF series arrays comprises of dipoles fed in phase for increased gain over a standard dipole antenna.
Omni-directional

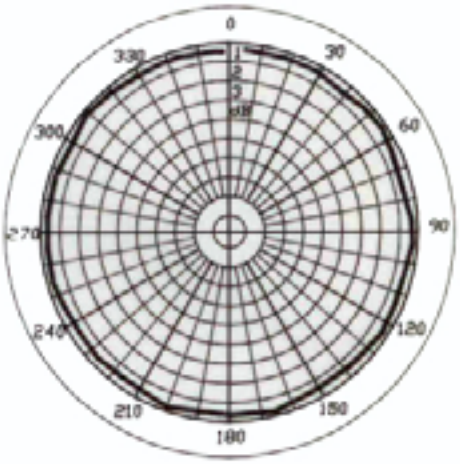
Specifications

Gain over 1/2 wave dipole	3 dB
V.S.W.R	<1.5:1
Maximum input power	250 Watts
Bandwidth	+/- 2.5 % of centre frequency
Input impedance	50 Ohms
Beam width	E-plane 32° H-plane 360° (omni)
Polarisation	Horizontal
Connection	3 metre length of RG213
	N-type socket and PVC sleeve
Support boom material	1.1/2" x 12 swg Aluminium tube
Radiating elements material	1/2" x 16swg aluminium tube
Castings	Aluminium kemloc
Insulator	Black carbon loaded polyethylene
Nuts and bolts	18/8 stainless steel with nyloc nut
Wind loading	29 Kgf @ wind velocity of 160 Kph
Weight	9.7 Kg
Length	1.78 metres

E-Plane



H-Plane



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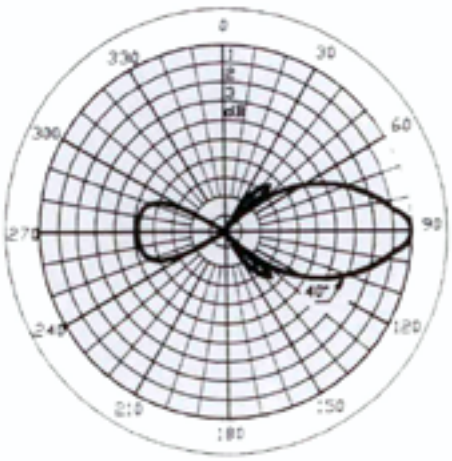
CDF148/2 ARRAY VHF two stack array

The CDF series arrays comprises of dipoles fed in phase for increased gain over a standard dipole antenna.
Available with 5 or 10 degree downtilts

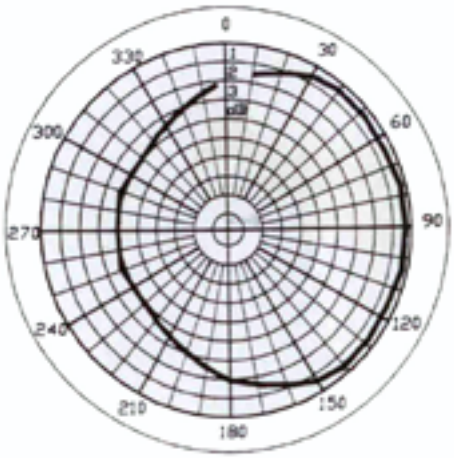
Specifications

Gain over 1/2 wave dipole	5 dB
V.S.W.R	<1.5:1
Maximum input power	250 Watts
Input impedance	50 Ohms
Beam width	E-plane 40°
Bandwidth	+/- 6 % of centre frequency
Polarisation	Vertical
Connection	3 metre Rg213 cable with N- type socket
Boom material	2.1/2" x 1/4 wall Aluminium tube
Radiating elements	3/4" x 10 swg x 12 swg Aluminium tube
Insulator	Black carbon loaded polyethylene
Length	2.4 metres
Weight	13 Kg

E-Plane



H-Plane



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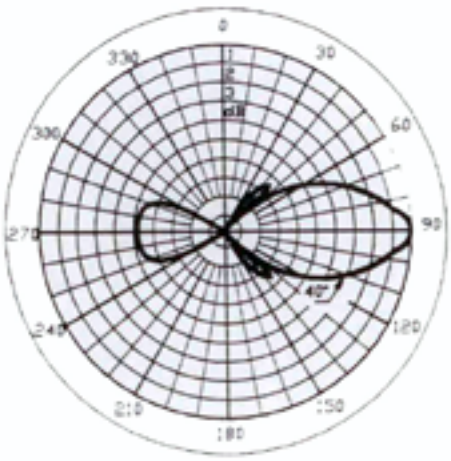
CDF165/2 ARRAY VHF two stack array

The CDF series arrays comprises of dipoles fed in phase for increased gain over a standard dipole antenna.
Available with 5 or 10 degree downtilts

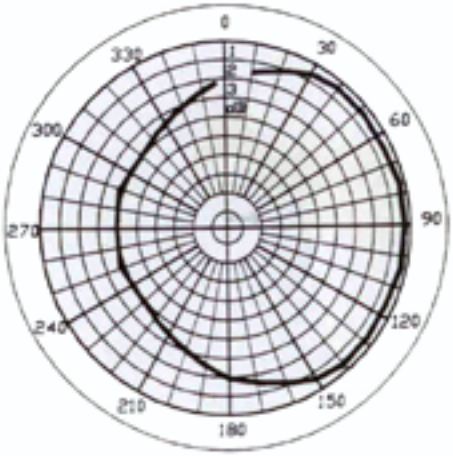
Specifications

Gain over 1/2 wave dipole	5 dB
V.S.W.R	<1.5:1
Maximum input power	250 Watts
Input impedance	50 Ohms
Beam width	E-plane 40°
Bandwidth	+/- 6 % of centre frequency
Polarisation	Vertical
Connection	3 metre Rg213 cable with N- type socket
Boom material	2.1/2" x 1/4 wall Aluminium tube
Radiating elements	3/4" x 10 swg x 12 swg Aluminium tube
Insulator	Black carbon loaded polyethylene
Length	2.4 metres
Weight	13 Kg

E-Plane



H-Plane



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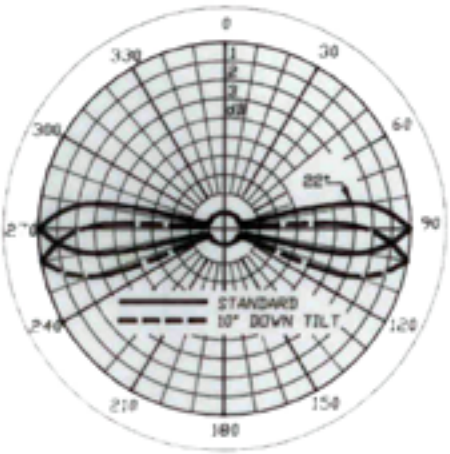
CDF195/2 ARRAY VHF two stack array

The CDF series arrays comprises of dipoles fed in phase for increased gain over a standard dipole antenna.
Available with 5 or 10 degree downtilts

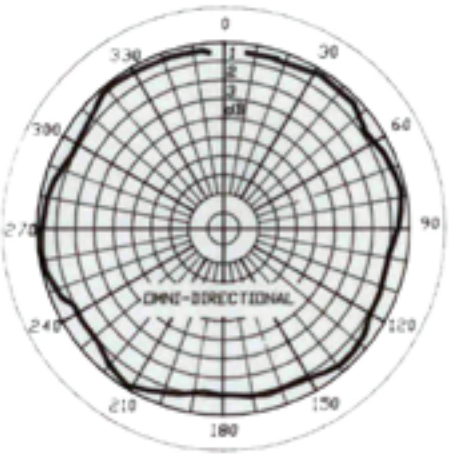
Specifications

Gain over 1/2 wave dipole	5 dB
V.S.W.R	<1.5:1
Maximum input power	250 Watts
Input impedance	50 Ohms
Beam width	E-plane 22°
Bandwidth	+/- 6 % of centre frequency
Polarisation	Vertical
Connection	3 metre Rg213 cable with N- type socket
Boom material	2.1/2" x 1/4 wall Aluminium tube
Radiating elements	3/4" x 10 swg x 12 swg Aluminium tube
Insulator	Black carbon loaded polyethylene
Length	2.1 metres
Weight	10 Kg

E-Plane



H-Plane



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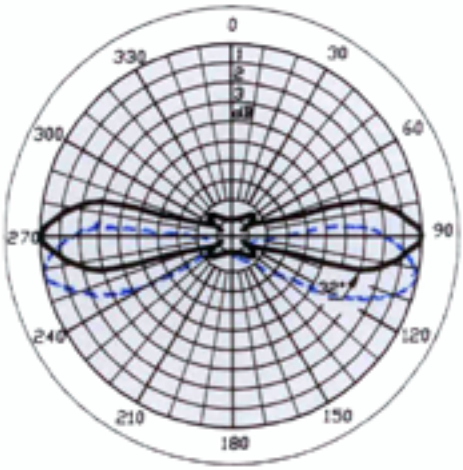
FUC/3 Frequency range 400 - 490 MHz

The FUC series collinear omni directional antenna
High strength and durability for the harshest of weather.
Incorporates DC short

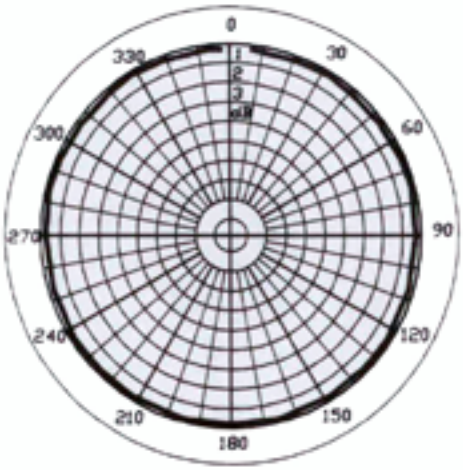
Specifications

Gain over 1/2 wave dipole	3 dB
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Beam width	E-plane 32° H-plane 360° (omni)
Bandwidth	+/- 2 % of centre frequency
Polarisation	Vertical
Connection	500mm Rg213 cable with N- type socket
Radiating elements	Brass rod plasfilm coated
Encapsulation	Reinforced glass fibre tube
Length @ 460 MHz	1.16 metres
Weight	1.1 Kg
Wind loading	6.4 Kgf @ wind velocity of 160 Kph

E-Plane



H-Plane



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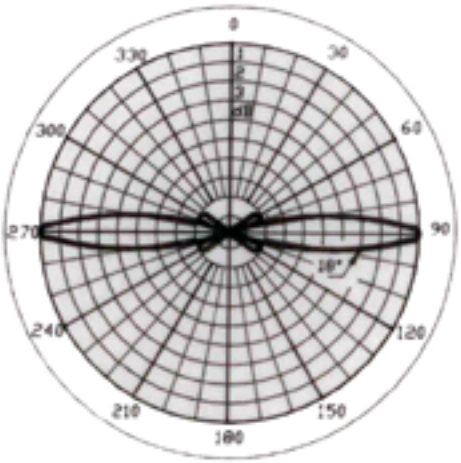
FUC/6 Frequency range 400 - 490 MHz

The FUC series collinear omni directional antenna
High strength and durability for the harshest of weather.
Incorporates DC short

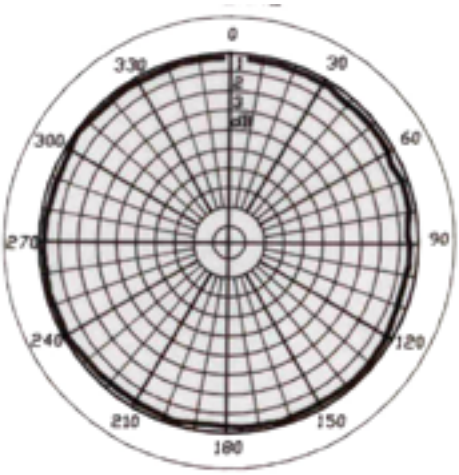
Specifications

Gain over 1/2 wave dipole	6 dB
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Beam width	E-plane 18° H-plane 360° (omni)
Bandwidth	+/- 2 % of centre frequency
Polarisation	Vertical
Connection	450mm Rg213 cable with N- type socket
Encapsulation	Reinforced glass fibre tube
Mounting stub	1.3/4" x 10 swg Aluminium tube
Length	3.05 metres
Weight	3 Kg
Wind loading	12.2 Kgf @ wind velocity of 160 Kph

E-Plane



H-Plane



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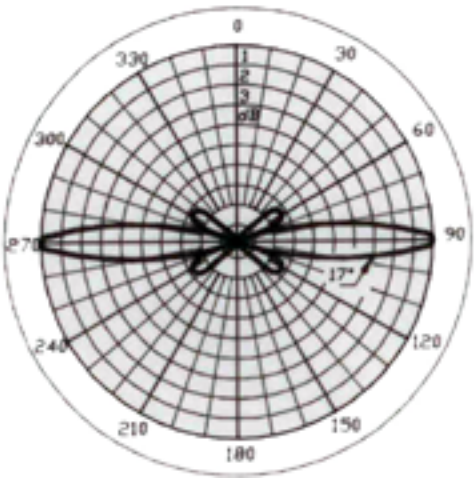
FUC/6-900 Frequency range 890 - 960 MHz

The FUC series collinear omni directional antenna
High strength and durability for the harshest of weather.
Incorporates DC short

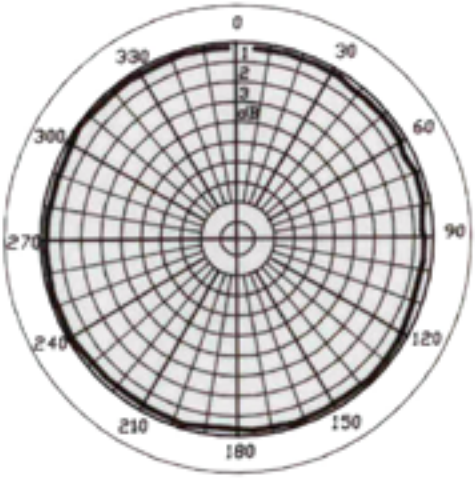
Specifications

Gain over 1/2 wave dipole	6 dB
V.S.W.R	<1.5:1
Maximum input power	150 Watts
Input impedance	50 Ohms
Beam width	E-plane 17° H-plane 360° (omni)
Bandwidth	+/- 4 % of centre frequency
Polarisation	Vertical
Connection	450mm Rg213 cable with N- type socket
Encapsulation	Reinforced glass fibre tube
Mounting stub	1.1/2" x 12 swg Aluminium tube
Length	1.3 metres
Weight	1.2 Kg
Wind loading	3.6 Kgf @ wind velocity of 160 Kph

E-Plane



H-Plane



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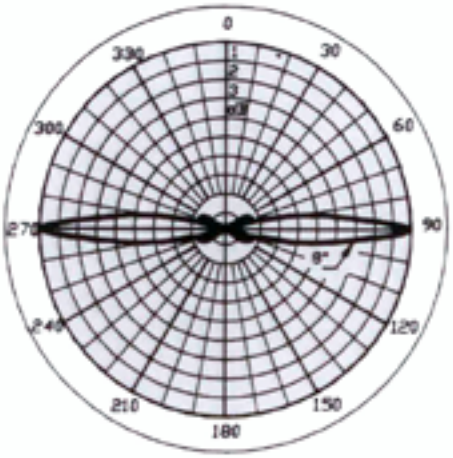
FUC/10 Frequency range 420 - 490 MHz

The FUC series collinear omni directional antenna
High strength and durability for the harshest of weather.
Incorporates DC short

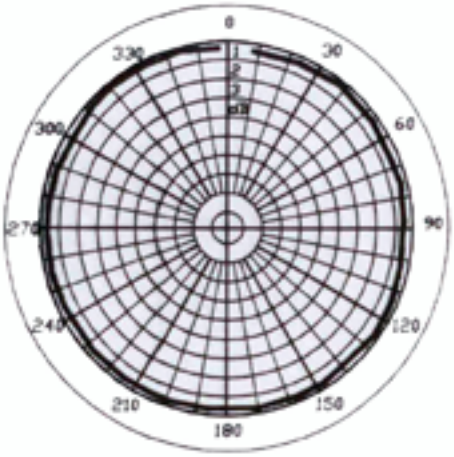
Specifications

Gain over 1/2 wave dipole	10 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 8° H-plane 360° (omni)
Bandwidth	+/- 1.5 % of centre frequency
Polarisation	Vertical
Connection	450mm Rg213 cable with N- type socket
Encapsulation	Reinforced glass fibre tube
Mounting stub	1.3/4" x 12 swg Aluminium tube
Length	5.2 metres
Weight	3.6 Kg
Wind loading	18 Kgf @ wind velocity of 160 Kph

E-Plane



H-Plane



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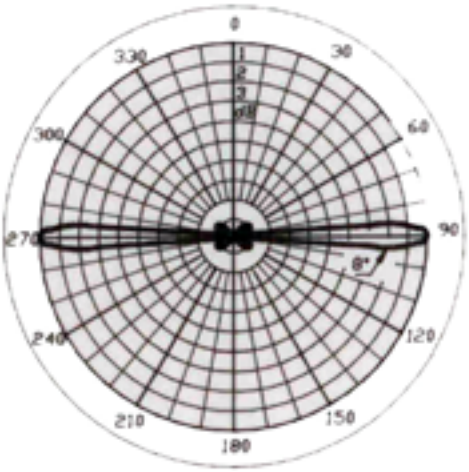
FUC/9-900 Frequency range 890 - 960 MHz

The FUC series collinear omni directional antenna
High strength and durability for the harshest of weather.
Incorporates DC short

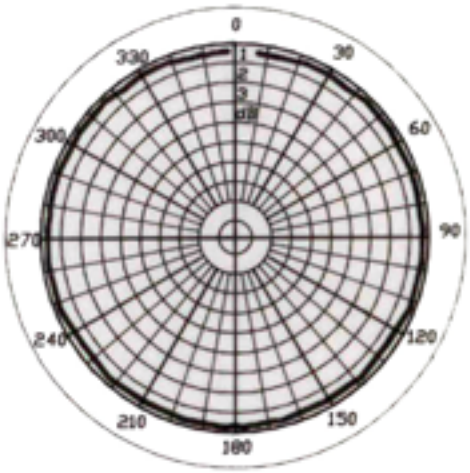
Specifications

Gain over 1/2 wave dipole	9 dB
V.S.W.R	<1.5:1
Maximum input power	250 Watts
Input impedance	50 Ohms
Beam width	E-plane 8° H-plane 360° (omni)
Bandwidth	+/- 4 % of centre frequency
Polarisation	Vertical
Connection	450mm Rg213 cable with N- type socket
Encapsulation	Reinforced glass fibre tube
Mounting stub	1.3/4" x 12 swg Aluminium tube
Length	3.2 metres
Weight	3.5 Kg
Wind loading	13 Kgf @ wind velocity of 160 Kph

E-Plane



H-Plane



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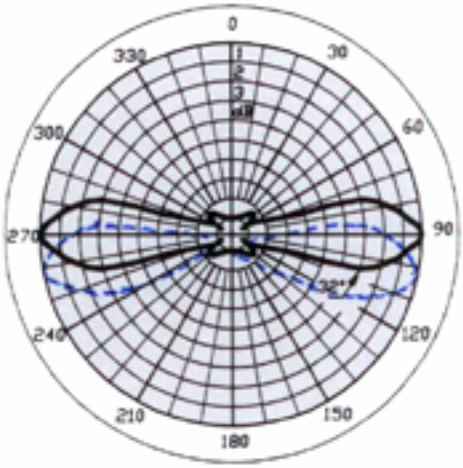
FVC/3 Frequency range 100 - 225 MHz

The FVC series collinear omni directional antenna
High strength and durability for the harshest of weather.
Incorporates DC short

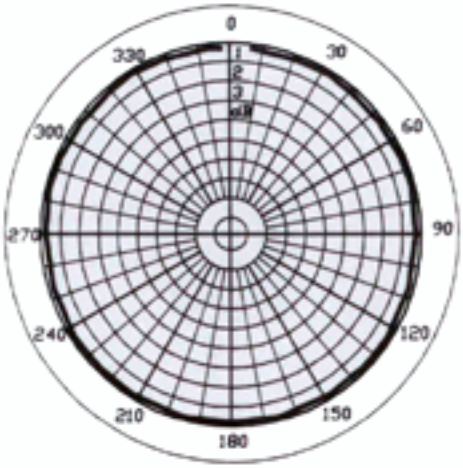
Specifications

Gain over 1/2 wave dipole	3 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 32° H-plane 360° (omni)
Bandwidth	+/- 1.5 % of centre frequency
Polarisation	Vertical
Connection	500mm Rg213 cable with N- type socket
Encapsulation	Reinforced glass fibre tube
Mounting stub	1.3/4" x 10 swg Aluminium tube
Length	3.05 metres
Weight	3.Kg
Wind loading	12.2 Kgf @ wind velocity of 160 Kph

E-Plane



H-Plane



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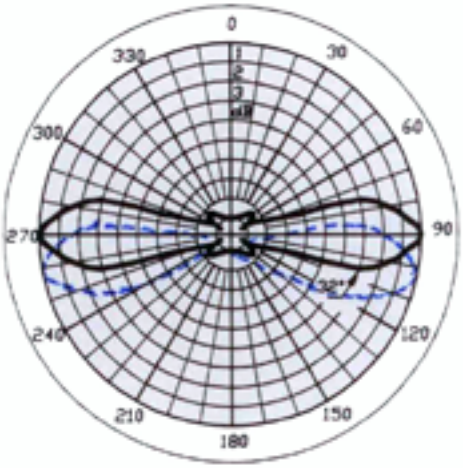
FVC/3L Frequency range 100 - 225 MHz

The FVC series collinear omni directional antenna
High strength and durability for the harshest of weather.
Incorporates DC short

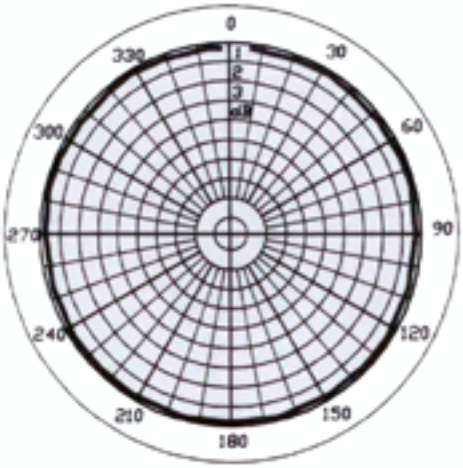
Specifications

Gain over 1/2 wave dipole	3 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 32° H-plane 360° (omni)
Bandwidth	+/- 1.5 % of centre frequency
Polarisation	Vertical
Connection	500mm Rg213 cable with N- type socket
Encapsulation	Reinforced glass fibre tube
Mounting stub	1.1/2" x 12 swg Aluminium tube
Length	3.05 metres
Weight	2.2 Kg
Wind loading	11 Kgf @ wind velocity of 160 Kph

E-Plane



H-Plane



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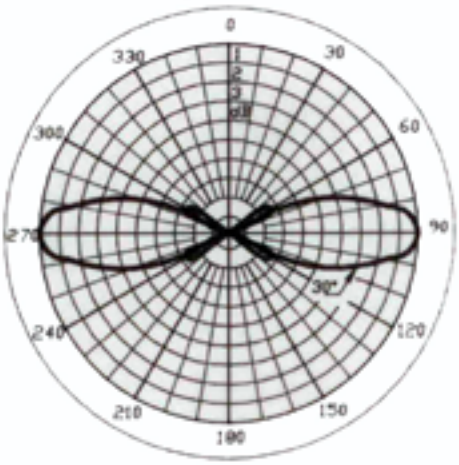
FVC/4.5 Frequency range 130 - 225 MHz

The FVC series collinear omni directional antenna
High strength and durability for the harshest of weather.
Incorporates DC short

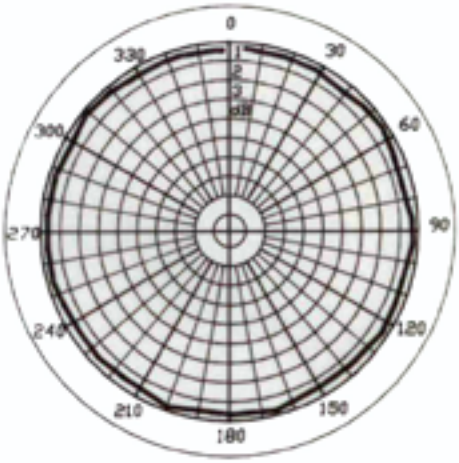
Specifications

Gain over 1/2 wave dipole	4.5 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 30° H-plane 360° (omni)
Bandwidth	+/- 1 % of centre frequency
Polarisation	Vertical
Connection	450mm Rg213 cable with N- type socket
Encapsulation	Reinforced glass fibre tube
Mounting stub	1.3/4" x 10 swg Aluminium tube
Length @ 140 MHz	6 metres
Weight	6.5.Kg
Wind loading	26 Kgf @ wind velocity of 160 Kph

E-Plane



H-Plane



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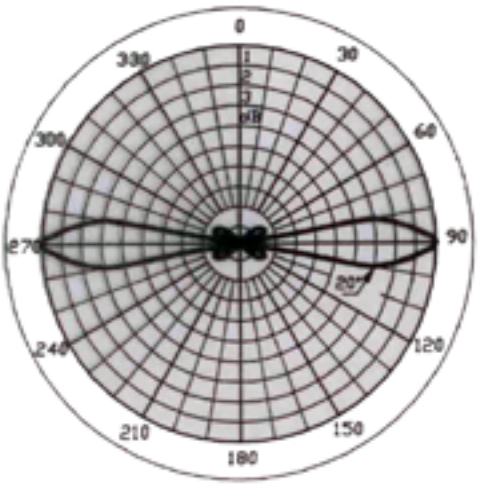
FVC/6 Frequency range 145 - 225 MHz

The FVC series collinear omni directional antenna
High strength and durability for the harshest of weather.
Incorporates DC short

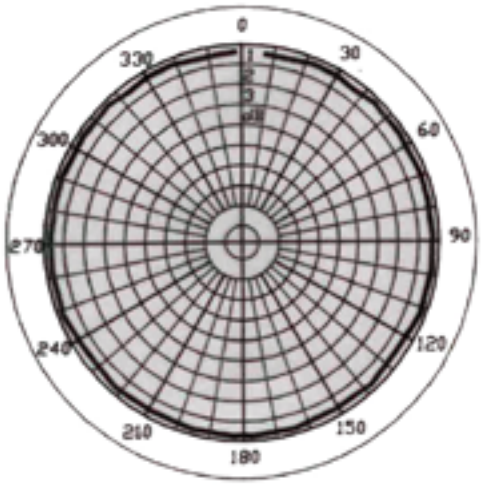
Specifications

Gain over 1/2 wave dipole	6 dB
V.S.W.R	<1.5:1
Maximum input power	200 Watts
Input impedance	50 Ohms
Beam width	E-plane 20° H-plane 360° (omni)
Bandwidth	+/- 1.3 % of centre frequency
Polarisation	Vertical
Connection	450mm Rg213 cable with N- type socket
Encapsulation	Reinforced glass fibre tube
Mounting stub	1.3/4" x 10 swg Aluminium tube
Length @ 169 MHz	5.2 metres
Weight	3.6.Kg
Wind loading	18 Kgf @ wind velocity of 160 Kph

E-Plane



H-Plane



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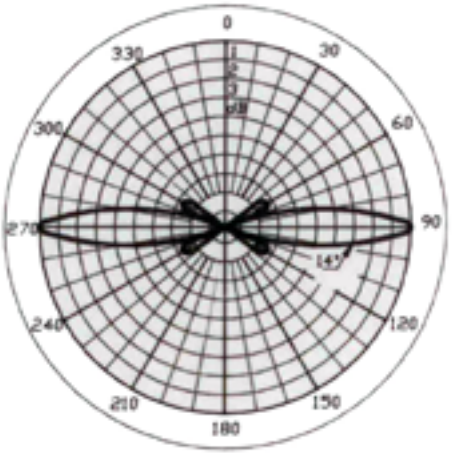
SHF/6 Frequency range 1426- 1540 MHz

The SHF series collinear omni directional antenna
High strength and durability for the harshest of weather.
Incorporates DC short

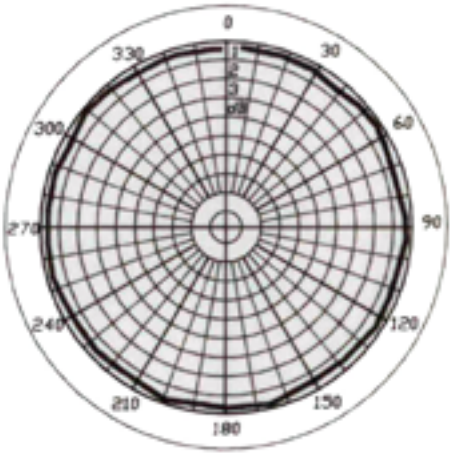
Specifications

Gain over 1/2 wave dipole	6 dB
V.S.W.R	<1.5:1
Maximum input power	250 Watts
Input impedance	50 Ohms
Beam width	E-plane 14° H-plane 360° (omni)
Bandwidth	+/- 4 % of centre frequency
Polarisation	Vertical
Connection	N- type socket
Encapsulation	Reinforced glass fibre tube
Mounting stub	1.3/4" x 10 swg Aluminium tube
Length	1.4 metres
Weight	2.2 Kg
Wind loading	8 Kgf @ wind velocity of 160 Kph

E-Plane



H-Plane



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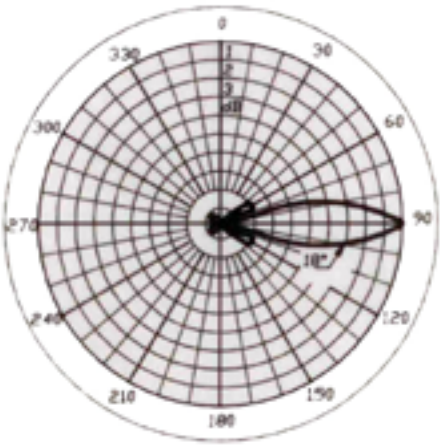
SHFB/1500 Frequency range 1200 - 2300 MHz

The SHFB sealed encapsulated array is designed for congested radio site use, the entire structure is at DC ground with very high front to back ratio

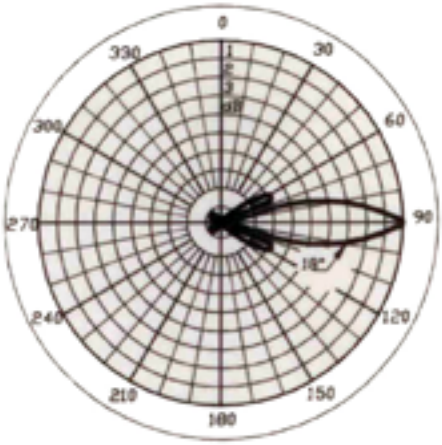
Specifications

Gain over 1/2 wave dipole	15 dB
V.S.W.R	<1.5:1
Maximum input power	100 Watts
Input impedance	50 Ohms
Beam width	E-plane 18° H-plane 18°
Bandwidth	+/- 6 % of centre frequency
Polarisation	Vertical
Connection	N- type socket
Encapsulation	Reinforced glass fibre tube
Wind loading	8 Kgf @ wind velocity of 160 Kph
Encapsulation	Reinforced glass fibre low alkali E

E-Plane



H-Plane



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Other antennas

Ceiling mount 6dbi indoor dual
band antenna - Omni directional
Ideal indoor signal booster
800-960 & 1710-2500 MHz

Sector antennas
Available from 450 MHz to 5.5 GHz
V-pol, Cross pol & down tilt versions

NOTE: Lead times for these two types of antenna can be up to 6 weeks in busy periods

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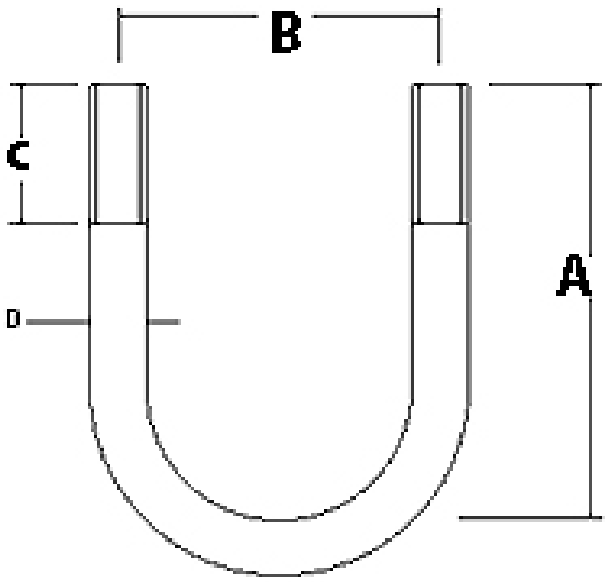
Accessories - Fixings (Comes complete with nuts & washers)

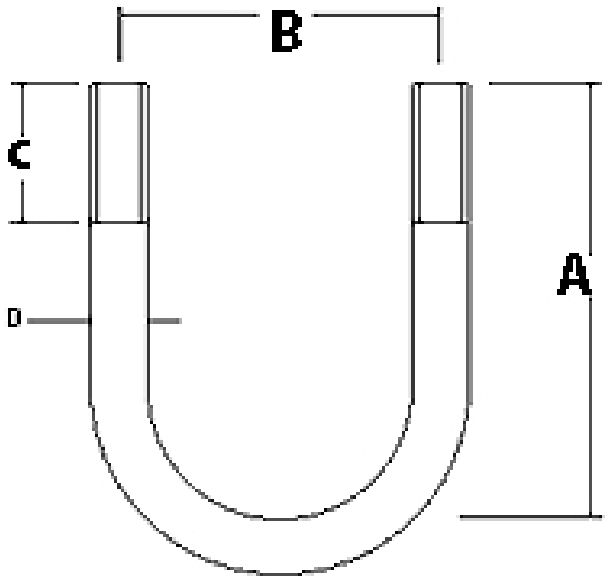
Galvanised U-bolts



Galvanised U-Bolt sizes in mm

Stock code	A	B	C	D	To suit tube
GUB001	72	43	40	8	38.1
GUB002	88	53	45	10	50.8
GUB003	101	66	45	10	63.5
GUB004	114	79	45	10	76.2
GUB005	125	90	45	10	88.9
GUB006	139	104	45	10	101.6
GUB007	152	117	45	10	114.3
GUB008	86	53	45	12	50.8
GUB009	99	66	45	12	63.5
GUB010	112	79	45	12	76.2
GUB011	124	91	45	12	88.9
GUB012	137	104	45	12	101.6
GUB013	150	117	45	12	114.3

Stainless steel U-bolts



STAINLESS STEEL U-Bolt sizes in mm

Stock code	A	B	C	D	To suit tube
SSU001	72	40	40	8	38.1
SSU002	88	53	45	10	50.8
SSU003	101	66	45	10	63.5
SSU004	114	79	45	10	76.2
SSU005	125	90	45	10	88.9
SSU006	139	104	45	10	101.6
SSU007	152	117	45	10	114.3
SSU008	86	53	45	12	50.8
SSU009	99	66	45	12	63.5
SSU010	112	79	45	12	76.2
SSU011	124	91	45	12	88.9
SSU012	137	104	45	12	101.6
SSU013	150	117	45	12	114.3

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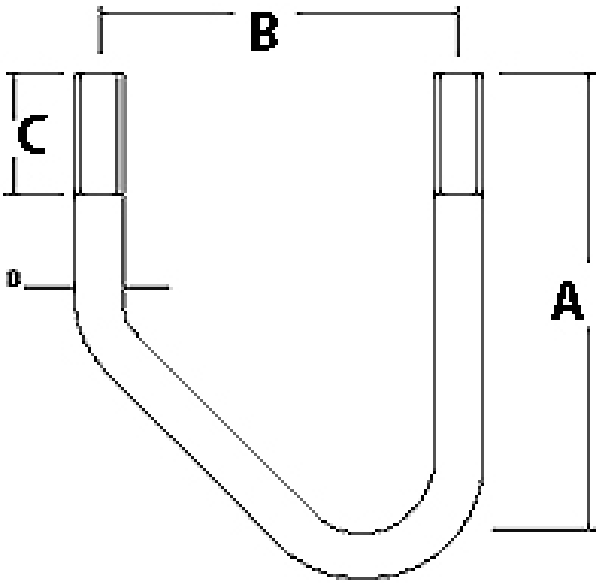
Accessories - Fixings (Comes complete with nuts & washers)

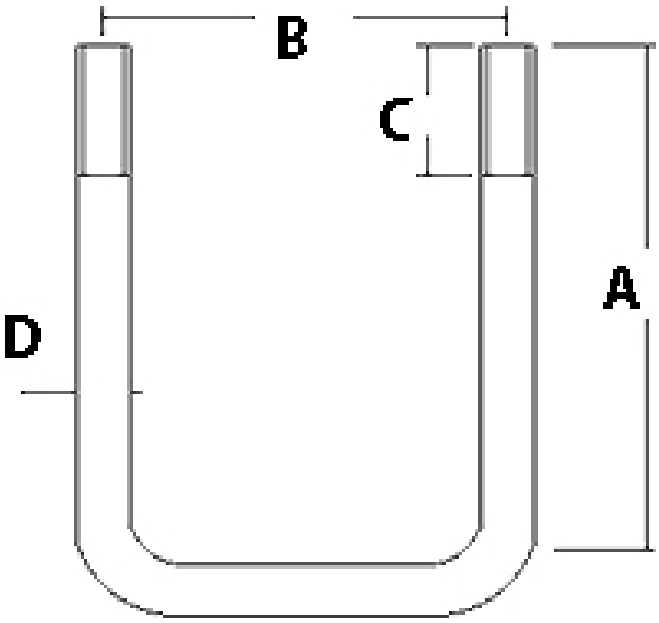
N-Bolts



Galvanised N-Bolt sizes in mm

Stock code	A	B	C	D	To suit angle
GVB001	80	52	30	10	50 x 50
GVB002	90	63	30	10	63.5 x 63.5
GVB003	105	73	35	12	63.5 x 63.5
GVB004	110	78	35	12	70 x 70
GVB005	120	83	40	12	75 x 75
GVB006	130	88	40	12	83 x 83
GVB007	145	103	45	12	101 x 101
GVB008	170	123	50	12	115 x 115
GVB009	200	153	50	12	152 x 152
GVB010	260	203	60	12	203 x 203

Square bolts



Galvanised square Bolt sizes in mm

Stock code	A	B	C	D	To suit box
GSB001	108	66	50	12	50 x 50
GSB002	118	76	50	12	60 X 60
GSB003	128	86	50	12	70 X70
GSB004	138	96	50	12	80 X 80
GSB005	148	106	50	12	90 X 90
GSB006	158	116	50	12	100 X 100
GSB007	178	136	50	12	120 X 120
GSB008	122	143	50	12	127 X 64
GSB009	160	67	50	12	102 X 51
GSB010	185	80	50	12	127 X 64
GSB011	109	118	50	12	102 X 51

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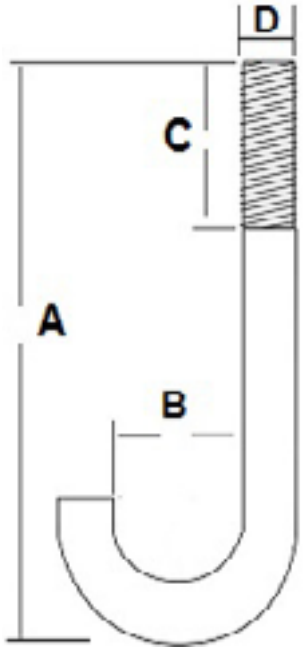
Accessories - Fixings (Comes complete with nuts & washers)

J-Bolts



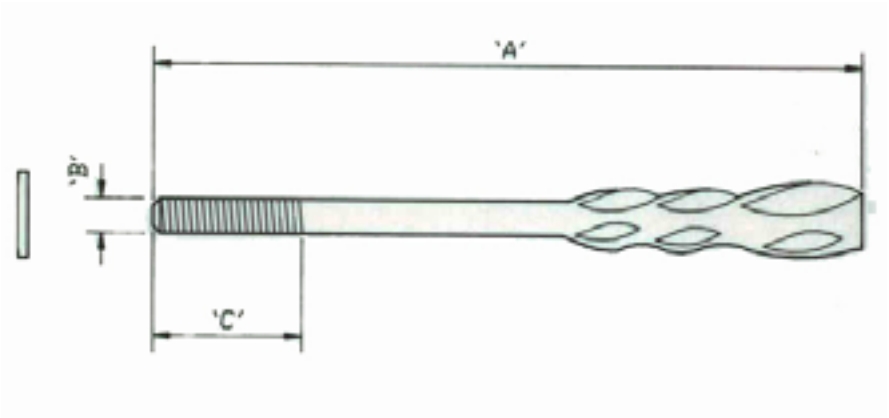
Galvanised J-Bolt sizes in mm

Stock code	A	B	C	D	E
GJB001	127	23	94	10	26
GJB002	205	24	105	12	44
GJB003	254	23	110	12	36

STAINLESS STEEL J-Bolt sizes in mm

Stock code	A	B	C	D	E
SSJ001	127	23	94	10	26
SSJ002	205	24	105	12	44
SSJ003	254	23	110	12	36

Indented foundation bolts



Product code	A	B	C
2/RB/01	300	20	50 APPROX
2/RB/02	200	20	50 APPROX
2/RB/03	140	12	50 APPROX

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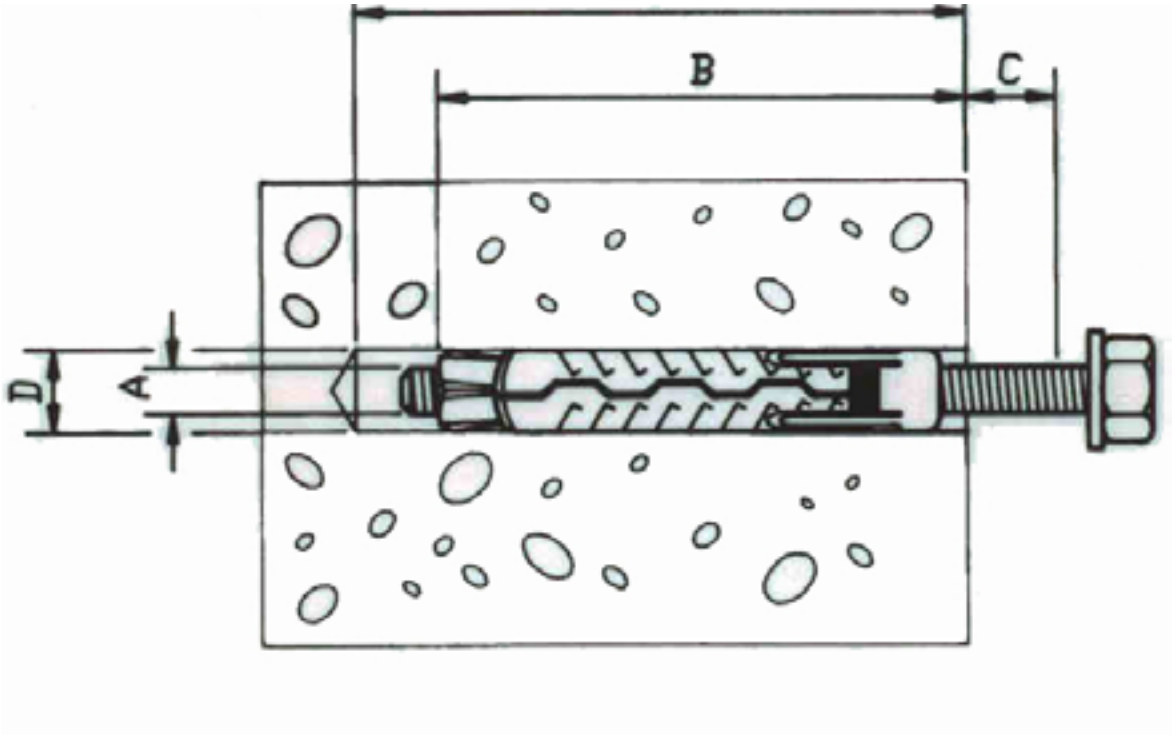
Rawlbolt (loose type)



Product code	Bolt dia A	Embedment depth	Fixing length max	Fixing Length min	Drill dia	Min hole depth
RAWLBOLT6/10	6mm	47mm	10mm	0mm	12mm	50mm
RAWLBOLT6/25	6mm	47mm	25mm	0mm	12mm	50mm
RAWLBOLT6/40	6mm	47mm	40mm	0mm	12mm	50mm
RAWLBOLT8/10	8mm	50mm	10mm	0mm	15mm	55mm
RAWLBOLT8/25	8mm	50mm	25mm	0mm	15mm	55mm
RAWLBOLT8/40	8mm	50mm	40mm	0mm	15mm	55mm
RAWLBOLT10/10	10mm	60mm	10mm	0mm	18mm	65mm
RAWLBOLT10/25	10mm	60mm	25mm	0mm	18mm	65mm
RAWLBOLT10/50	10mm	60mm	50mm	0mm	18mm	65mm
RAWLBOLT10/75	10mm	60mm	75mm	25mm	18mm	65mm
RAWLBOLT12/10	12mm	75mm	10mm	0mm	22mm	85mm
RAWLBOLT12/25	12mm	75mm	25mm	0mm	22mm	85mm
RAWLBOLT12/50	12mm	75mm	50mm	0mm	22mm	85mm
RAWLBOLT12/75	12mm	75mm	75mm	25mm	22mm	85mm
RAWLBOLT16/15	16mm	102mm	15mm	0mm	29mm	110mm
RAWLBOLT16/30	16mm	102mm	30mm	0mm	29mm	110mm
RAWLBOLT16/60	16mm	102mm	60mm	25mm	29mm	110mm

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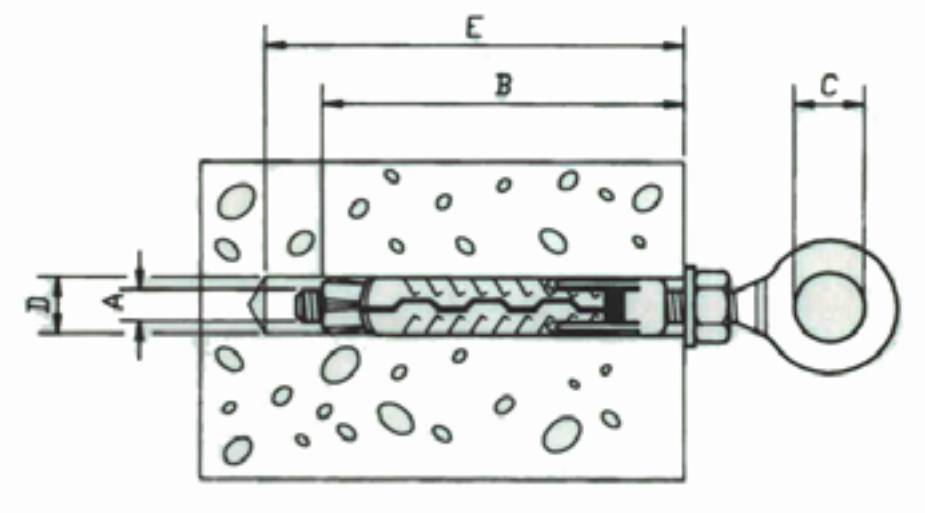
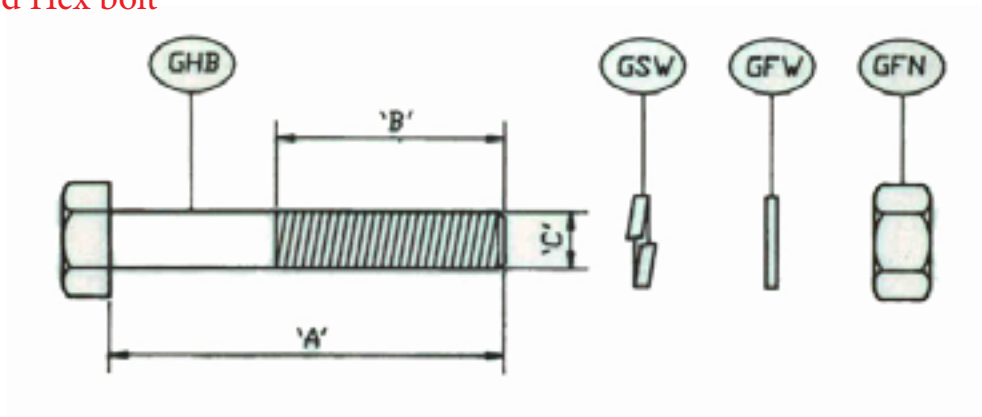
Eyebolt



Product code	Bolt Dia A	Embedment depth	Eye dia C	Drill dia D	Min hole depth E
EYEBOLT/6	6mm	11mm	47mm	12mm	50mm
EYEBOLT/8	8mm	12mm	50mm	15mm	55mm
EYEBOLT/10	10mm	13mm	60mm	18mm	65mm
EYEBOLT/12	12mm	16mm	75mm	22mm	85mm
EYEBOLT/16	16mm	25mm	102mm	29mm	110mm

Galvanised Hex bolt



Product code	A	B	C	Spring washer	Flat washer	Full nut
GHB8X35	35mm	22mm	8mm	GSW8	GFW8	GFN8
GHB8X40	40mm	22mm	8mm	GSW9	GFW9	GFN9
GHB8X45	45mm	22mm	8mm	GSW10	GFW10	GFN10

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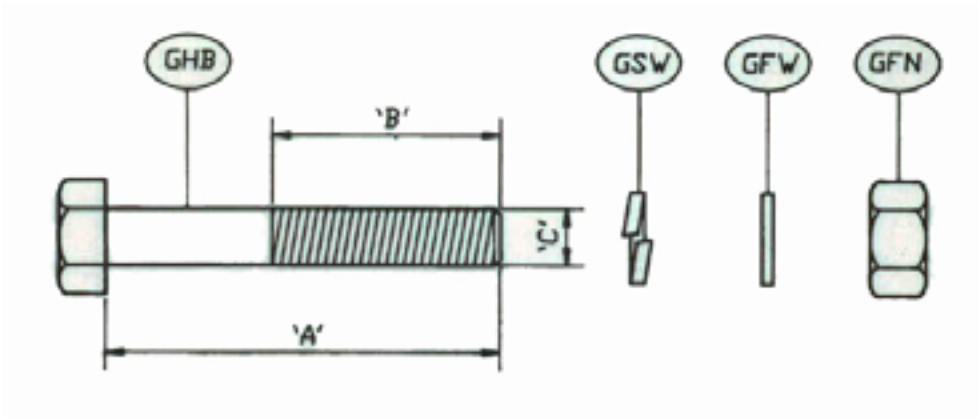
Galvanised Hexagon bolt (continued)



Product code	A	B	C	Spring washer	Flat washer	Full nut
GHB8X50	50mm	22mm	8mm	GSW8	GFW8	GFN8
GHB8X55	55mm	22mm	8mm	GSW8	GFW8	GFN8
GHB8X60	60mm	22mm	8mm	GSW8	GFW8	GFN8
GHB8X65	65mm	22mm	8mm	GSW8	GFW8	GFN8
GHB8X70	70mm	22mm	8mm	GSW8	GFW8	GFN8
GHB8X75	75mm	22mm	8mm	GSW8	GFW8	GFN8
GHB8X80	80mm	22mm	8mm	GSW8	GFW8	GFN8
GHB8X85	85mm	22mm	8mm	GSW8	GFW8	GFN8
GHB8X90	90mm	22mm	8mm	GSW8	GFW8	GFN8
GHB8X95	95mm	22mm	8mm	GSW8	GFW8	GFN8
GHB8X100	100mm	22mm	8mm	GSW8	GFW8	GFN8
GHB10X30	30mm	26mm	10mm	GSW10	GFW10	GFN10
GHB10X40	40mm	26mm	10mm	GSW10	GFW10	GFN10
GHB10X45	45mm	26mm	10mm	GSW10	GFW10	GFN10
GHB10X50	50mm	26mm	10mm	GSW10	GFW10	GFN10
GHB10X100	100mm	26mm	10mm	GSW10	GFW10	GFN10
GHB12X40	40mm	30mm	12mm	GSW12	GFW12	GFN12
GHB12X45	45mm	30mm	12mm	GSW12	GFW12	GFN12
GHB12X50	50mm	30mm	12mm	GSW12	GFW12	GFN12
GHB12X100	100mm	30mm	12mm	GSW12	GFW12	GFN12
GHB16X45	45mm	38mm	16mm	GSW16	GFW16	GFN16
GHB16X50	50mm	38mm	16mm	GSW16	GFW16	GFN16
GHB16X60	60mm	38mm	16mm	GSW16	GFW16	GFN16

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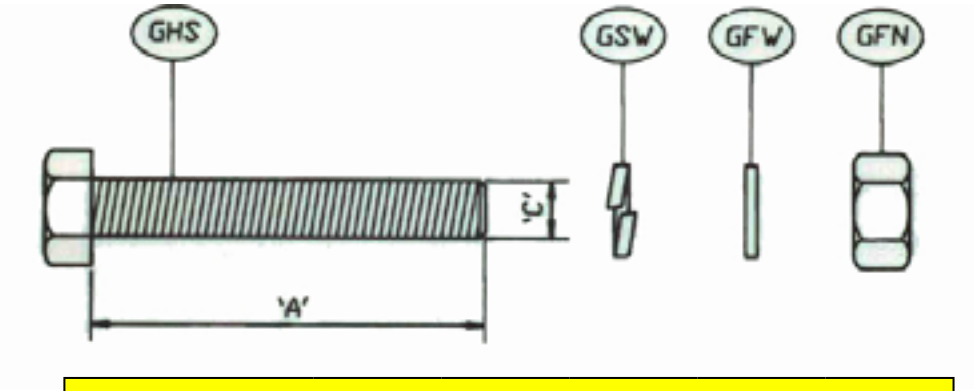
Galvanised Hexagon set



Product code	A	C	Spring washer	Flat washer	Full nut
GHS8X30	30mm	8mm	GSW8	GFW8	GFN8
GHS8X35	35mm	8mm	GSW8	GFW8	GFN8
GHS8X40	40mm	8mm	GSW8	GFW8	GFN8
GHS8X45	45mm	8mm	GSW8	GFW8	GFN8
GHS8X50	50mm	8mm	GSW8	GFW8	GFN8
GHS8X55	55mm	8mm	GSW8	GFW8	GFN8
GHS8X60	60mm	8mm	GSW8	GFW8	GFN8
GHS8X65	65mm	8mm	GSW8	GFW8	GFN8
GHS8X70	70mm	8mm	GSW8	GFW8	GFN8
GHS8X75	75mm	8mm	GSW8	GFW8	GFN8
GHS8X80	80mm	8mm	GSW8	GFW8	GFN8
GHS8X90	90mm	8mm	GSW8	GFW8	GFN8
GHS8X100	10mm	8mm	GSW8	GFW8	GFN8
GHS10X25	25mm	10mm	GSW10	GFW10	GFN10
GHS10X30	30mm	10mm	GSW10	GFW10	GFN10
GHS10X40	40mm	10mm	GSW10	GFW10	GFN10
GHS10X45	45mm	10mm	GSW10	GFW10	GFN10
GHS10X50	50mm	10mm	GSW10	GFW10	GFN10
GHS10X100	100mm	10mm	GSW10	GFW10	GFN10
GHS12X30	30mm	12mm	GSW12	GFW12	GFN12
GHS12X35	35mm	12mm	GSW12	GFW12	GFN12
GHS12X40	40mm	12mm	GSW12	GFW12	GFN12
GHS12X45	45mm	12mm	GSW12	GFW12	GFN12
GHS12X50	50mm	12mm	GSW12	GFW12	GFN12
GHS12X60	60mm	12mm	GSW12	GFW12	GFN12
GHS16X40	40mm	16mm	GSW16	GFW16	GFN16
GHS16X45	45mm	16mm	GSW16	GFW16	GFN16
GHS16X50	50mm	16mm	GSW16	GFW16	GFN16
GHS16X100	100mm	16mm	GSW16	GFW16	GFN16

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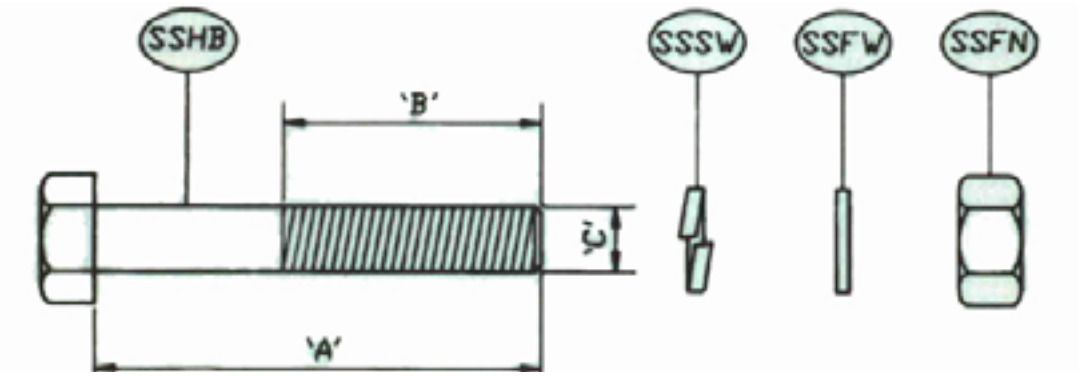
Stainless steel Hexagon bolts



Product code	A	B	C	Spring washer	Flat washer	Full nut
SSHB4X30	30mm	14mm	4mm	SSSW4	SSFW4	SSFN4
SSHB4X35	35mm	14mm	4mm	SSSW4	SSFW4	SSFN4
SSHB4X40	40mm	14mm	4mm	SSSW4	SSFW4	SSFN4
SSHB4X45	45mm	14mm	4mm	SSSW4	SSFW4	SSFN4
SSHB4X50	50mm	14mm	4mm	SSSW4	SSFW4	SSFN4
SSHB4X55	55mm	14mm	4mm	SSSW4	SSFW4	SSFN4
SSHB4X60	60mm	14mm	4mm	SSSW4	SSFW4	SSFN4
SSHB4X65	65mm	14mm	4mm	SSSW4	SSFW4	SSFN4
SSHB5X30	30mm	16mm	5mm	SSSW5	SSFW5	SSFN5
SSHB5X35	35mm	16mm	5mm	SSSW5	SSFW5	SSFN5
SSHB5X40	40mm	16mm	5mm	SSSW5	SSFW5	SSFN5
SSHB5X45	45mm	16mm	5mm	SSSW5	SSFW5	SSFN5
SSHB5X50	50mm	16mm	5mm	SSSW5	SSFW5	SSFN5
SSHB5X55	55mm	16mm	5mm	SSSW5	SSFW5	SSFN5
SSHB5X60	60mm	16mm	5mm	SSSW5	SSFW5	SSFN5
SSHB6X35	35mm	18mm	6mm	SSSW6	SSFW6	SSFN6
SSHB6X40	40mm	18mm	6mm	SSSW6	SSFW6	SSFN6
SSHB6X45	45mm	18mm	6mm	SSSW6	SSFW6	SSFN6
SSHB6X50	50mm	18mm	6mm	SSSW6	SSFW6	SSFN6
SSHB6X55	55mm	18mm	6mm	SSSW6	SSFW6	SSFN6
SSHB6X60	60mm	18mm	6mm	SSSW6	SSFW6	SSFN6
SSHB6X65	65mm	18mm	6mm	SSSW6	SSFW6	SSFN6
SSHB6X70	70mm	18mm	6mm	SSSW6	SSFW6	SSFN6
SSHB6X75	75mm	18mm	6mm	SSSW6	SSFW6	SSFN6
SSHB6X80	80mm	18mm	6mm	SSSW6	SSFW6	SSFN6
SSHB6X90	90mm	18mm	6mm	SSSW6	SSFW6	SSFN6

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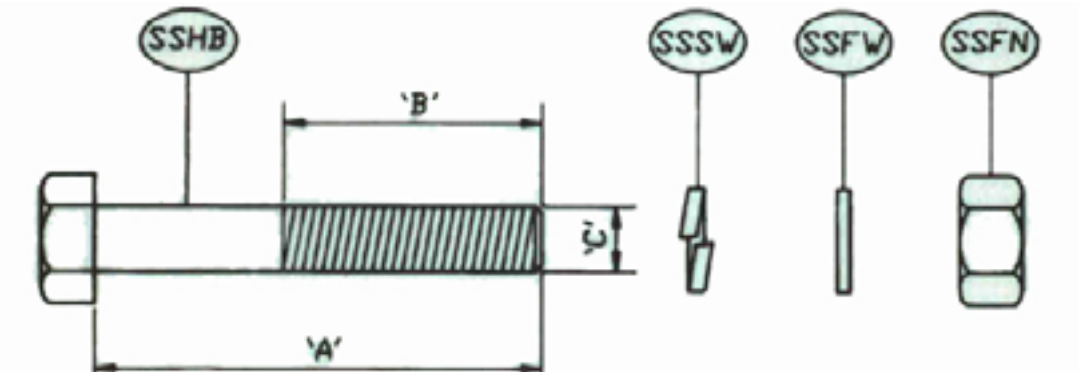
Stainless steel Hexagon bolts (continued)



Product code	A	B	C	Spring washer	Flat washer	Full nut
SSHB8X35	35mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB8X40	40mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB8X45	45mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB8X50	50mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB8X55	55mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB8X60	60mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB8X65	65mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB8X70	70mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB8X75	75mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB8X80	80mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB8X85	85mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB8X90	90mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB8X100	100mm	22mm	8mm	SSSW8	SSFW8	SSFN8
SSHB10X35	35mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X40	40mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X45	45mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X50	50mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X55	55mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X60	60mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X65	65mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X70	70mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X75	75mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X80	80mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X90	90mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X100	100mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X110	110mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X120	120mm	26mm	10mm	SSSW10	SSFW10	SSFN10
SSHB10X135	135mm	26mm	10mm	SSSW10	SSFW10	SSFN10

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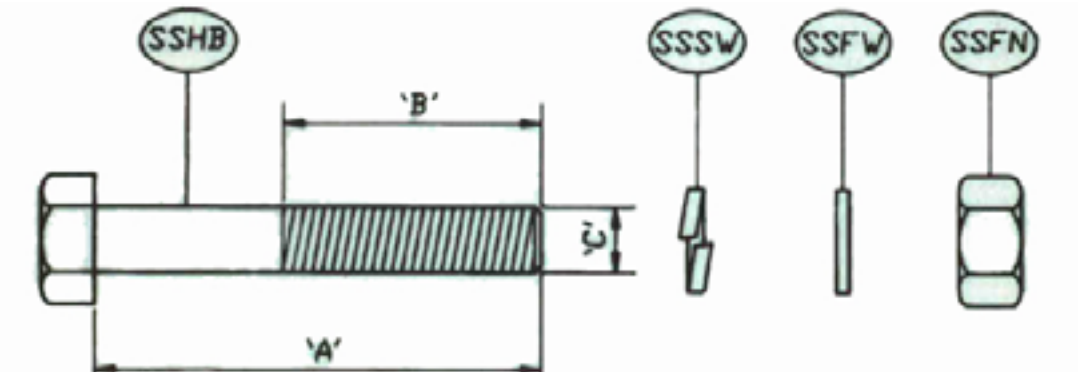
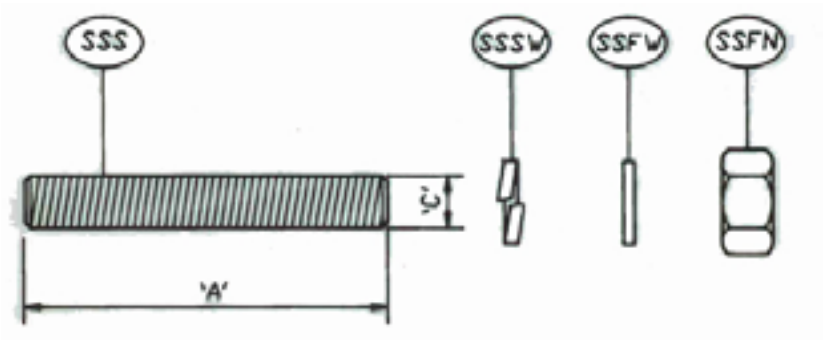
Stainless steel Hexagon bolts



Product code	A	B	C	Spring washer	Flat washer	Full nut
SSHB12X45	45mm	30mm	12mm	SSSW12	SSFW12	SSFN12
SSHB12X50	50mm	30mm	12mm	SSSW12	SSFW12	SSFN12
SSHB12X60	60mm	30mm	12mm	SSSW12	SSFW12	SSFN12
SSHB12X65	65mm	30mm	12mm	SSSW12	SSFW12	SSFN12
SSHB12X70	70mm	30mm	12mm	SSSW12	SSFW12	SSFN12
SSHB12X75	75mm	30mm	12mm	SSSW12	SSFW12	SSFN12
SSHB12X80	80mm	30mm	12mm	SSSW12	SSFW12	SSFN12
SSHB12X90	90mm	30mm	12mm	SSSW12	SSFW12	SSFN12
SSHB12X100	100mm	30mm	12mm	SSSW12	SSFW12	SSFN12

Stainless steel hexagon studding



Product code	A	C	Spring washer	Flat washer	Full nut
SSS6	1000mm	6mm	SSSW6	SSFW6	SSFN6
SSS8	1000mm	8mm	SSSW8	SSFW8	SSFN8
SSS10	1000mm	10mm	SSSW10	SSFW10	SSFN10
SSS12	1000mm	12mm	SSSW12	SSFW12	SSFN12

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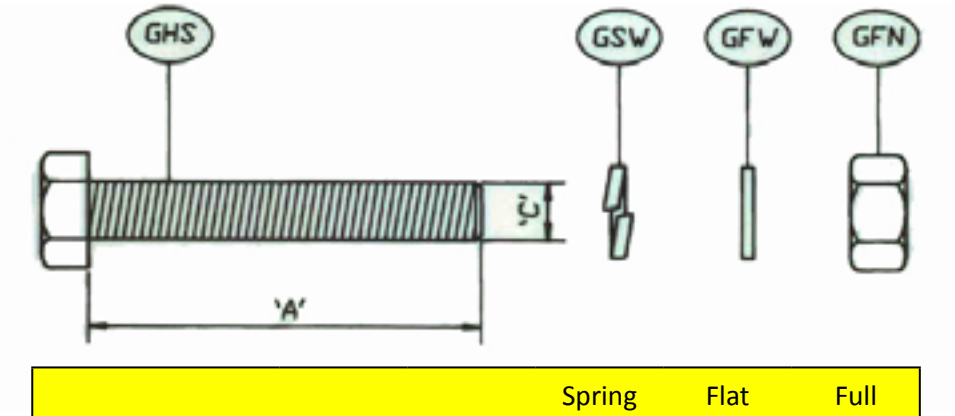
Stainless steel Hexagon sets



Product code	A	C	Spring washer	Flat washer	Full nut
SSHS4X10	10mm	4mm	SSSW4	SSFW4	SSFN4
SSHS4X12	12mm	4mm	SSSW4	SSFW4	SSFN4
SSHS4X16	16mm	4mm	SSSW4	SSFW4	SSFN4
SSHS4X20	20mm	4mm	SSSW4	SSFW4	SSFN4
SSHS4X25	25mm	4mm	SSSW4	SSFW4	SSFN4
SSHS4X30	30mm	4mm	SSSW4	SSFW4	SSFN4
SSHS4X35	35mm	4mm	SSSW4	SSFW4	SSFN4
SSHS4X40	40mm	4mm	SSSW4	SSFW4	SSFN4
SSHS5X12	12mm	5mm	SSSW5	SSFW5	SSFN5
SSHS5X16	16mm	5mm	SSSW5	SSFW5	SSFN5
SSHS5X20	20mm	5mm	SSSW5	SSFW5	SSFN5
SSHS5X25	25mm	5mm	SSSW5	SSFW5	SSFN5
SSHS5X30	30mm	5mm	SSSW5	SSFW5	SSFN5
SSHS5X35	35mm	5mm	SSSW5	SSFW5	SSFN5
SSHS5X40	40mm	5mm	SSSW5	SSFW5	SSFN5
SSHS5X45	45mm	5mm	SSSW5	SSFW5	SSFN5
SSHS5X50	50mm	5mm	SSSW5	SSFW5	SSFN5
SSHS5X55	55mm	5mm	SSSW5	SSFW5	SSFN5
SSHS5X60	60mm	5mm	SSSW5	SSFW5	SSFN5
SSHS6X16	16mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X20	20mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X25	25mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X30	30mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X35	35mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X40	40mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X45	45mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X50	50mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X55	55mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X60	60mm	6mm	SSSW6	SSFW6	SSFW6

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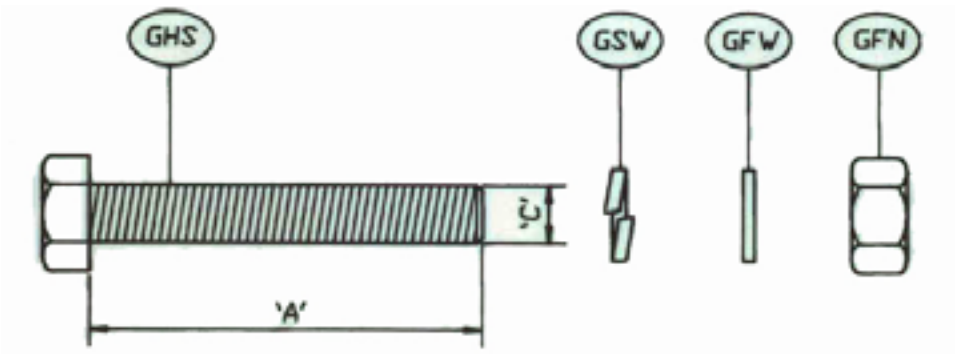
Stainless steel Hexagon sets (CONTINUED)



Product code	A	C	Spring washer	Flat washer	Full nut
SSHS6X65	65mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X70	70mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X75	75mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X80	80mm	6mm	SSSW6	SSFW6	SSFW6
SSHS6X90	90mm	6mm	SSSW6	SSFW6	SSFW6
SSHS8X25	25mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X30	30mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X35	35mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X40	40mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X45	45mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X50	50mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X55	55mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X60	60mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X65	65mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X70	70mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X75	75mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X80	80mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X90	90mm	8mm	SSSW8	SSFW8	SSFW8
SSHS8X100	100mm	8mm	SSSW8	SSFW8	SSFW8
SSHS10X30	30mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X35	35mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X40	40mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X45	45mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X50	50mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X55	55mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X60	60mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X65	65mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X70	70mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X75	75mm	10mm	SSSW10	SSFW10	SSFW10

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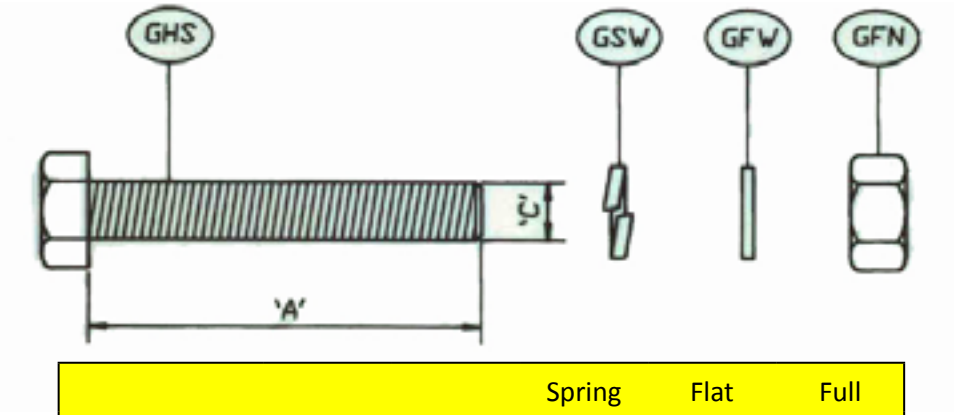
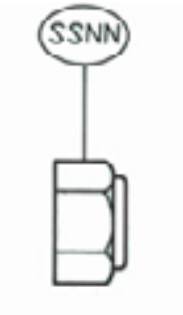
Stainless steel Hexagon sets (CONTINUED)



Product code	A	C	Spring washer	Flat washer	Full nut
SSHS10X80	80mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X90	90mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X100	100mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X110	110mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X120	120mm	10mm	SSSW10	SSFW10	SSFW10
SSHS10X135	135mm	10mm	SSSW10	SSFW10	SSFW10
SSHS12X20	20mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X25	25mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X30	30mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X35	35mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X40	40mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X45	45mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X50	50mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X55	55mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X60	60mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X65	65mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X70	70mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X75	75mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X80	80mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X90	90mm	12mm	SSSW12	SSFW12	SSFW12
SSHS12X100	10mm	12mm	SSSW12	SSFW12	SSFW12

Self locking nut

Product code	Size	Product code	Size
SSNN4	4mm	SSNN8	8mm
SSNN5	5mm	SSNN10	10mm
SSNN6	6mm	SSNN12	12mm
SSNN16	16mm		



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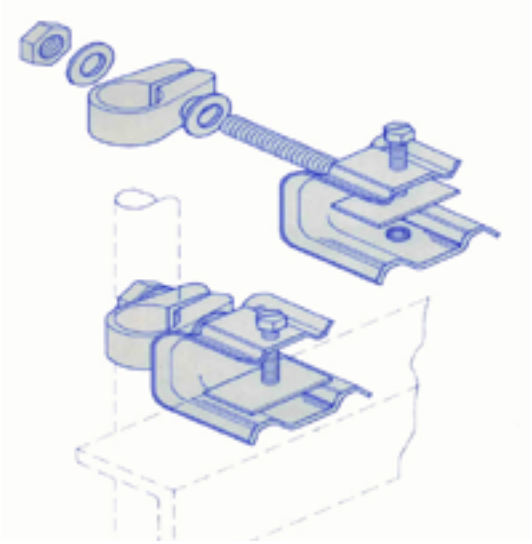
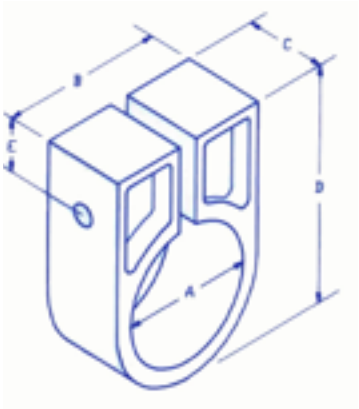
Cable cleating



Galvanised cleating clamp

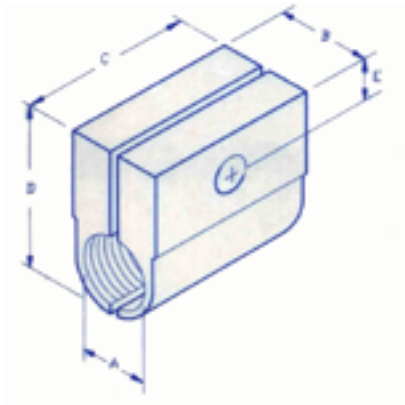
Product code	Studding size	Nuts/bolts included
GCC001	8mm	NO
GCC002	10mm	NO
GCC003	10mm	YES

REM Cleats / Straps



Product code	Cable hole (A)	B	C	D	E	Bolt hole	To suit
REM4	10.1mm	14.9mm	15.9mm	28.4mm	7.9mm	6mm	RG213
REM5	12.7mm	17.5mm	15.9mm	31.0mm	7.9mm	6mm	LDF250
REM7	17.8mm	22.2mm	15.9mm	36.1mm	7.9mm	6mm	LDF450
REM4/10	10.1mm	14.9mm	15.9mm	28.4mm	7.9mm	10mm	RG213
REM5/10	12.7mm	17.5mm	15.9mm	31.0mm	7.9mm	10mm	LDF250
REM7/10	17.8mm	22.2mm	15.9mm	36.1mm	7.9mm	10mm	LDF450
REM12/10	30.4mm	39.7mm	15.9mm	57.4mm	11.1mm	10mm	LDF550

REM Clamps



Product code	Cable hole (A)	B	C	D	E	Bolt hole	To suit
RCC004	11.1-14.3	23.8mm	44.4mm	39.7mm	11.1mm	10mm	RG213
RCC005	12.7-15.9	25.4mm	44.4mm	41.3mm	11.1mm	10mm	LDF250
RCC007	15.9-19.0	30.2mm	44.4mm	46.0mm	11.1mm	10mm	LDF450
RCC012	25.4-31.7	49.2mm	44.4mm	60.3mm	11.1mm	10mm	LDF550

For all other sizes please contact us

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Coaxial series cables

Cable type (50 ohm)	ATTENUATION VALUES 50 OHM - dB/100m							
	1MHz	10MHz	100MHz	200MHz	400MHz	800MHz	1000MHz	3000MHz
220, 221	0.13	0.56	2.25	3.70	6.10		11.80	25.50
218, 219	0.20	0.79	3.05	4.70	7.60		14.20	30.50
217, 224	0.40	1.25	4.75	7.30	11.00	14.00	19.00	39.00
213, 214, 215	0.50	1.85	6.20	9.10	13.80	21.10	24.50	51.00
212	0.85	2.70	9.20	13.60	20.00		35.00	70.00
223	1.00	3.90	13.80	20.50	31.30		54.00	102.00
58C	1.20	4.10	15.00	22.00	33.50		61.00	125.00
122	1.50	5.60	23.00	36.00	54.00		95.00	190.00

Cable type (75 ohm)	ATTENUATION VALUES 75 OHM - dB/100m							
	1MHz	10MHz	100MHz	200MHz	400MHz	800MHz	1000MHz	
35B, 164	0.23	0.79	2.75	4.2	6.6		13.1	
34B	0.38	1.3	4.6	6.6	9.8		16.5	
11A, 12A, 216	0.73	2.2	7	10.2	15.2		27	
6A	0.85	2.7	9.2	13.6	20		35	
59B	1.20	3.45	11	16	23.5		42.6	

Radio Structures supply all cable types and sizes

For other cable types or sizes not listed please contact us

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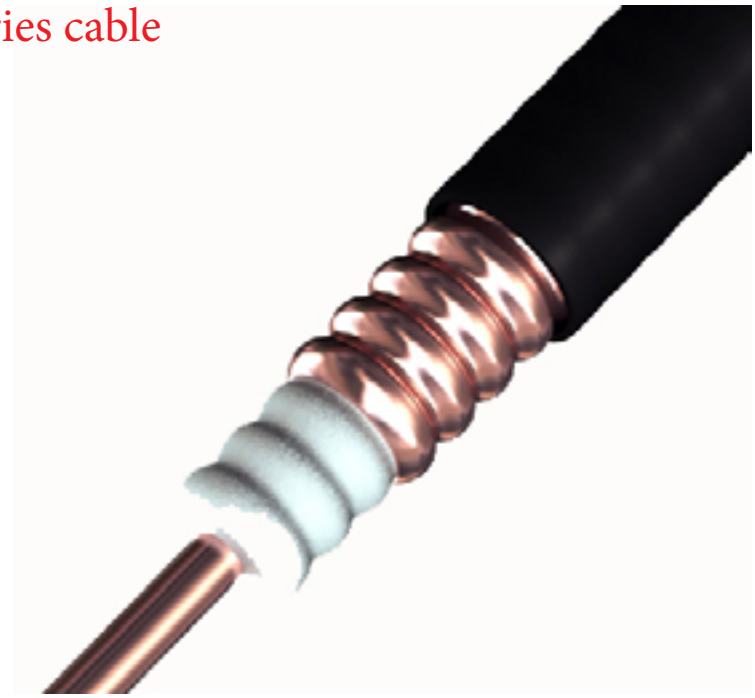
Cable - Low loss 3/8” foam dielectric 50 OHMS

3/8” Low loss series cable



Frequency MHz	dB/100m	Average power	Frequency MHz	dB/100m	Average power
0.5	0.234	8.000	700	2.93	0.399
1	0.328	8.000	800	3.13	0.371
1.5	0.399	8.000	824	3.18	0.366
2	0.459	8.000	894	3.31	0.350
10	1.08	3.600	960	3.43	0.337
20	1.53	2.560	1000	3.5	0.330
30	1.87	2.100	1250	3.97	0.289
50	2.46	1.600	1500	4.4	0.260
88	3.24	1.180	1700	4.69	0.242
100	3.44	1.100	2000	5.1	0.220
108	3.59	1.060	2300	5.55	0.204
150	4.27	0.920	3000	6.51	0.176
174	4.59	0.845	4000	7.74	0.150
200	4.92	0.780	5000	8.8	0.163
300	6.09	0.631	6000	9.85	0.117
400	7.09	0.542	8000	11.8	0.100
450	7.56	0.508	10000	13.5	0.088
500	8	0.480	12000	15.2	0.075
512	8.11	0.474	13000	16	0.070
600	8.84	0.434			

Electrical	
Max Frequency GHz	13
Velocity percent	88
Peak power (KW)	8
DC resistance - Inner	3.778
DC resistance - Outer	2.85
DC breakdown - Volts	2500
Jacket spark - Volts	5000
Capacitance pF/m	75.5
Inductance, uH/m	0.19
Mechanical	
Outer conductor	Copper
Inner conductor	CCA
Dia over jacket (mm)	11
Dia over copper (mm)	907
Outer conductor (mm)	95
Min bend radius (mm)	60
Number of bends min	1.9
Bending moment (N-m)	0.12
Cable weight (kg/m)	113
Tensile strength (kg/mm)	2

Radio Structures supply all cable types and sizes

For other cable types or sizes not listed please contact us

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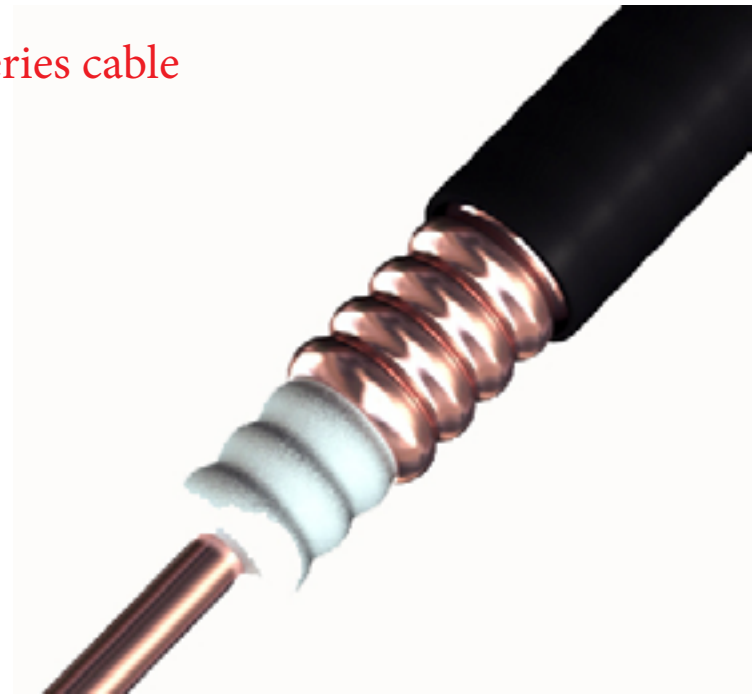
Cable - Low loss 1/2” foam dielectric 50 OHMS

1/2” Low loss series cable



Frequency MHz	dB/100m	Average power	Frequency MHz	dB/100m	Average power
0.5	0.152	19.000	700	6.31	0.670
1	0.217	19.000	800	6.79	0.623
1.5	0.266	15.800	824	6.9	0.613
2	0.308	13.700	894	7.22	0.586
10	1.692	6.100	960	7.51	0.563
20	1.985	4.290	1000	7.68	0.551
30	1.21	3.490	1250	8.69	0.486
50	1.57	2.690	1500	9.61	0.439
88	2.10	2.010	1700	10.3	0.409
100	2.24	1.880	2000	11.3	0.373
108	2.34	1.810	2300	12.3	0.344
150	2.77	1.520	3000	14.4	0.294
174	3.00	1.410	4000	17.0	0.248
200	3.23	1.310	5000	19.5	0.217
300	4.00	1.060	6000	21.8	0.194
400	4.66	0.906	8000	26.0	0.162
450	4.96	0.850	8800	27.6	0.153
500	5.26	0.803			
512	5.32	0.793			
600	5.8	0.728			

Electrical	
Max Frequency GHz	8.8
Velocity percent	88
Peak power (KW)	19
DC resistance - Inner	1.64
DC resistance - Outer	1.97
DC breakdown - Volts	4000
Jacket spark - Volts	8000
Capacitance pF/m	75.8
Inductance, uH/m	0.19
Mechanical	
Outer conductor	Copper
Inner conductor	CCA
Dia over jacket (mm)	16
Dia over copper (mm)	14
Outer conductor (mm)	125
Min bend radius (mm)	50
Number of bends min	3.8
Bending moment (N-m)	0.22
Cable weight (kg/m)	113
Tensile strength (kg/mm)	2

Radio Structures supply all cable types and sizes

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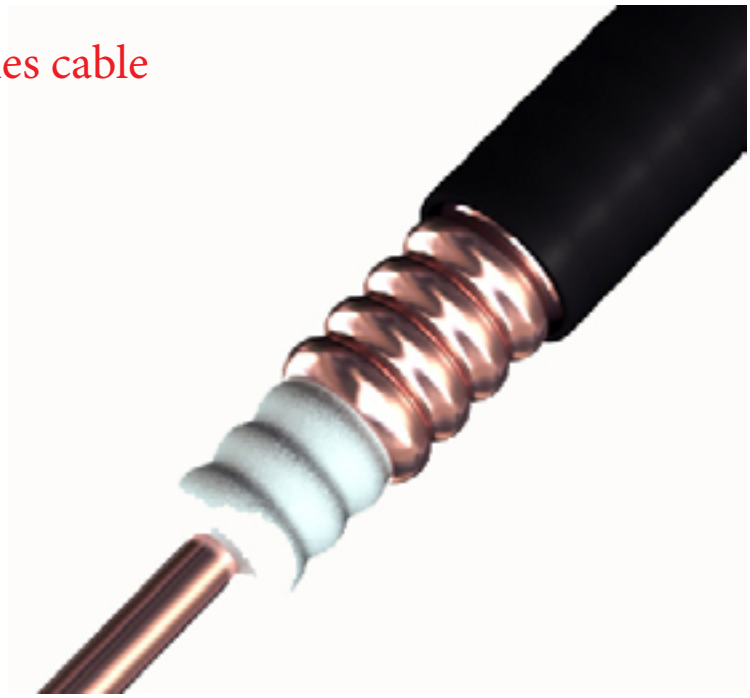
Cable - Low loss 7/8” foam dielectric 50 OHMS

7/8” Low loss series cable



Frequency MHz	dB/100m	Average power	Frequency MHz	dB/100m	Average power
0.5	0.084	44.000	700	3.500	1.860
1	0.115	44.000	800	3.780	1.730
1.5	0.141	44.000	824	3.850	1.700
2	0.164	40.000	894	4.030	1.620
10	0.367	17.700	960	4.200	1.560
20	0.525	12.400	1000	4.300	1.520
30	0.646	10.100	1250	4.900	1.330
50	0.843	7.740	1500	5.450	1.200
88	1.130	5.750	1700	5.870	1.110
100	1.210	5.380	2000	6.460	1.010
108	1.260	5.170	2300	7.050	0.926
150	1.500	4.340	3000	8.310	0.785
174	1.630	4.010	4000	9.940	0.656
200	1.760	3.720	5000	11.500	0.568
300	2.190	2.980			
400	2.560	2.550			
450	2.740	2.390			
500	2.900	2.250			
512	2.940	2.220			
600	3.210	2.030			

Radio Structures supply all cable types and sizes

Electrical	
Max Frequency GHz	5
Velocity percent	89
Peak power (KW)	44
DC resistance - Inner	1.15
DC resistance - Outer	1.18
DC breakdown - Volts	6000
Jacket spark - Volts	8000
Capacitance pF/m	75
Inductance, uH/m	0.187
Mechanical	
Outer conductor	Copper
Inner conductor	Copper
Dia over jacket (mm)	28
Dia over copper (mm)	24.9
Outer conductor (mm)	250
Min bend radius (mm)	50
Number of bends min	16.3
Bending moment (N-m)	0.49
Cable weight (kg/m)	147
Tensile strength (kg/mm)	1.4

For other cable types or sizes not listed please contact us

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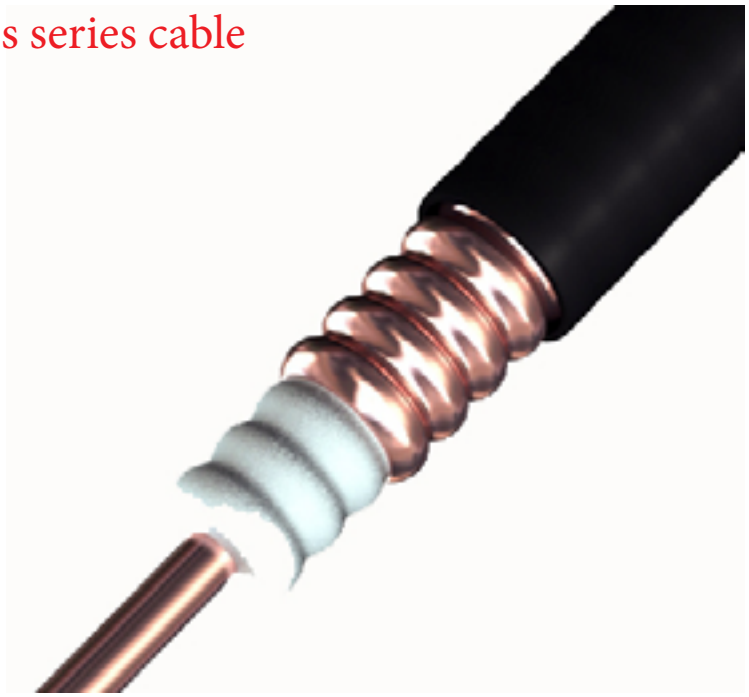
Cable - Low loss 1.5/8" foam dielectric 50 OHMS

1.5/8" Low loss series cable



Frequency MHz	dB/100m	Average power	Frequency MHz	dB/100m	Average power
0.5	0.015	143.000	700	0.664	4.550
1	0.021	143.000	800	0.718	4.210
1.5	0.026	117.000	824	0.731	4.130
2	0.030	101.000	894	0.767	3.940
10	0.068	44.500	960	0.800	3.780
20	0.097	31.200	1000	0.819	3.690
30	0.120	25.300	1250	0.936	3.230
50	0.156	19.300	1500	1.050	2.890
88	0.210	14.300	1700	1.130	2.680
100	0.225	13.400	2000	1.250	2.420
108	0.235	12.900	2300	1.370	2.210
150	0.280	10.800	2500	1.440	2.100
174	0.304	9.950			
200	0.328	9.220			
300	0.411	7.360			
400	0.482	6.270			
450	0.515	5.870			
500	0.547	5.530			
512	0.556	5.440			
600	0.607	4.980			

Electrical	
Max Frequency GHz	2.5
Velocity percent	88
Peak power (KW)	145
DC resistance - Inner	1.69
DC resistance - Outer	0.33
DC breakdown - Volts	11000
Jacket spark - Volts	10000
Capacitance pF/m	75.8
Inductance, uH/m	0.19
Mechanical	
Outer conductor	Copper
Inner conductor	Copper
Dia over jacket (mm)	50
Dia over copper (mm)	46.5
Outer conductor (mm)	4.05
Min bend radius (mm)	510
Number of bends min	50
Bending moment (N-m)	68
Cable weight (kg/m)	1.36
Tensile strength (kg/mm)	455

Radio Structures supply all cable types and sizes

For other cable types or sizes not listed please contact us

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Cable - Low loss 1/4" super flexible 50 OHMS

1/4" Super flexible Low loss series cable

Frequency MHz	dB/100m	Average power	Frequency MHz	dB/100m	Average power
0.5	0.405	5.000	800	19.000	0.331
1	0.574	5.000	824	19.300	0.326
1.5	0.704	5.000	894	20.300	0.311
2	0.814	5.000	960	21.100	0.298
10	1.840	3.420	1000	21.600	0.291
20	2.630	2.400	1250	24.700	0.255
30	3.230	1.950	1500	27.500	0.229
50	4.200	1.500	1700	29.700	0.213
88	5.670	1.110	2000	32.700	0.193
100	6.070	1.040	2300	35.700	0.177
108	6.320	0.998	3000	42.200	0.150
150	7.510	0.837	4000	50.500	0.125
174	8.150	0.773	5000	58.400	0.108
200	8.790	0.717	6000	66.000	0.096
300	11.000	0.574	8000	80.000	0.079
400	12.900	0.490	10000	92.800	0.068
450	13.700	0.459	12000	106.000	0.060
500	14.600	0.432	14000	118.000	0.054
512	14.800	0.427	16000	130.000	0.049
600	16.200	0.390	18000	141.000	0.045
700	17.600	0.358	19000	141.000	0.043

Radio Structures supply all cable types and sizes

Electrical	
Max Frequency GHz	19
Velocity percent	78
Peak power (KW)	5
DC resistance - Inner	8.2
DC resistance - Outer	6.5
DC breakdown - Volts	2000
Jacket spark - Volts	5000
Capacitance pF/m	85
Inductance, uH/m	0.213
Mechanical	
Outer conductor	Copper
Inner conductor	Copper
Dia over jacket (mm)	7.6
Dia over copper (mm)	6.4
Outer conductor (mm)	25
Min bend radius (mm)	20
Number of bends min	0.7
Bending moment (N-m)	0.08
Cable weight (kg/m)	68
Tensile strength (kg/mm)	1.8

For other cable types or sizes not listed please contact us

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Cable - Low loss 1/2" super flexible 50 OHMS

1/2" Super flexible Low loss series cable

Frequency MHz	dB/100m	Average power	Frequency MHz	dB/100m	Average power
0.5	0.234	7.500	600	8.900	0.785
1	0.331	7.500	700	9.670	0.720
1.5	0.406	7.500	800	10.400	0.669
2	0.469	7.500	824	10.600	0.658
10	1.060	6.610	894	11.100	0.628
20	1.500	4.650	960	11.500	0.604
30	1.850	3.780	1000	11.700	0.590
50	2.400	2.910	1250	13.300	0.520
88	3.220	2.170	1500	14.800	0.470
100	3.440	2.030	1700	15.900	0.438
108	3.580	1.950	2000	17.400	0.400
150	4.230	1.650	2300	18.900	0.370
174	4.570	1.530	3000	22.100	0.318
200	4.920	1.420	4000	26.200	0.270
300	6.120	1.140	5000	30.000	0.230
400	7.140	0.980	6000	34.100	0.203
450	7.610	0.919	8000	42.000	0.166
500	9.060	0.867	10000	49.300	0.142
512	8.170	0.856	10200	50.000	0.140

Electrical	
Max Frequency GHz	10.2
Velocity percent	81
Peak power (KW)	7.5
DC resistance - Inner	2.69
DC resistance - Outer	3.28
DC breakdown - Volts	2500
Jacket spark - Volts	5000
Capacitance pF/m	82.7
Inductance, uH/m	0.205
Mechanical	
Outer conductor	Copper
Inner conductor	CCA
Dia over jacket (mm)	13.2
Dia over copper (mm)	12.2
Outer conductor (mm)	32
Min bend radius (mm)	50
Number of bends min	2.7
Bending moment (N-m)	0.21
Cable weight (kg/m)	80
Tensile strength (kg/mm)	1.9

Radio Structures supply all cable types and sizes

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Radiating series cables

1/2" Cable

Frequency MHz	Longitudinal Loss, dB/100 m (dB/100 ft)	Coupling Loss 50% dB	Coupling Loss 95%, dB
75	2,17 (0,66)	46(50)	58(60)
150	3,11 (0,95)	54(58)	66(69)
400	5,59 (1,70)	53(55)	57(59)
450	5,88 (1,79)	52(55)	56(59)
470	6,01 (1,83)	52(55)	56(59)
500	6,20 (1,89)	52(55)	56(59)
800	8,50 (2,59)	55(58)	59(62)
870	9,07 (2,76)	56(59)	61(64)
900	9,41 (2,87)	57(60)	62(65)
960	10,51(3,20)	57(60)	62(65)

Standard conditions

7/8" Cable

Frequency MHz	Longitudinal Loss, dB/100 m (dB/100 ft)	Coupling Loss 50%, dB	Coupling Loss 95%, dB
75	1,08 (0,33)	46 (50)	58 (60)
150	1,56 (0,48)	54 (58)	66 (69)
380	2,69 (0,81)	53 (55)	57 (59)
400	2,70 (0,82)	53 (55)	57 (59)
450	2,90 (0,88)	52 (55)	56 (59)
470	2,97 (0,91)	52 (55)	56 (59)
500	3,10 (0,94)	52 (55)	56 (59)
800	4,35 (1,33)	55 (58)	59 (62)
870	4,90 (1,49)	56 (59)	61 (64)
900	5,05 (1,54)	57 (60)	62 (65)
960	5,19 (1,58)	57 (60)	62 (65)

1.5/8" Cable

Frequency MHz	Longitudinal Loss, dB/100 m (dB/100 ft)	Coupling Loss 50%, dB	Coupling Loss 95%, dB
35	0,43 (0,13)	47 (50)	57 (60)
75	0,62 (0,19)	51 (55)	60 (64)
150	0,91 (0,28)	56 (60)	68 (72)
400	1,77 (0,54)	55 (57)	58 (60)
450	1,86 (0,57)	55 (57)	58 (60)
470	1,91 (0,58)	55 (57)	58 (60)
480	1,94 (0,59)	55 (57)	58 (60)
800	3,06 (0,93)	54 (58)	58 (62)
870	3,34 (1,02)	54 (58)	58 (62)
900	3,46 (1,06)	54 (58)	58 (62)
960	3,73 (1,14)	54 (58)	58 (62)

Radio Structures supply all cable types and sizes

For other cable types or sizes not listed please contact us

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Elliptical wave guide

Radio Structures supply HELIAX® Elliptical Wave guide Systems including the transmission line, system components, and installation accessories

Jumper cables

Cat type network cables

Cable earth straps

RoHS COMPLIANT

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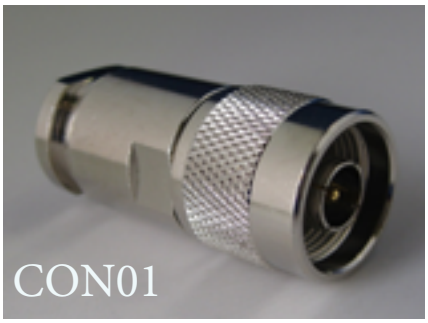
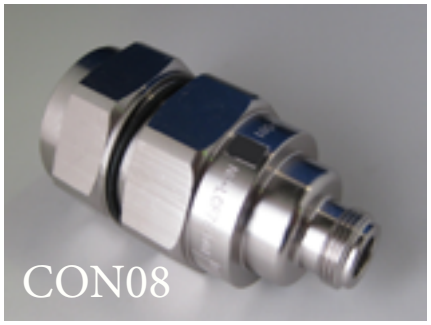
Cable - Connectors


CON01


CON04


CON08


CON02


CON05


CON09


CON02T

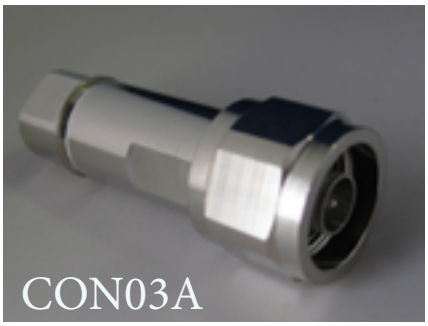

CON05LF


CON11

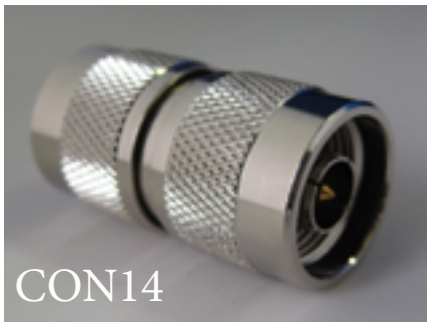

CON03


CON06


CON12


CON03A


CON07


CON14

For Connectors not listed please contact us

Radio Structures Ltd, TRS Complex, Gatelodge close, Round Spinney Industrial Estate, Northampton, NN3 8RJ
Telephone: +44 (0) 1604 790005 Fax: +44(0) 1604 790797 Email: sales@radiostructures.com
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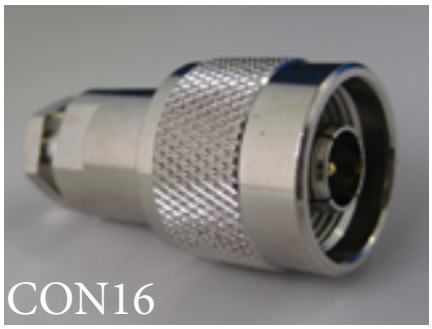
Cable - Connectors


CON16


CON24B


CON30

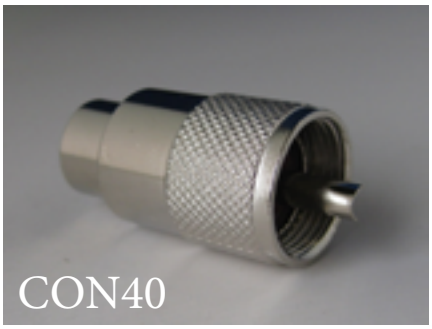

CON20


CON25


CON30A


CON20B


CON25A


CON40

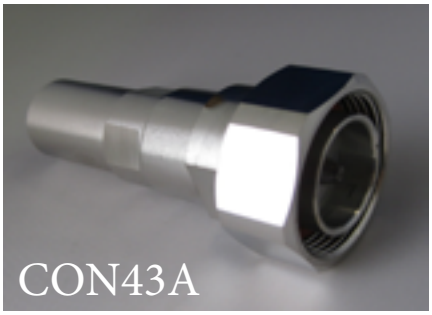

CON22


CON27


CON41


CON24


CON28


CON43A

For Connectors not listed please contact us

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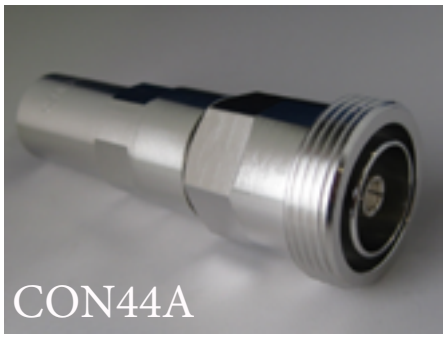
Cable - Connectors


CON44A

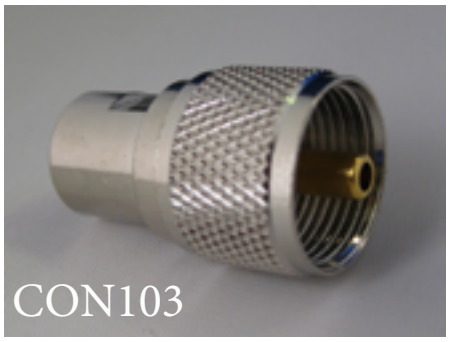

CON71

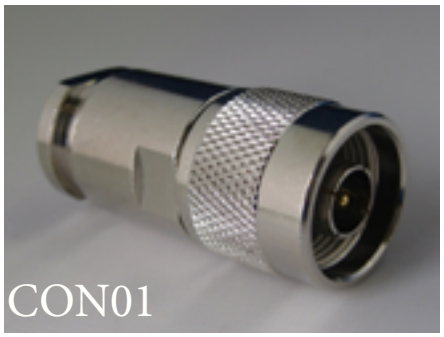

CON75


CON76


CON77


CON78


CON103


CON01


CON02

RG series

Cable type	Connector type	Description	Product code
RG174	N-Type	N type female bulkhead	CON101
RG174	SMB	SMB crimp	CON107
RG174	N-Type	N type male	CON107B
RG58	N-type	N-Type 90 degree	CON106
RG58	UHF	UHF plug pressure clamp	CON103A
RG58	N-type	N-Type male	CON16
RG58	N-type	N-Type male crimp	CON16CR
RG58	N-type	N-Type female crimp	CON16CR/FEMALE
RG58	N-type	N-Type female	CON24
RG58	N-type	N-Type female bulkhead	CON24B
RG58	BNC	BNC Male	CON22
RG58	TNC	TNC Male	CON31
RG58	PL259	PL259 male	CON41
RG58	PL259	PL259 adapter	CON41A

RoHS COMPLIANT

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RG series (continued)

Cable type	Connector type	Description	Product code
RG59	BNC	BNC Male	CON22A
RG59	N-Type	N Type female	CON24B
RG59	TNC	TNC type male	CON31A
RG213	N-Type	N Type male	CON01
RG213	N-Type	N Type female	CON02
RG213	N-Type	N Type female bulkhead	CON09H
RG213	N-Type	N Type female crimp	CON10
RG213	UHF	UHF plug	CON103
RG213	N-Type	N Type male crimp	CON17
RG213	BNC	BNC Male	CON20
RG213	BNC	BNC Male crimp	CON20C
RG213	N-Type	N Type male elbow	CON25
RG213	TNC	TNC male	CON30
RG213	PL259	PL259 female	CON39
RG213	PL259	PL259 male	CON40
RG213	UHF	UHF solder plug	CON40C
RG213	7/16 din	7/16din female panel	CON50
RG213	N-Type / FME	N Type male to FME male	CON63
RG213	TNC/BNC	TNC Female to BNC male	CON64
RG213	7/16 din	7/16din Female	CON70
RG214	7/16 din	7/16din Female	CON70
RG214	N-Type	N Type female	CON02A
RG214	N-Type	N Type male	CON13
RG214	BNC	BNC male	CON20A

These are a range of popular connectors, Radio Structures also supply other versions

3/8” low loss connectors

Cable type	Connector type	Description	Product code
3/8”	N-type	N-Type male LCF	CON03
3/8”	N-type	N-Type male	CON03U
3/8”	N-type	N-Type female LCF	CON07
3/8”	N-type	N-Type female EC	CON07U

These are a range of popular connectors, Radio Structures also supply other versions

RoHS COMPLIANT

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Low loss connectors (continued)

1/2" low loss connectors

Cable type	Connector type	Description	Product code
1/2"	N Type	N Type LCF male	CON04
1/2"	N Type	N Type 90 degree	CON04-90
1/2"	N Type	N Type male sucofeed	CON04-SUHNER
1/2"	N Type	N Type female	CON04CUH
1/2" Radiating	Radiating N	N Type male radiating	CON04H
1/2"	N Type	N Type LCF female	CON06
1/2" Radiating	Radiating N	N Type female radiating	CON06CUH
1/2"	N Type	N Type Male	CON104
1/2"	N Type	N Type Female	CON105
1/2"	N Type	N Type Superflex male SCF12	CON78
1/2"	N Type	N Type Superflex female	CON97
1/2"	N Type	N Type Superflex male	CON99
1/2"	7/16"	7/16din male	CON43
1/2"	7/16"	7/16din female	CON43FM
1/2"	7/16"	7/16din HCF male	CON59

These are a range of popular connectors, Radio Structures also supply other versions

7/8" low loss connectors

Cable type	Connector type	Description	Product code
7/8"	N Type	N Type Male LCF	CON05
7/8" Radiating	N Type	N Type Male LCF Radiating	CON05LF
7/8"	N Type	N Type Female LCF	CON08
7/8"	7/16din	7/16din Male LCF	CON42
7/8"	7/16din	7/16din Female LCF	CON42F
7/8"	7/16din	7/16din Male right angle	CON42RA

These are a range of popular connectors, Radio Structures also supply other versions

RoHS COMPLIANT

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Low loss connectors (continued)

1.5/8” low loss connectors

Cable type	Connector type	Description	Product code
1.5/8”	N Type	N Type Male	CON32U
1.5/8”	N Type	N Type Male LCF	CON32
1.5/8”	N Type	N Type Male rapid fit	CON124
1.5/8”	N Type	N Type Female rapid fit	CON125

These are a range of popular connectors, Radio Structures also supply other versions

Super flexible low loss connectors

Cable type	Connector type	Description	Product code
1/4” Superflex	N Type	N Type Male 1/4”	CON121
1/4” Superflex	N Type	N Type Female 1/4”	CON122
1/2” Superflex	N Type	N Type Male 1/2” SCF12-50J	CON78
1/2” Superflex	N Type	N Type Female 1/2” SCF12-50J	CON79
1/2” Superflex	N Type	N Type Female 1/2”	CON97
1/2” Superflex	N Type	N Type Male 1/2”	CON99
1/2” Superflex	N Type	N Type Male 1/2”	CON99U

These are a range of popular connectors, Radio Structures also supply other versions

RoHS COMPLIANT

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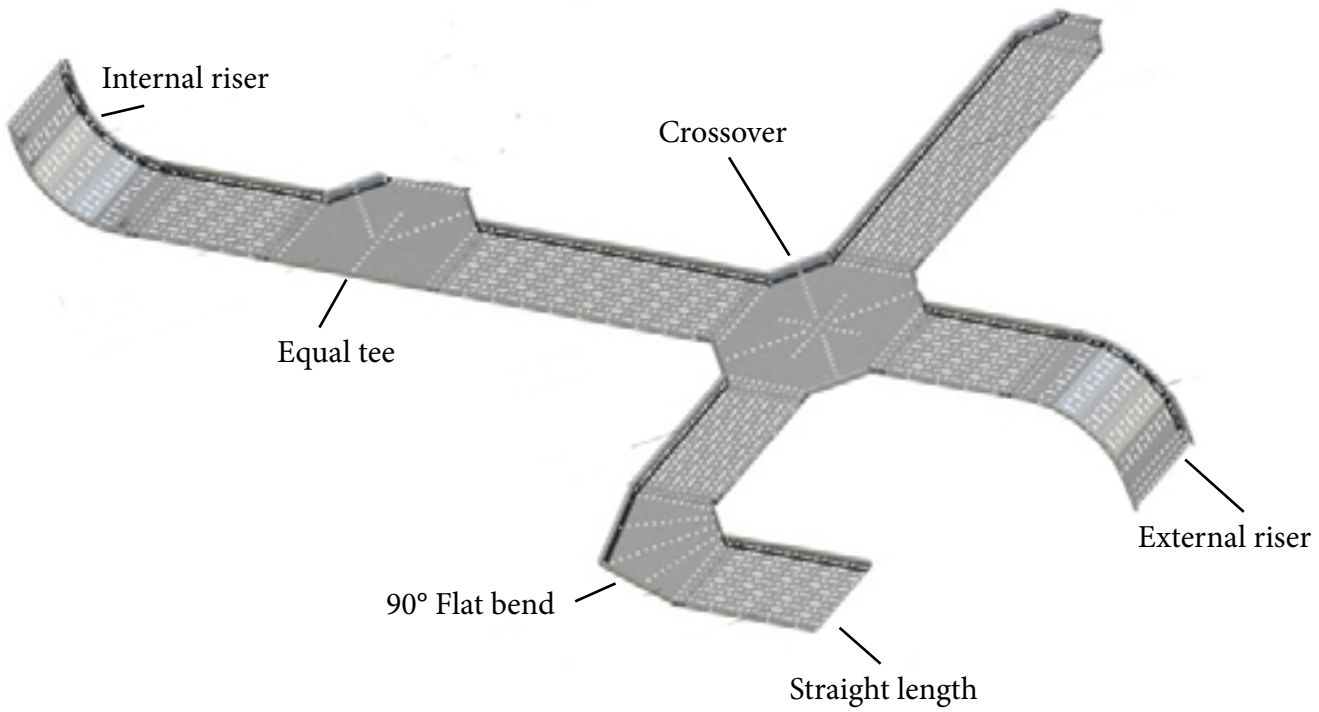
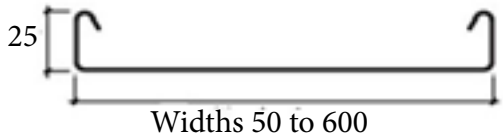
Cable management tray system

Cable tray

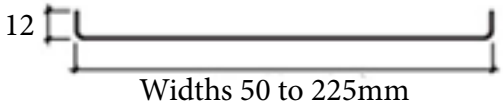
Radio Structures supply cable management trays to suit the customers requirement.
Tray Systems generally conform to BS EN 61537:2007 Cable management - cable tray systems and cable ladder systems.
Materials and finishes available are mild steel pre-galvanised as standard, mild steel hot dip galvanised after manfacture and stainless steel grade 316L to order



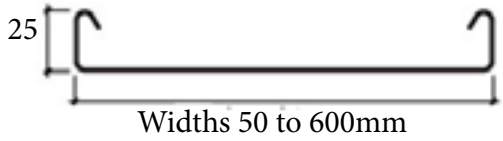
Medium duty



Light duty



Heavy duty



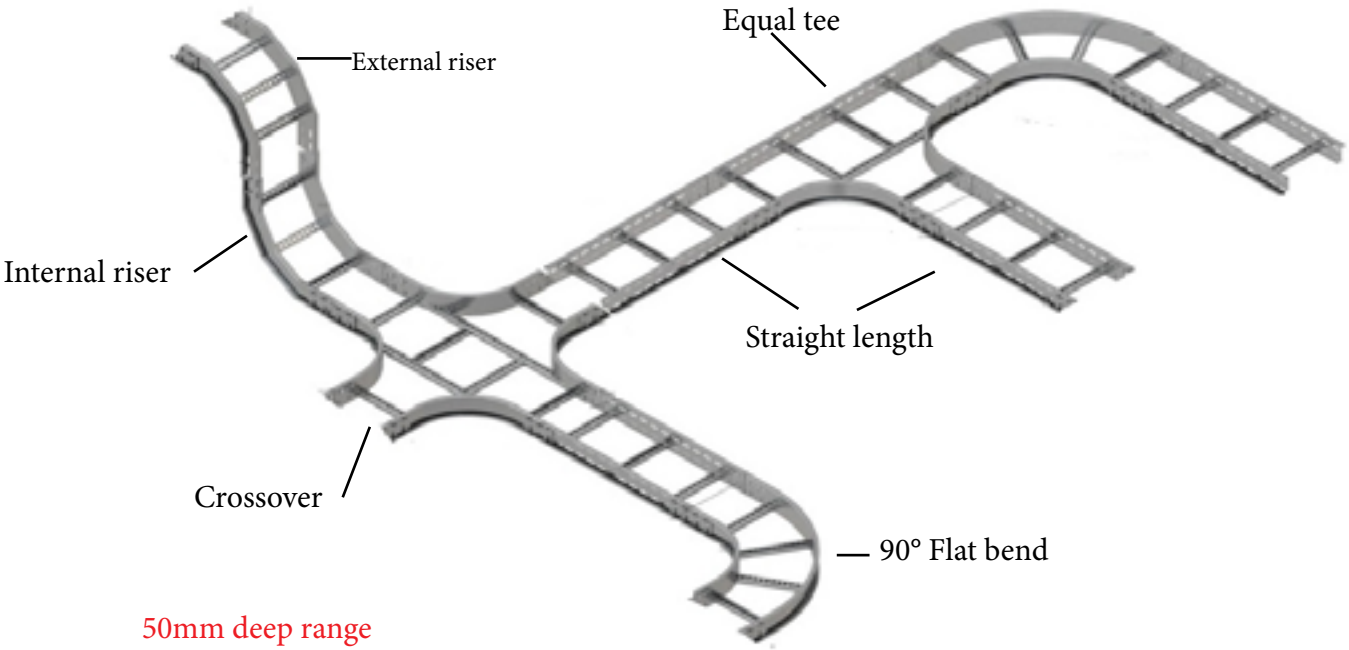
Other type cable management solutions available please contact us

Radio Structures Ltd, TRS Complex, Gatelodge close, Round Spinney Industrial Estate, Northampton, NN3 8RJ
Telephone: +44 (0) 1604 790005 Fax: +44(0) 1604 790797 Email: sales@radiostructures.com
www.radiostructures.com

Cable management ladder

Cable ladder rack

Radio Structures supply cable management trays to suit the customers requirement.
Tray Systems generally conform to BS EN 61537:2007 Cable management - cable tray systems and cable ladder systems.
Materials and finishes available are mild steel pre-galvanised as standard, mild steel hot dip galvanised after manfacture and stainless steel grade 316L to order

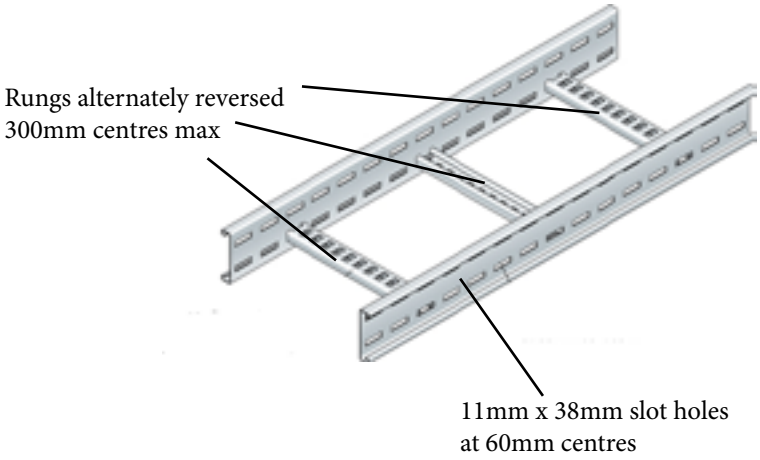


50mm deep range
50mm External side
20mm Internal side
1.5mm Thick side rails

100mm deep range
100mm External side
70mm Internal side
1.5mm Thick side rails

125mm deep range
125mm External side
95mm Internal side
2mm Thick side rails

150mm deep range
150mm External side
120mm Internal side
2mm Thick side rails



Other type cable management solutions available please contact us

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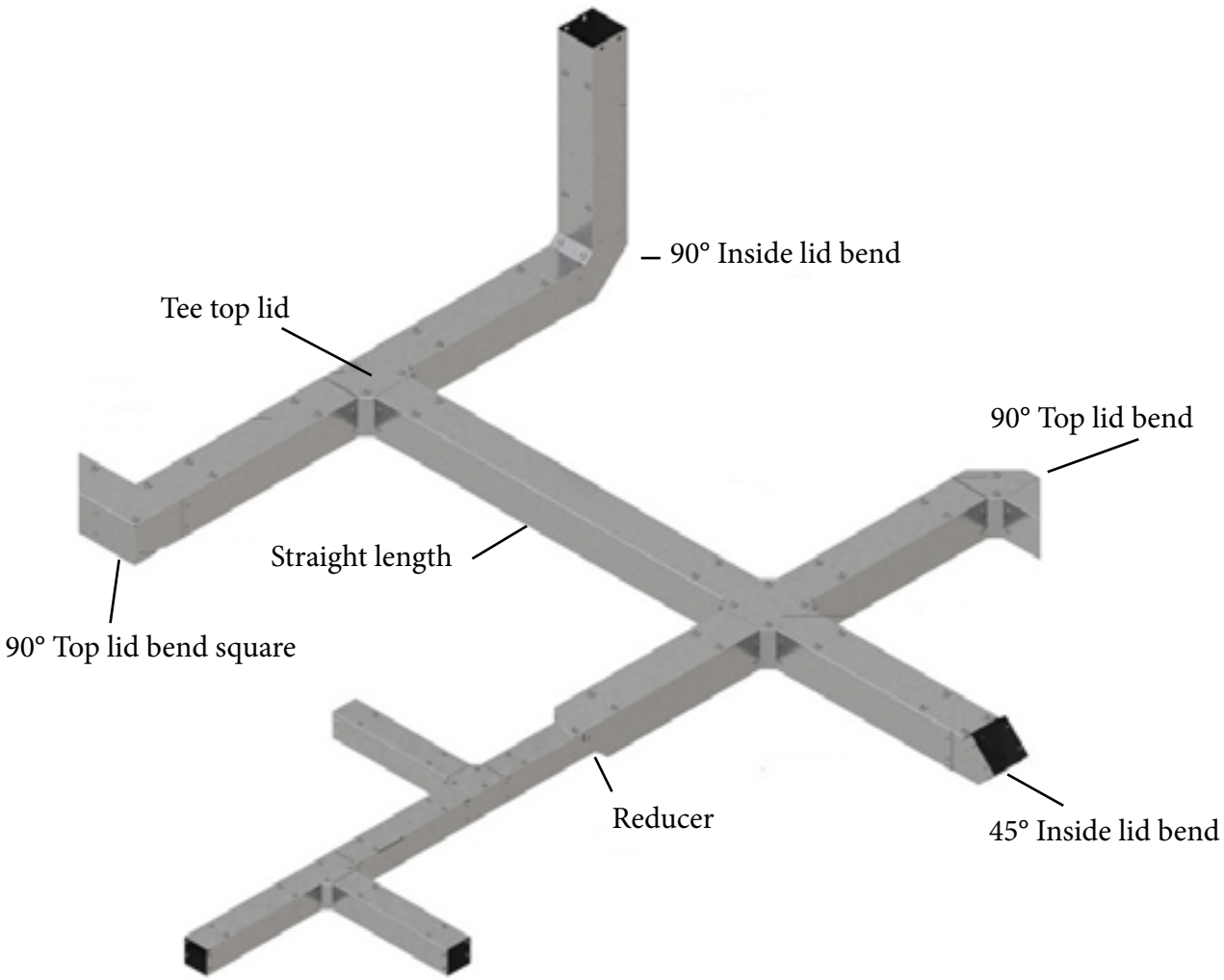
Cable management trunking

Cable trunking

Radio Structures standard specification distribution trunking is available in widths / depths up to 225mm. Trunking is also available for lighting in 50mm x 50mm, this range utiliises the standard distribution trunking components but with snap on lids available in white plastic or pre galvanised steel. Standard finish is pre galvanised, however we offer bespoke powder coating as an optional extra.



Trunking Systems generally conform to BS EN 50085-1:2005 Cable trunking systems and cable ducting systems for electrical installations-Part 1: General requirements, and BS EN 50085-2-1:2006 Cable trunking systems and cable ducting systems for electrical installations-Part 2-1: Cable trunking systems and cable ducting systems intended for mounting on walls and ceilings.
The maximum voltage of these installations is 1000V a.c. and 1500V d.c.

Other type cable management solutions available please contact us

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Cable drum trailer

Easy load Cable drum trailer

The Radio Structures easy load cable trailer is an ideal solution for heavy cable drums, the easy load function is ideal for single operator site operations.

Cable drums are winched into place via the frame linked to the hand winch, this makes light work of loading the cable drum onto trailer.

Cable trailers are manufactured to suit the customers requirements - We would generally ask what the largest and heaviest drum that would be transported and then manufacture the trailer to that specification enabling the client to have the most cost effective sized trailer.

Trailers can come galvanised to BS EN ISO 1461:2009 or powder coated to suit the clients colour preference.

Complete with an autobrake system, full lighting system, spare wheel and ball hitch.

We are also able to manufacture extras that the client may need attaching to the trailer.

Radio Structures also carry out regular servicing, maintenance and repairs. Trailers come with 12 months warranty.

Bespoke and other type solutions available please contact us

Radio Structures Ltd, TRS Complex, Gatelodge close, Round Spinney Industrial Estate, Northampton, NN3 8RJ
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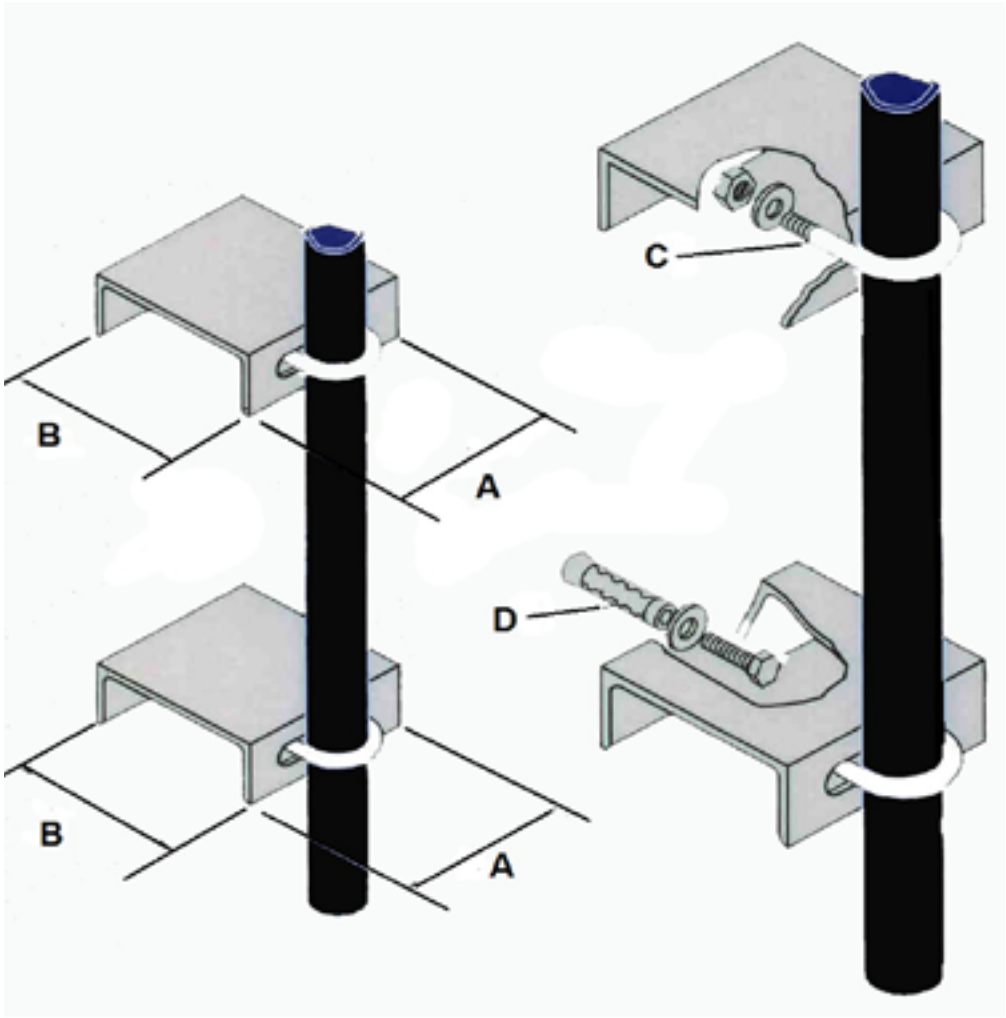
Channel wall brackets

Wall mounting channel brackets



Stock code	A	B	C	D
CS4	130mm	92mm	GUB002	RAWLBOLT/10
CS5	130mm	127mm	GUB002	RAWLBOLT/10
CS6	130mm	152mm	GUB002	RAWLBOLT/10

Bespoke and other type solutions available please contact us

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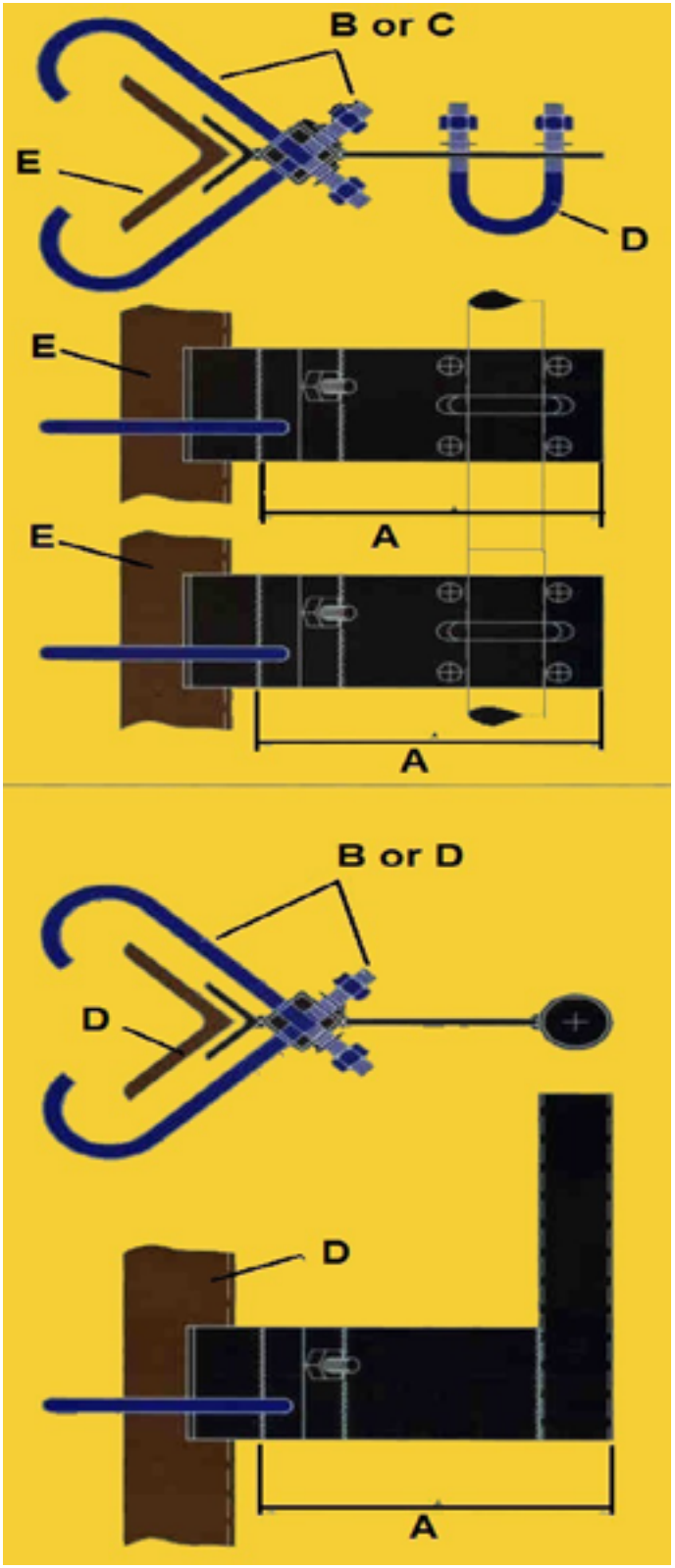
Angle / Tube tower brackets

Vertical tower brackets - for tubular or angle masts

VTB



AVTB or TVTB

To suit Angle or tubular leg towers -
(48.3 mm scaffold Tube not included)
Can suit larger OD tubes

Straight version also available

Bespoke and other type solutions available please contact us

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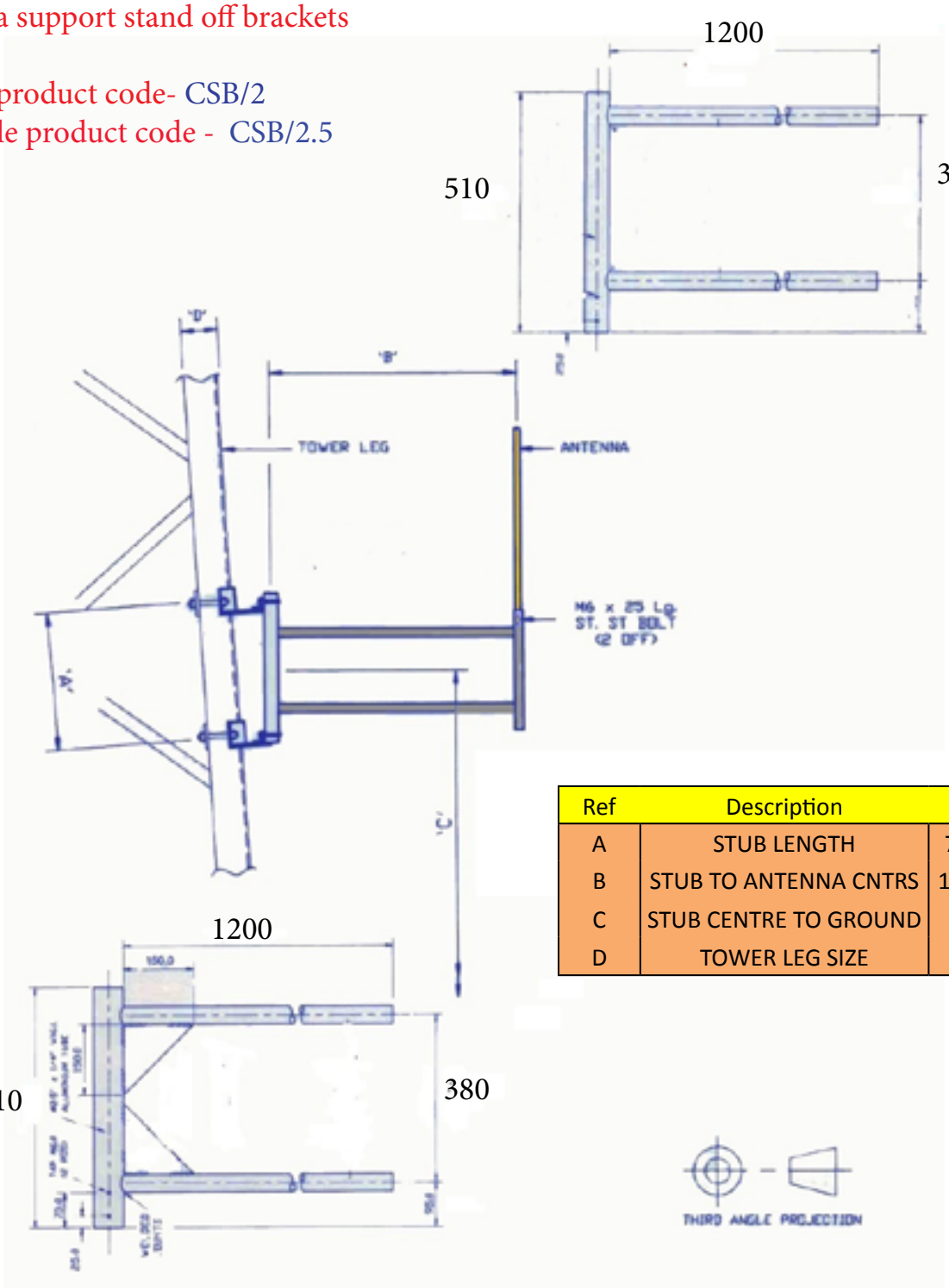
Antenna support tower brackets

Antenna support stand off brackets

2” pole product code- CSB/2
2.5” pole product code - CSB/2.5



Ref	Description	Length
A	STUB LENGTH	762mm
B	STUB TO ANTENNA CNTRS	1200mm
C	STUB CENTRE TO GROUND	
D	TOWER LEG SIZE	

Other type versions available

Bespoke and other type solutions available please contact us

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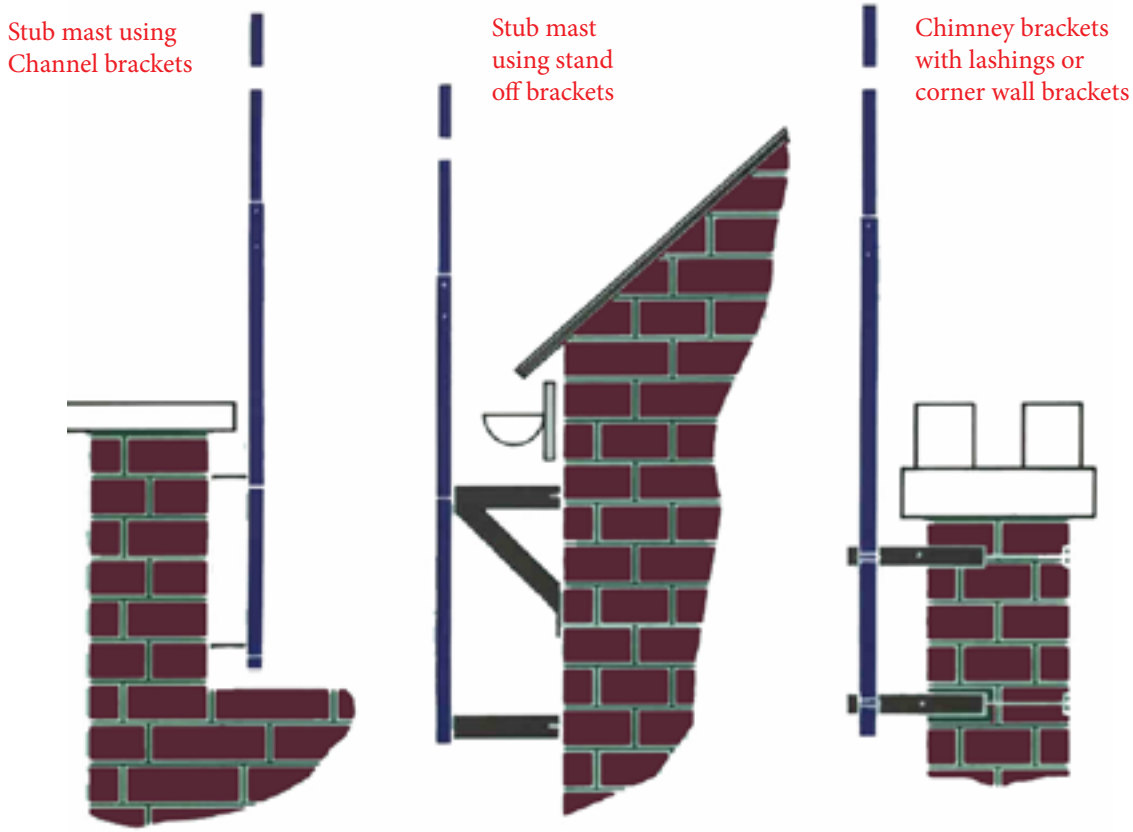
Wall mount fixings

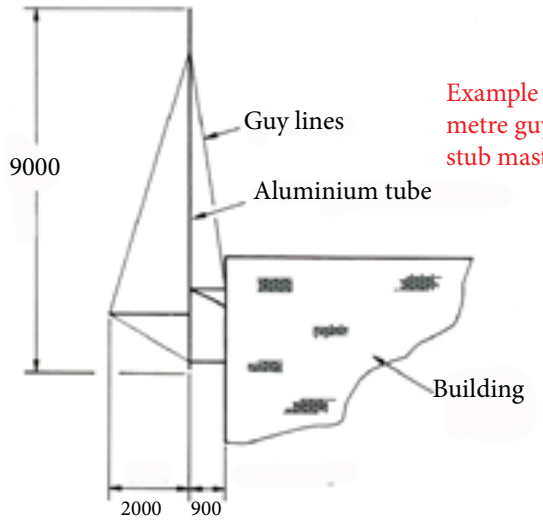
Galvanised stub masts and various fixings



STUB MAST

The stub mast is the most economical way of supporting a standard radio communication antenna these can also be guyed to help minimise potential wind vibration and to keep the mast steady.
Radio structures also manufacture heavy duty models that are fully welded and will support CCTV camera systems or heavier type applications, ideal for side of building applications.
Stub masts can be mounted on virtually any sound structure.
Chimney brackets and lashings can be provided for applications that require to be securely attached to a chimney stack.

Example of a heavy duty welded CCTV box pole - Available in various heights. Contact us for a quote.



Example of a 9 metre guyed stub mast

Bespoke and other type solutions available please contact us

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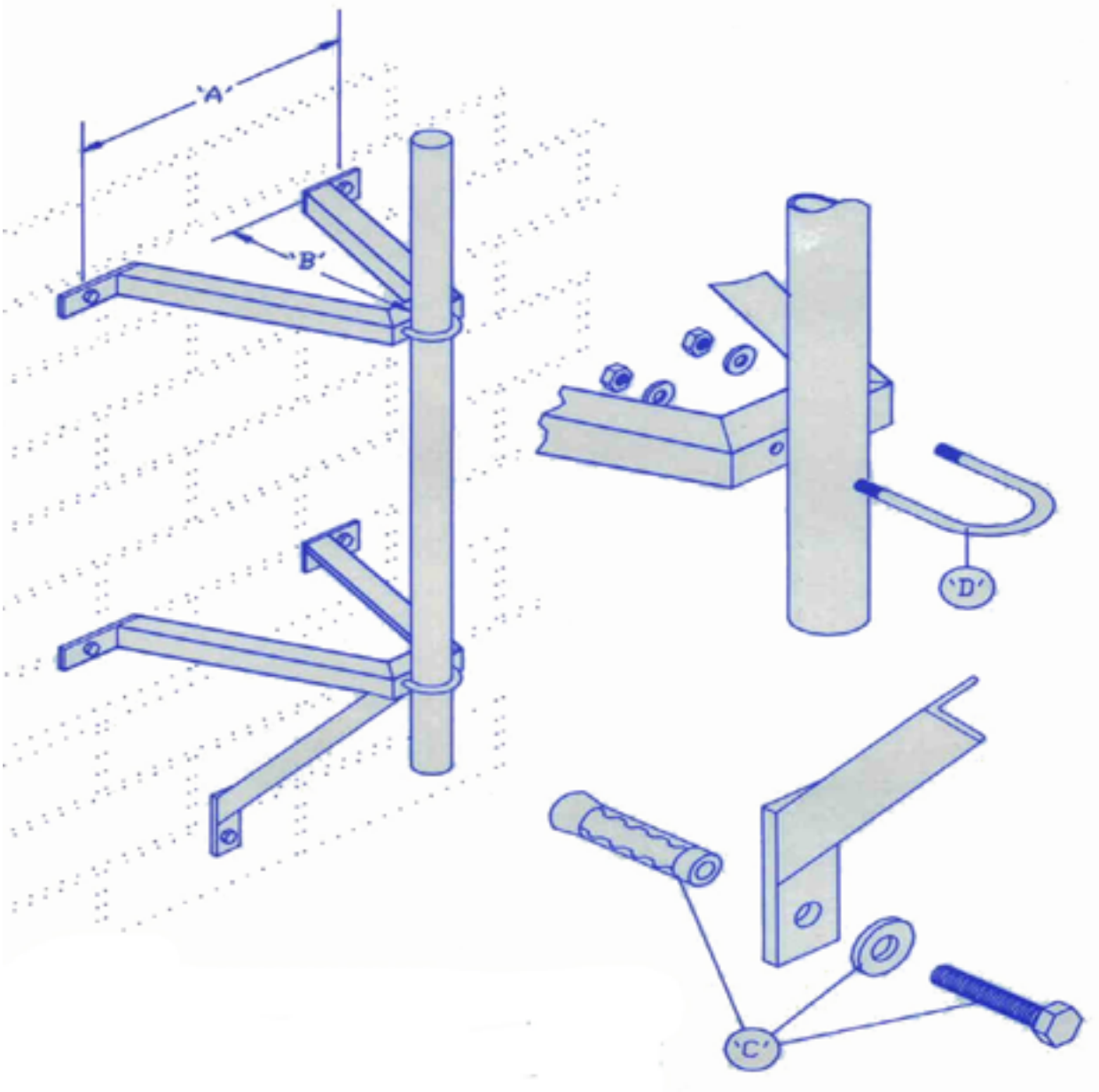
Wall stand off brackets

Galvanised wall mounting standoff brackets



Stock code	Description	A	B	C	D
SAB3/12	12" Stand off brackets	365mm	305mm	RAWLBOLT/10	GUB002
SAB3/18	18" Stand off brackets	460mm	460mm	RAWLBOLT/10	GUB002
SAB3/24	24" Stand off brackets	620mm	600mm	RAWLBOLT/10	GUB002
SAB3/36	36" Stand off brackets	900mm	900mm	RAWLBOLT/10	GUB002

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Base posts / Wall posts

Base posts for internal and external tube mounting

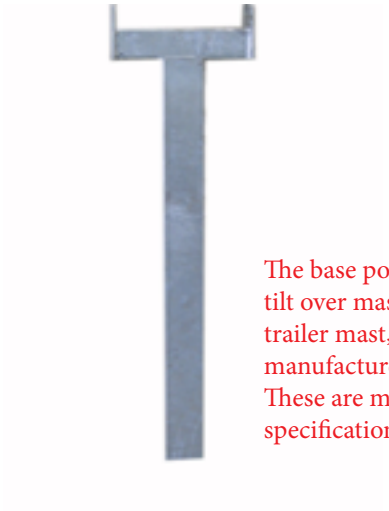
Base posts manufactured to suit the customers application from large base plate versions to suit our tilt over masts to small types to hold light scaffold type tube.

B0002

The base channel post mast is an external support post to suit scaffold type tube, this can also be manufactured to suit larger type tubes.

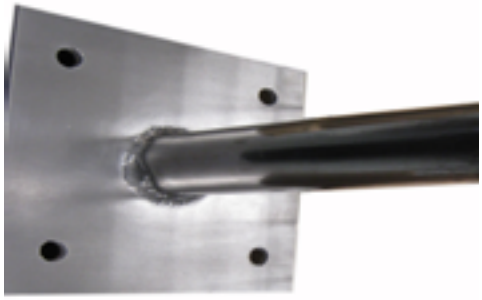
VP12-2

Stub base plate with drainage holes, ideal for use as a base for scaffold type tube, the stub fits inside the scaffold tube, this can be manufactured to suit larger ID tubes.



The base post is used for mounting tilt over masts and versions to suit the trailer mast, the base plate can also be manufactured to suit the customers base. These are manufactured to suit the clients specification.

Wall posts are an ideal solution to enable fitting to a wall, with angle and straight versions available



The straight wall post can be fitted with a dipole to enable wall mount dipole antennas, we can manufacture other versions to suit your application.

The angle wall post bracket is ideal for fitting indoor antennas such as end fed or collinears, these can also be manufactured to suit other applications.

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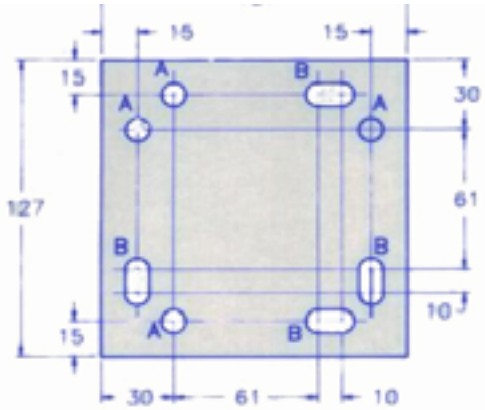
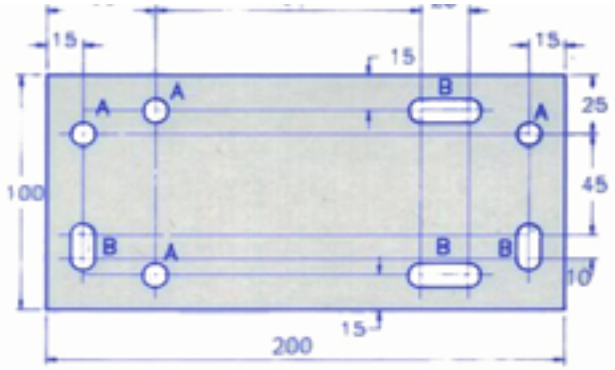
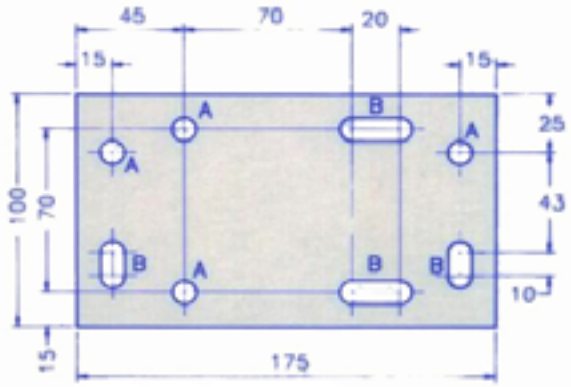
Antenna mounting clamps

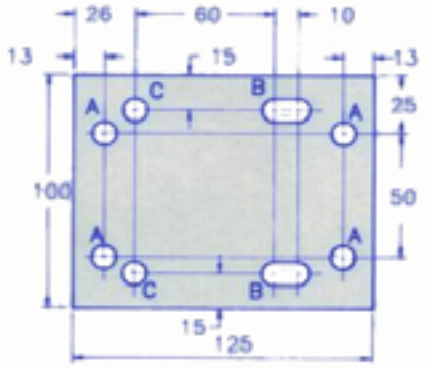
Crossover plates





Product code	Description	Product code	Description
CO/1.5	1.5” x 1.5” Crossover plate c/w U-bolts	CO/3.5	3.5” x 1.5” Crossover plate c/w U-bolts
CO/2	2” x 1.5” Crossover plate c/w U-bolts	CO/4	4” x 1.5” Crossover plate c/w U-bolts
CO/2-2	2” x 2” Crossover plate c/w U-bolts	CO/4.5	4.5” x 1.5” Crossover plate c/w U-bolts
CO/2.5	2.5” x 1.5”” Crossover plate c/w U-bolts	CO/5	5” x 1.5” Crossover plate c/w U-bolts
CO/3	3” x 1.5” Crossover plate c/w U-bolts		





These crossover plates are widely used for mounting antenna’s at 90 degrees to the support structure. They are supplied complete with U-bolts to accept diameters from 1.1/4” to 5.1/2” We can also fabricate bespoke crossover plates and other type brackets to suit your application.

Bespoke and other type solutions available please contact us

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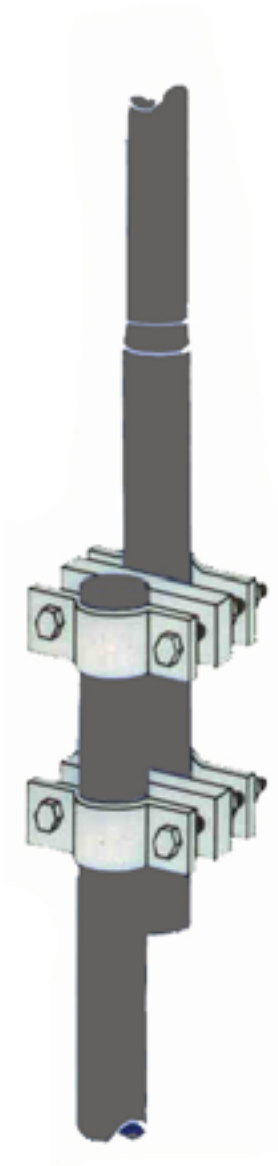
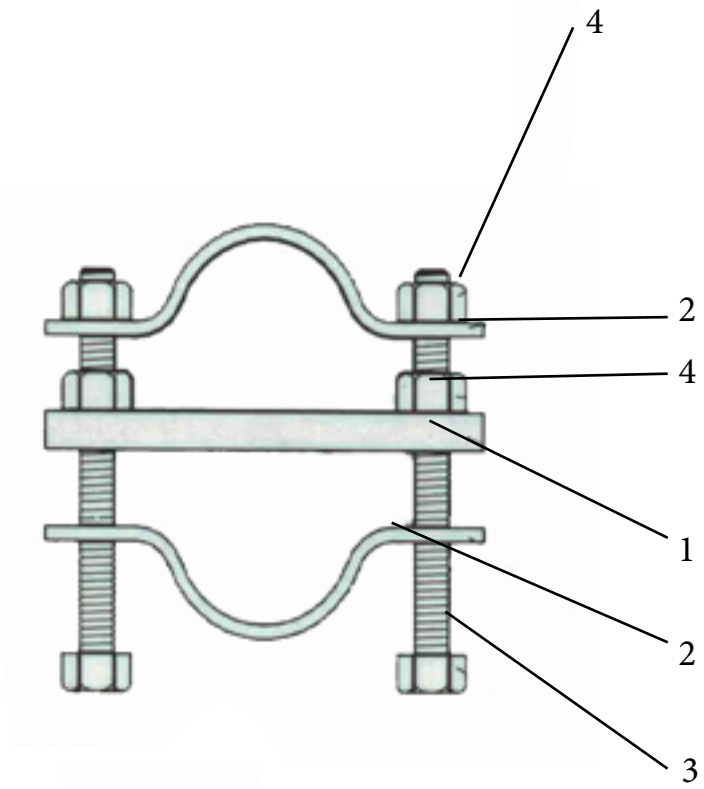
Antenna support clamps

Antenna parallel supporting clamps - CVB





REF	Description	Product code
1	CVB CLAMP (FLAT)	CVB003
2	CVB CLAMP (CURVED)	CVB002
3	M10X100 M.S BOLT	GHS10X100
4	M10 M.S NUT	GFN10
	FULL SET OF CVB CLAMPS	CVB

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Wire rope

Wire rope - Available in galvanised / Stainless steel and PVC covered

Radio Structures supply wire rope cut to size and also offer a sealed termination service, enabling the connection type of choice such as a swaged thimble eye as shown - Our standard wire rope is 7x19 specification, we are able to supply other types.

Example of a thimble swaged termination

Nominal Diameter [mm]	Approximate Mass [kg/m]	Minimum breaking loads - 1770 Mpa [kN]
3	0.038	5.77
4	0.059	10.25
5	0.092	16
6	0.134	23.1
7	0.182	31.4
8	0.243	41
9	0.308	51.9
10	0.379	64.1
11	0.466	77.5
12	0.578	92.3
13	0.636	108.3
14	0.768	125.6
16	0.964	164
18	1.26	207.6
20	1.52	256.3

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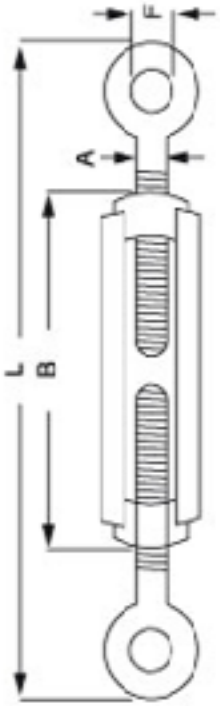
Rigging Screws

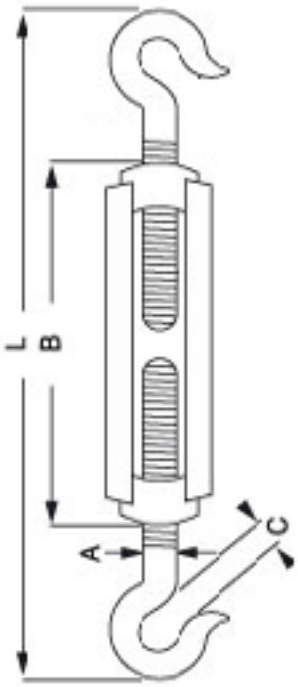
Rigging screw eye-eye type



Dia A mm	B mm	F mm	L - Min mm	L - Max mm	Weight kg/100
6	80	11	128	191	6
8	105	12	159	240	10.5
10	125	13	197	289	19.5
12	140	15	222	320	33
16	190	25	306	451	83
20	220	28	358	522	155
24	260	36	436	628	280

Other variations and models available

Rigging screw Hook - Hook type



Dia A mm	B mm	C mm	L -Min mm	L - Max mm	Weight kg/100
6	110	8	184	270	11
8	110	10.5	200	280	20
10	125	13	234	323	28
12	125	13	260	343	43
16	170	20	322	438	100
20	200	21	382	514	160
24	255	26	496	673	280

Other variations and models available

Bespoke and other type solutions available please contact us

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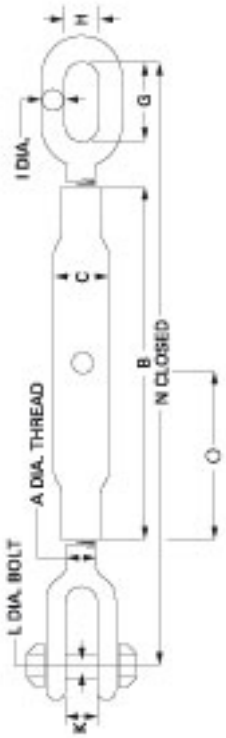
Rigging screws

Rigging screw jaw / eye type

Size A Inches	B mm	G mm	H mm	I mm	N mm	O mm	WLL Tonnes	Weight kg/each
1/4	102	14	8	6	178	254	0.2	0.14
5/16	127	19	8	8	203	305	0.32	0.3
3/8	152	25	11	8	230	349	0.5	0.45
1/2	175	36	14	11	275	524	0.7	1
5/8	225	41	16	14	360	550	1.2	1.4
3/4	230	51	22	16	390	550	1.5	2.5
7/8	300	51	22	16	480	702	2.2	3.6
1	324	57	25	19	520	822	3.2	5.9
1 1/4	375	65	35	22	655	872	4.8	9.1
1 1/2	400	75	38	25	720	949	6	15



Example jaw / eye shown

Rigging screw jaw / jaw type

Dia Thread Inch	Take-up Inch	WLL Tonnes	Dia Thread Inch	Take-up Inch	WLL Tonnes
3/8	6	0.54		12	6.9
	6	1	1 1/4	18	6.9
1/2	9	1		24	6.9
	12	1		12	9.71
	6	1.59	1 1/2	18	9.71
5/8	9	1.59		24	9.71
	12	1.59	1 3/4	18	12.7
	6	2.36		24	12.7
3/4	9	2.36	2	24	16.78
	12	2.36	2 1/2	24	27.22
	18	2.36	2 3/4	24	34.02
7/8	12	3.27			
	18	3.27			
	6	4.54			
1	12	4.54			
	18	4.54			
	24	4.54			

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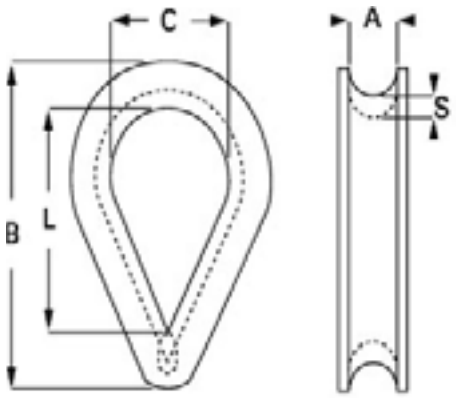
Thimbles / Dee shackles

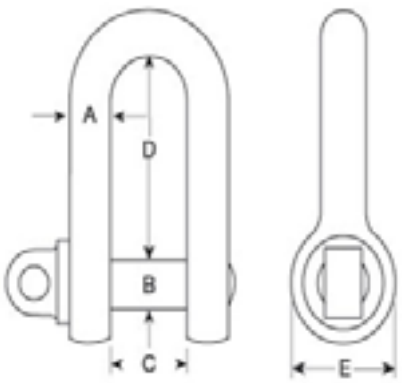
Galvanised thimbles



Rope Dia Inches	A mm	B mm	L mm	C mm	S mm	Weight kg/100
1/4	7	45	26	18	4	4.1
5/16	8	54	33	22	4	6.5
3/8	10	64	38	25	4.8	9.5
1/2	14	80	44	32	5.6	13
5/8	16	98	59	41	7.9	30
3/4	21	124	73	51	9.5	51.5
7/8	22	133	83	57	9.5	69
1	27	162	108	70	10.3	99.5
1 1/8	29	178	111	76	12.7	129
1 1/4	3	197	133	95	12.7	145
1 3/8	38	229	152	105	15.9	238
1 1/2	41	254	165	114	17.5	340
1 5/8	43	254	165	114	17.5	499
1 3/4	51	286	178	127	25.4	532
2	64	330	203	140	28.6	695

Also available in stainless steel, extra heavy and solid versions

Dee shackles - D type



SWL Tonnes	A Inches	B Inches	C Inches	D Inches	E Inches	Weight kg/each
0.25	1/4	3/8	1/2	1	3/4	0.1
0.5	3/8	1/2	3/4	1 1/2	1	0.12
0.75	1/2	5/8	1 1/8	2 1/8	1 1/4	0.29
1.5	5/8	3/4	1 1/4	2 1/2	1 1/2	0.57
2	3/4	7/8	1 1/2	2 7/8	1 3/4	0.92
3	7/8	1	1 3/4	3 1/4	2	1.59
3.75	1	1 1/8	2	3 3/4	2 1/4	2.12
5	1 1/8	1 1/4	2 1/8	4 1/8	2 1/2	3.18
6	1 1/4	1 3/8	2 3/8	4 1/2	2 3/4	4.54
7	1 3/8	1 1/2	2 5/8	5	3	6.06
9.5	1 1/2	1 3/4	2 3/4	5 3/8	3 1/2	8.74

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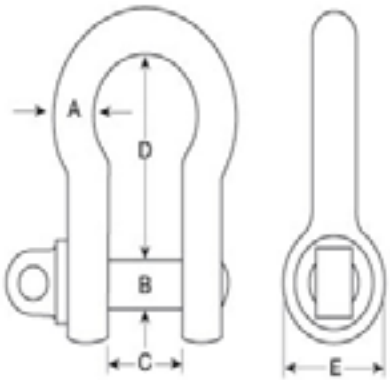
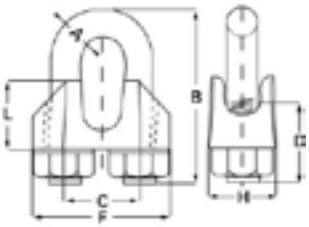
Bow shackles / Wire rope grips

Bow shackles



SWL Tonnes	A Inches	B Inches	C Inches	D Inches	E Inches	Weight kg/each
0.45	3/8	1/2	5/8	1 5/8	1	0.18
0.75	1/2	5/8	7/8	2 1/8	1 1/4	0.34
1.25	5/8	3/4	1 1/8	2 3/4	1 1/2	0.65
2	3/4	7/8	1 3/8	3 3/8	1 3/4	1.08
2.75	7/8	1	1 5/8	3 7/8	2	1.8
3.75	1	1 1/8	1 3/4	4 1/4	2 1/4	2.46
4.75	1 1/8	1 1/4	2	4 7/8	2 1/2	3.47
5.75	1 1/4	1 3/8	2 1/4	5 3/8	2 3/4	4.56
7.25	1 3/8	1 1/2	2 1/2	6	3	6.07
8.5	1 1/2	1 3/4	2 3/4	6 5/8	3 1/2	8.35
9.5	1 5/8	1 7/8	3	7 3/8	3 3/4	11.81

Galvanised wire rope grips



Dia mm	A mm	B mm	C mm	D mm	F mm	H mm	L mm	Weight kg/100
5	5	25	12	13	25	13	13	2.1
6.5	6	32	14	17	30	16	14	4
8	8	41	18	20	39	20	18	8.2
10	8	46	20	24	40	20	21	9.2
12	10	56	24	28	50	24	25	25
13	12	64	27	30	55	28	29	27.5
14	12	66	28	31	59	28	30	35
16	14	76	32	35	64	32	35	43
19	14	83	36	36	68	32	40	49
22	16	96	40	40	74	34	44	68
26	20	111	46	50	84	38	51	117
30	20	127	54	55	95	41	59	140
34	22	141	60	60	105	45	67	213
40	24	159	68	65	117	49	77	268

Bespoke and other type solutions available please contact us

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Lifting blocks / Cable socks

Galvanised Malleable Iron Block Swivel Oval Eye / Hook eye

Galvanised malleable iron body, fitted with plain bore as standard with grey iron sheave.
Also available with steel sheave and bronze brush.
Versions available Single, double and treble sheave combinations
Hot dipped galvanised to BS EN ISO 1462:2009

Other versions and sizes available

Cable lifting socks

Cable lifting socks are an ideal solution for the installation of cables alleviating damage during hoisting, enabling the engineer to pull through ducts and past obstacles with ease. Radio Structures supply cable socks to suit all types of cable.

Bespoke and other type solutions available please contact us

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CCTV & Antenna mounting

CCTV / Antenna Mast and structure mounting solutions

Tilt over poles for easy access and maintenance from ground level.
Available from 3 metres to 12 metres height.
Built to customers specific requirements or "off the shelf" versions available.

Static poles from 3 metres to 16 metres and lattice mast structures available from 3 metres to 20 metres.

Single tilt over and Dual tilt over and wind up (telescopic) versions also available on our lattice masts.

Wall mount CCTV poles - Standard and heavy duty

CCTV poles call for a quote - Fabricated to suit application

Tilt over masts and dual tilt and wind up (telescopic) masts.
All versions can be found within the mast / tower sections

Product code	Description	Height (M)	Max head load
CCTVTILTPOLE3	Tilt over CCTV pole c/w Winch	3	30Kg
CCTVTILTPOLE6	Tilt over CCTV pole c/w winch	6	30Kg
CCTVTILTPOLE9	Tilt over CCTV pole c/w winch	9	25Kg
CCTVTILTPOLE12	Tilt over CCTV pole c/w Winch	12	25Kg
CCTVSTAT3	Static pole for CCTV	3	30Kg
CCTVSTAT6	Static pole for CCTV	6	30Kg
CCTVSTAT9	Static pole for CCTV	9	25Kg
CCTVSTAT12	Static pole for CCTV	12	25Kg

Radio Structures manufacture solutions to suit the customers requirement

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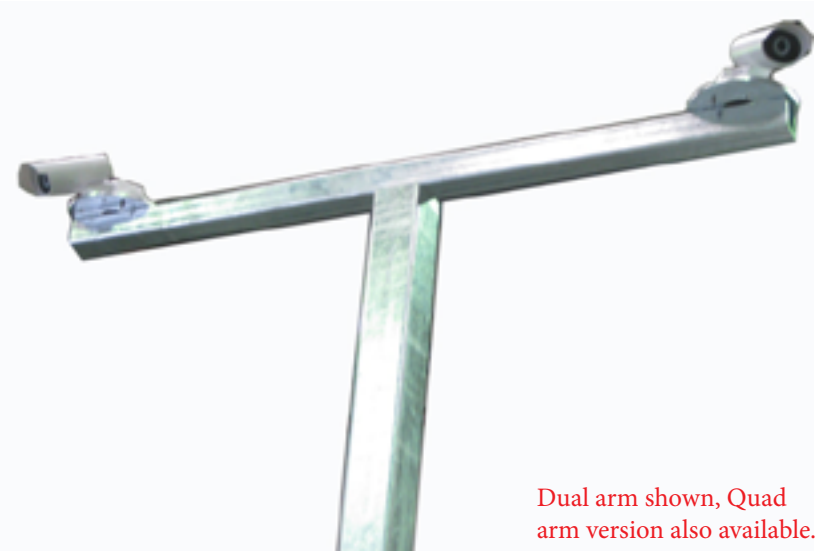
CCTV & Antenna mounting

CCTV / Antenna Mast and structure mounting solutions

Shown with dome camera
Dual and Quad arm version
also available.

Single, Dual and Quad arm solutions for use with dome type cameras, these can be adapted to suit any camera, antenna, security light, Solar panel, wind generator or any other relevant equipment.

Dual, Triple and Quad arm mounting solutions.
These can be used as a solution for multi camera, security lights, antennas and any other relevant requirement.
Radio Structures can fabricate any solution to suit your needs.



Dual arm shown, Quad arm version also available.

Product code	Description
SARMCCTV	Single arm CCTV mounting top cap
DARMCCTV	Dual armm CCTV mounting top cap

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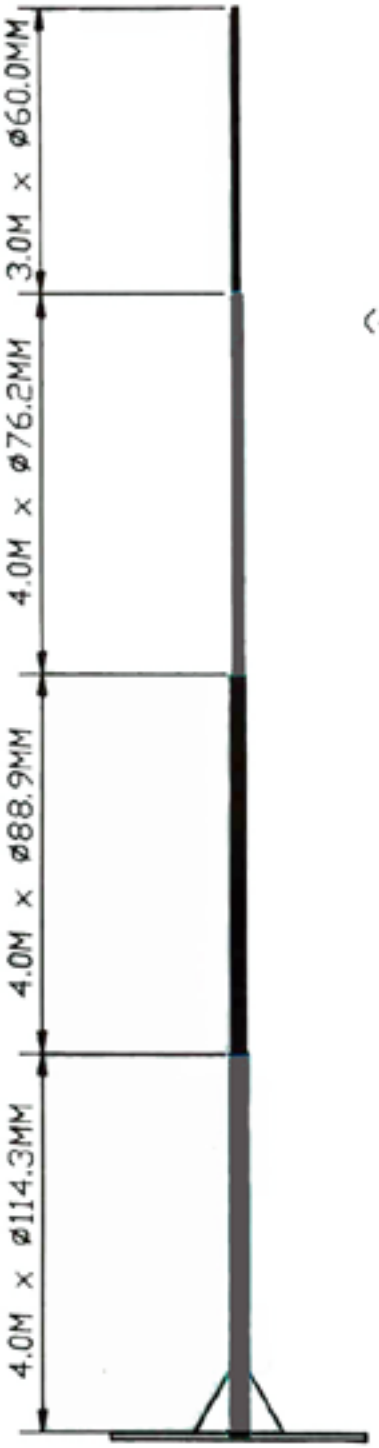
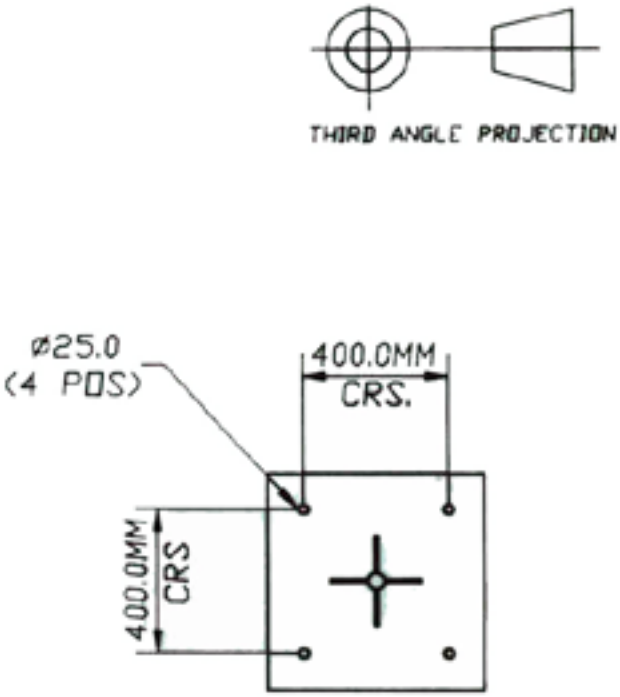
Static pole mast - Lamp post style





Static Post Masts		
Product code	Height	Material
SSPM4	4	Galvanised steel
SSPM5	5	Galvanised steel
SSPM6	6	Galvanised steel
SSPM8	8	Galvanised steel
SSPM9	9	Galvanised steel
SSPM10	10	Galvanised steel
SSPM12	12	Galvanised steel
SSPM13	13	Galvanised steel
SSPM15	15	Galvanised steel
SSPM16	16	Galvanised steel

Radio structures can fabricate these in Aluminium

Radio Structures manufacture solutions to suit the customers requirement

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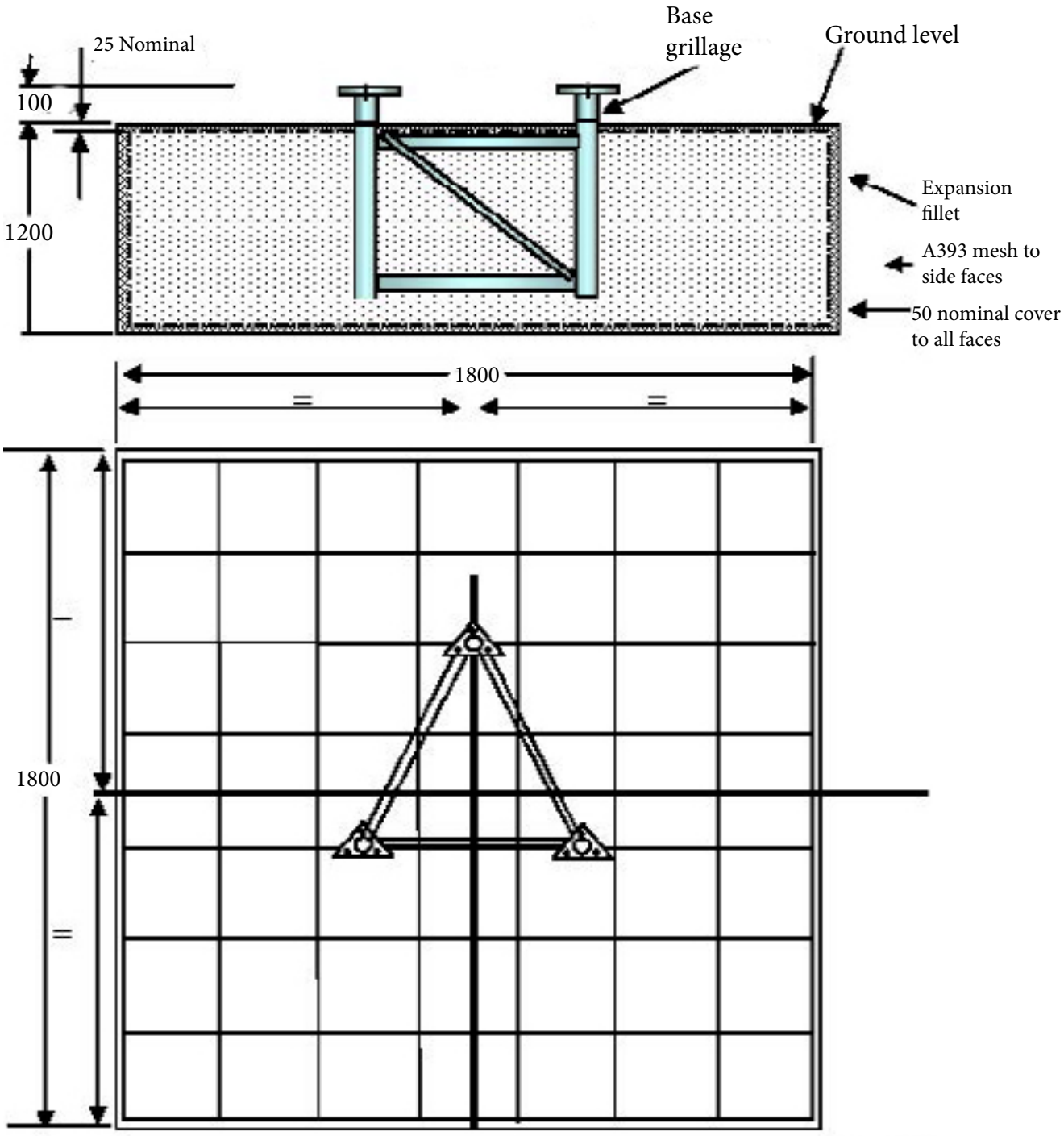
Slimline series Base mounting options - Base grillage set in concrete



Base grillage options for the Slimline series	
Product code	Description
SL40BG	Base grillage for SL40 section
SL50BG	Base grillage for SL50 section
SL50HBG	Base grillage for SL50 heavy section

1/ Concrete to be grade C35, Max aggregate size 50 - 80 slump.
2/ Subsoil to be capable of sustaining a minimum bearing pressure of 100 kN/m2.
3/ 16 off 20mm x 1700mm re-bars in each direction, 8 of top and 8 of bottom. Total of 32 bars.
4/ Base stubs to be filled with concrete after installation.

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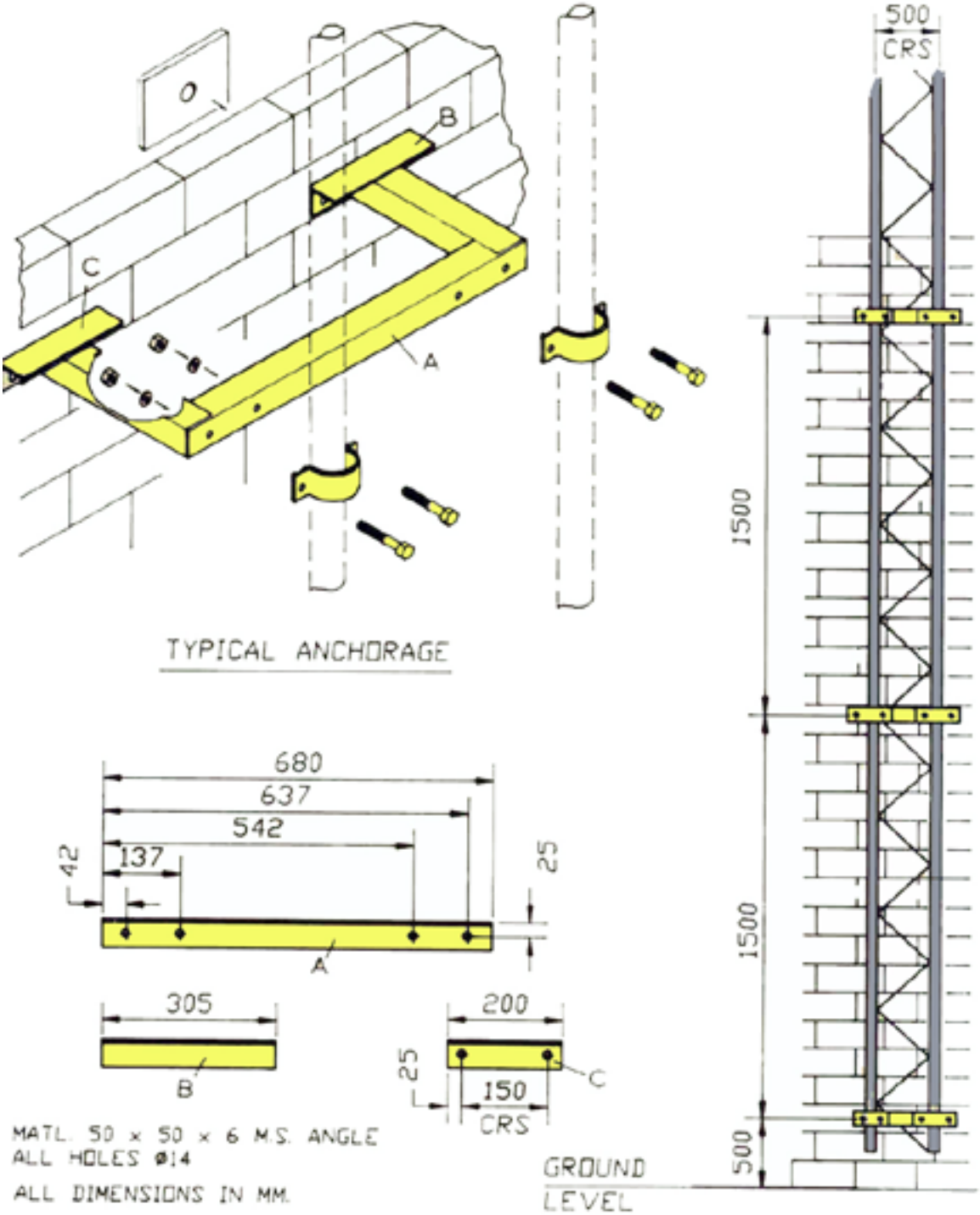
Slimline series Base mounting options - Wall mount (Roof mount frame also available)



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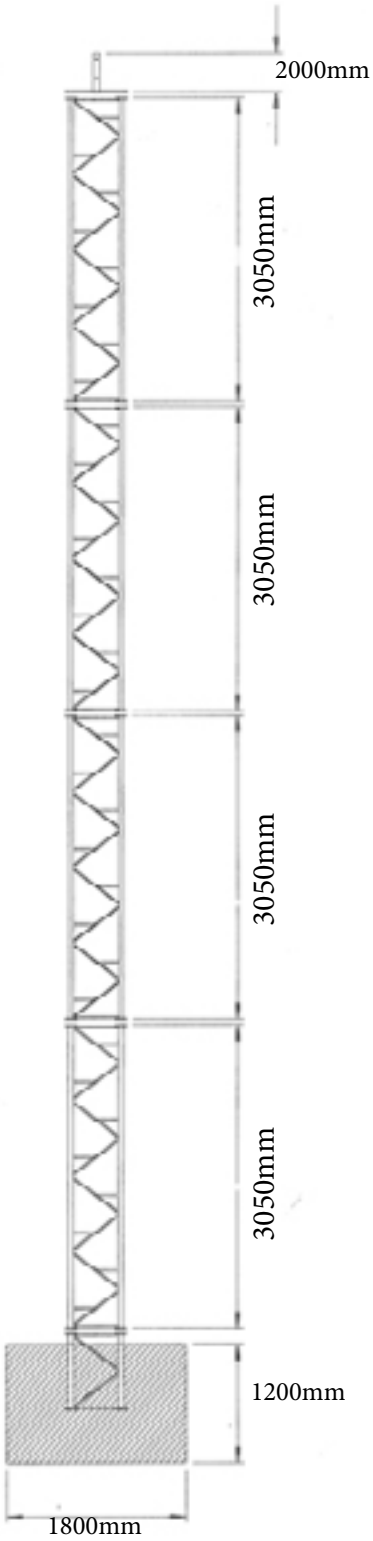
Slimline series tower heights from 3 metres to 19.5 metres



SL40TC, SL50TC & STP series

Sealed and unsealed type slim line series top cap for use with scaffold sized tubes (48.3mm OD)

SL40BG, SL50BG & SL50HBG

Radio Structures standard base grillage, set in concrete to enable support of the main structure.

Roof frames also available

SL50ADF & SL50HADF

Reducer frames connect SL50 version slim line lattice towers the the SL40 series towers.

For more information on our range of structures please contact us

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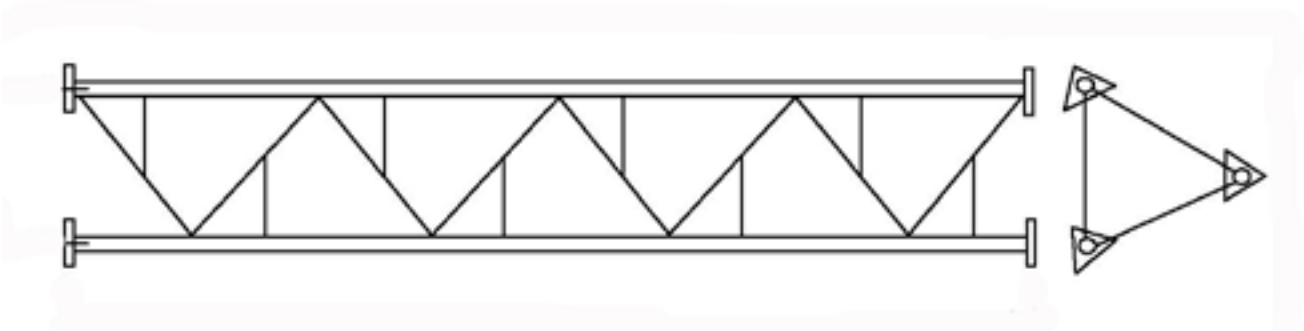
CCTV / Antenna tower and structure mounting solutions

SL series free standing lattice towers				
Product code	Section Qty	Section types	Top of Antenna pole metres	Top of tower Tower metres
SL40(1)	1	SL40 x1	5.05	3.05
SL40(2)	2	SL40 x2	8.10	6.10
SL40(3)	3	SL40 x3	11.15	9.15
SL40(4)	4	SL40 x4	14.20	12.20
SL50(1)	1	SL50 x1	5.05	3.05
SL50(2)	2	SL50 x2	8.10	6.10
SL50(3)	3	SL50 x3	11.15	9.15
SL50(4)	4	SL50 x4	14.20	12.20
SL50(5)	5	SL50 x5	17.25	15.25
SL50(6)	6	SL50 x6	20.30	18.30
SL50(1)40(1)	2	SL50 x1 SL40 x1	9.10	7.10
SL50(1)40(3)	4	SL50 x1 SL40 x3	14.95	12.95
SL50(2)40(1)	3	SL50 x2 SL40 x3	12.00	10.00
SL50(2)40(2)	4	SL50 x2 SL40 x2	14.90	12.90
SL50(2)40(3)	5	SL50 x2 SL40 x3	18.00	16.00
SL50(3)40(2)	5	SL50 x3 SL40 x2	18.00	16.00
SL50(3)40(3)	6	SL50 x3 SL40 x3	21.50	19.50
SL50(4)40(1)	5	SL50 x4 SL40 x1	19.50	17.50
SL50H	1	SL50H x1	5.05	3.05
SL50H(1)50(1)40(3)	5	SL50H x1 SL50 x1 SL40 x3	14.90	12.90
SL50H(1)50(2)	3	SL50H x1 SL50 x2	11.15	9.15

Radio Structures manufacture other types to suit the customers installation needs, section sizes can be reduced for ease of transport and installation, brackets and bespoke fittings can be manufactured to suit.

SL40 Sections = 400mm face width - SL50 Sections = 500mm face width



For more information on our range of structures please contact us

Radio Structures Ltd, TRS Complex, Gatelodge close, Round Spinney Industrial Estate, Northampton, NN3 8RJ
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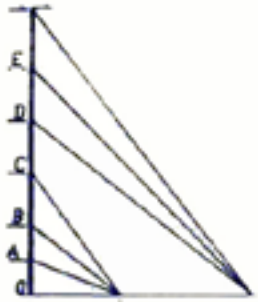
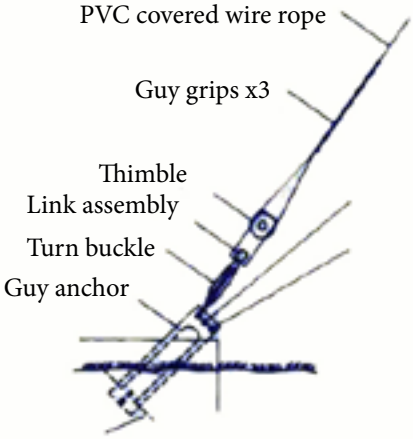
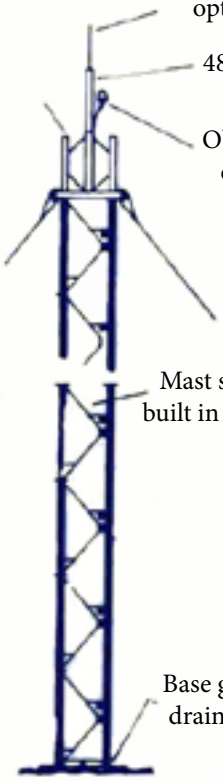
Slimline guyed series - Mast heights from 3 metres to 64 metres

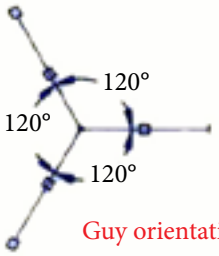
Example of a single Anchorage point system



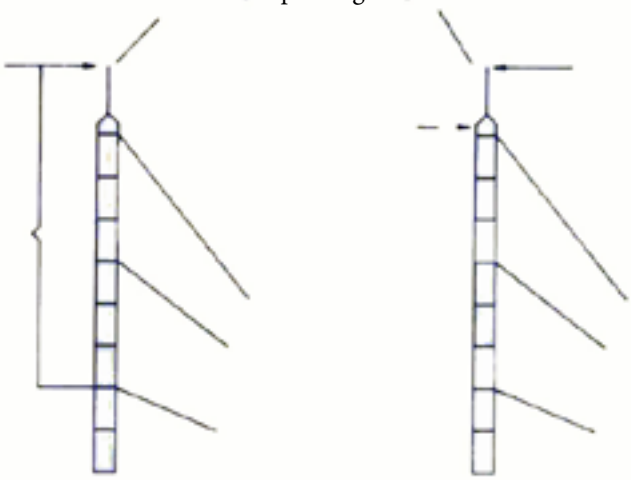
Example of a dual Anchorage point system







Guy orientation



Design load distributed over 2 spans 300 Kg

Guy attachment frame

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TM series - Trailer mast Heights from 6 metres to 30 metres

Trailer masts for sale and hire.

Radio Structures have a fleet of trailer masts we hire on weekly, monthly or annual contracts. The fleet predominantly consists of the larger 30 metre TM models. We use the larger versions for hire as they are the most adaptive to all heights from 6 metres to 30 metres making it ideal for all applications.
We also offer new and Ex-hire trailer masts for sale, masts can be manufactured to suit your application - such as brackets for CCTV security cameras, Lighting, Radio links, Wind surveillance and aerial photography to name a few.

Parts, Maintenance and repair services

Radio Structures offer maintenance and repair services to our own TM series masts and masts manufactured by other Manufacturers, this can be from small jobs of rewiring the mast sections to full overhaul refurbishments and repairs.
Spare parts are also always available.

Trailer mast specifications

Heavy duty lattice mast sections, fitted onto a purpose built heavy duty box section Chassis, Galvanised to BS/EN/ISO 1461, comes fully equipped with Independent suspension units, over run braking system, 3 x 205/80/16 all-terrain wheels, Galvanised Mud Guards including road lighting system.
Warning Triangles, 50mm ball Towing Hitch, Specially designed & manufactured trailer mast outriggers & Jacks, Jockey wheel, Fulton Auto Brake Winches, Stainless Steel Luffing wires, Galvanised pulley wheels.
Guy lines come with the larger masts for semi permanent siting.
Mobile masts are an ideal solution for planning issues and testing.

For more information on our range of structures please contact us

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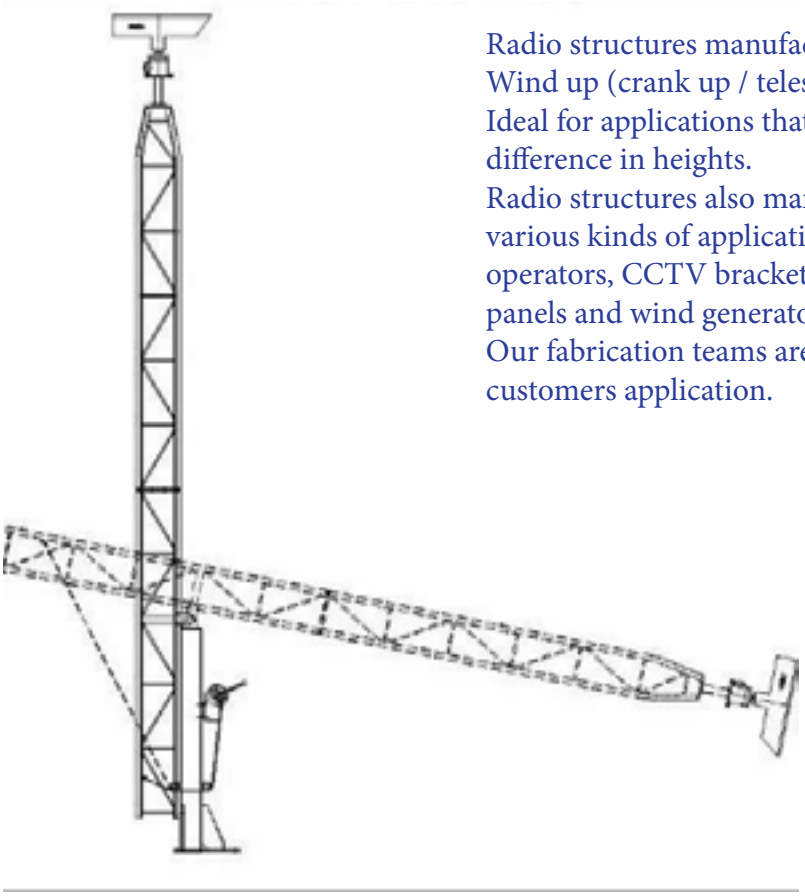
BM series single tilt over towers and dual tilt and wind up towers



Radio structures manufacture tilt over and dual tilt over and Wind up (crank up / telescopic) masts from 6 metres to 30 metres. Ideal for applications that require ease of maintenance or a difference in heights.
Radio structures also manufacture brackets and top plates to suit various kinds of application such as rotator cages for Ham radio operators, CCTV brackets for security camera mounting, solar panels and wind generators.
Our fabrication teams are able to manufacture items to suit the customers application.

Radio Structures offer standard towers and extra heavy duty towers for applications that need the extra head load weight allowance.
Base templates are sent out so the concrete bases can be installed. The concrete normally takes 28 days to reach an acceptable strength, in which time the mast is fabricated and galvanised to BS EN ISO 1461:2009.
We also offer a tower installation service, although the civils (concrete base) will need to be installed by other parties.

Radio Structures manufacture solutions to suit the customers needs

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Radio Structures rotator cages

Radio Structures fabricate rotator cages to suit the clients rotator, send us all the relevant dimensions and we'll fabricate and galvanise a solution to suit.

We also fabricate solutions to suit other types of installation, including options to repair, replace and additions - Whatever your requirement, please contact us for a friendly chat or drop us an email with all your dimensions and we'll send you a no obligation quotation.

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www.radiostructures.com 2013 product catalogue

TRS series tower heights from 6 metres to 45 metres

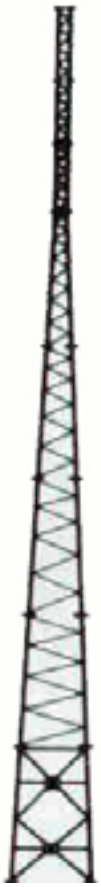
The TRS series triangular series towers are available from heights of 6 metres to 45 metres.

With numerous versions available to suit light head load applications up to heavy duty versions that will support heavier or multiple loads.

Height, wind loading and present / future application weight calculations are taken into consideration when we quote for a new proposed mast, ensuring the most suited structure is supplied.

Radio Structures also supply various mast and tower related items such as fall protection, lightning protection, anti climb systems, rest platforms and brackets to suit all applications.

WORLDWIDE
✓ DELIVERY



All of our structures are hot dip galvanised to BS EN ISO 1461:2009, component parts are made from quality and ethically sourced materials, using specialist jigs which ensure accuracy time and time again.
Our speed of fabrication enables Radio Structures to make overall cost savings which are then passed on through our pricing system for the end user.
Radio Structures have experienced rigging installation teams who are able to build masts and towers effortlessly with or without the use of a crane, this can also be incorporated with the fitting of the customers antennas or other products at the same time.

Radio Structures manufacture solutions to suit the customers needs

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Monopoles

Radio Structures supply monopoles and Camouflaged concealed monopoles that replicate natural trees.

With height ranges up to 50 metres (size and height manufactured to the customers requirements). Telecommunication monopoles are an ideal small footprint solution.

Standard monopoles can come in galvanised and/or powder coated finishes.

Camouflaged concealed monopoles can come in a variety of tree types to enable the harmonisation of the natural enviroment.

A disguised monopole constructed by tapered steel section finished with synthetic skin, branches and leaves.

The available heights for this structure are 16m to 45m.

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Anti climb systems for all structure types

Radio Structures manufactures anti climb systems as an optional extra to suit the entire Radio Structures range of structures, we also manufacture bespoke systems to suit other manufacturers structures.
The TRS tower series anti climb system (not shown) consists of barbed wire tensioned around special leg brackets internally and externally, then connecting to a lockable gate for ease of ladder entry.

Radio Structures anti climb panels to suit the Slim line series lattice masts only, Lockable and hinged versions available.

Anti climb systems for use with pole and tube type structures, ideal for CCTV pole protection, versions available to suit the slimline series.

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Radio Structures fabrication and engineering services

Radio Structures fabrication and engineering teams are able to manufacture parts to suit the clients application, using some of the most technically advanced equipment.

We are able to fabricate parts to suit our own and other manufacturers products using mild steels and Aluminium metals - You could send us a CAD drawing, rough sketch or a template and we'll be able to manufacture the products to suit - We don't just stop at the fabrication of parts for masts and towers, if you are looking for replacement gates, posts, shelters and anything else that can be fabricated from mild steels and aluminium metals, then come to us for a quote.

Galvanising or powder coating options are available for finished goods to prolong the life of the product.

Need us to do a site survey, measure the damaged or worn parts, fabricate new parts and then replace them, we can do this for an all inclusive service.

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Fall protection

Fall protection - Latchways and Railok systems

Radio structures are a registered and certified supplier, installer and certification provider of Latchways and Railok fall protection equipment.

A key element of the ManSafe system is the TowerLatch unit with its unique Latchways starwheel component. This provides workers with the security of being constantly attached to the system while also having both hands free to go about their duties. If a worker should fall from the system, the TowerLatch unit immediately locks onto the system cable and arrests the fall.

- Follows the contours of the tower structure.
- Can be installed on all types of steel lattice structures, towers, masts and monopoles.
- Suitable for retrofitting or as part of a new build.
- The system is unobtrusive and lightweight.
- Operation is not affected by snow, ice or adverse weather conditions.
- Can be installed for use in virtually all environments.
- Can be integrated into a comprehensive system incorporating inclined and horizontal sections.
- Will support up to four workers on a single line.
- The TowerLatch starwheel unit rotates freely through the intermediate cable guides to give the user continuous hands-free protection.
- In the event of a fall, the TowerLatch unit locks onto the cable and arrests the fall.
- The load generated in a fall is absorbed by the system's top anchor bracket. This has a built in safety factor of 2.4 x the potential load.
- A unique patented Latchways energy absorber built into the system ensures that the maximum load on the worker and end anchor in the event of a fall is minimised to 6 kN.

Installation of ManSafe TowerLatch vertical systems should only be carried out by a Latchways trained and certified installer.

LATCHWAYS FALL ARREST SYSTEMS

Authorised Installers

Latchways fall protection systems should be inspected and certified annually, Radio Structures can to do this on your behalf - We offer discounts for contracts of 3+ years

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Installations

Radio Structures rigging installations

Radio Structures rigging teams carry out installations of our own and other manufacturers products, from the installation of Masts and towers to the antennas, cabling and lightning protection.

Fully equipped with the latest test equipment we are able to test, certify and fault find on all types of installations.

Our maintenance crews are able to carry out remedial works to include but not limited to: Structure rust removal and painting, Removal and replacement of faulty parts and added additions.

We offer discounts on contracts of 3+ years for our yearly safety certification and maintenance service.

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Earth rods and fittings

Copper bond Earth rod

Copper bond earth rods and fittings					
Dimen-sions mm	Thread diameter	Shank diameter	Product code	Coupling Product code	Driving head Product code
9.5 x 1200	Unthreaded	9.5	ERB012		
16 x 1200	5/8”	14.2	ERB112	ERB016	ERBD16
16 x 1500	5/8”	14.2	ERB115	ERB016	ERBD16
16 x 1800	5/8”	14.2	ERB118	ERB016	ERBD16
16 x 2400	5/8”	14.2	ERB124	ERB016	ERBD16
16 x 3000	5/8”	14.2	ERB130	ERB016	ERBD16
20 x 1200	3/4”	17.2	ERB212	ERB20	ERBD20
20 x 1800	3/4”	17.2	ERB218	ERB20	ERBD20
20 x 2400	3/4”	17.2	ERB224	ERB20	ERBD20
20 x 3000	3/4”	17.2	ERB230	ERB20	ERBD20

Solid copper earth rods and fittings					
Diameter mm	Rod length mm	Product code	Driving head product code	Coupling dowel product code	Spike Product code
16	1200	ERC112	ERCD16	ERD01	ERCS16
20	1200	ERC212	ERCD20	ERD01	ERCS20

Driving Head

Internal Coupling Dowel

Spike

Product code	Description	Suit size
ERCD16	Driving head	16mm
ERD10	Internal coupling dowel	16mm
ERCS16	Spike	16mm

Solid copper Earth rod

For lightning protection solutions not listed please contact us

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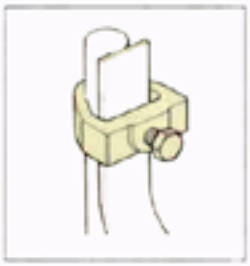
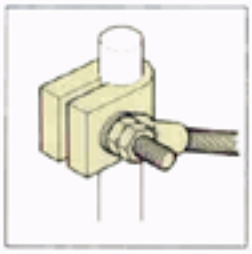
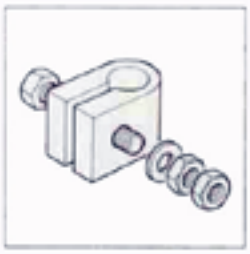
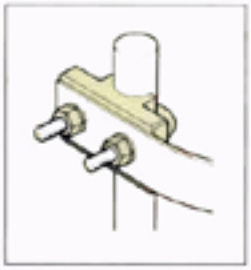
Earthing clamps



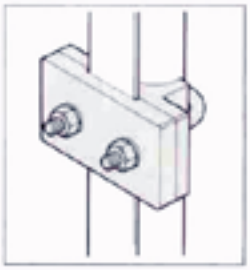
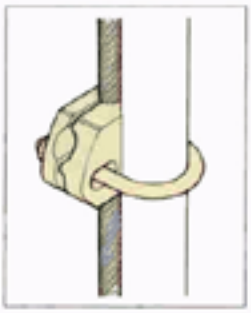


Single clamps



Double clamps


A-Clamp

Diameter	Size	Product Code
16mm	25mm	ERA1625
16mm	38mm	ERA1638
16mm	50mm	ERA1650
25mm	25mm	ERA2525

Earth rod to cable clamp

Diameter	Size	Product Code
9.5	6-35mm	ERA1625
16	6-35mm	ERA1638
16	16-70mm	ERA2525

Split connector clamp

Diameter	Bond rod	Solid copper
9.5mm	ERS010	
16mm	ERS016	ERSS16
20mm	ERS020	ERSS20

U-Bolt connector clamps

Diameter	Single plate	Double plate copper tape	Double plate Earth wire
16mm	ERU016	ERU216	ERU470
25mm	ERU025	ERU225	
31mm	ERU031	ERU231	
38mm	ERU038	ERU238	
50mm	ERU050		

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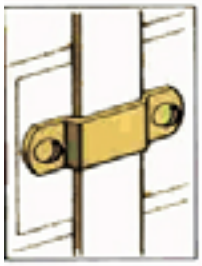
Lightning protection - Conductor fixings

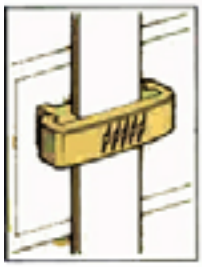
Metallic tape clip



Metallic tape clip

Brass clips			Copper / Aluminium clips			
Size mm	Product code Bare copper	Product code PVC covered	Size	Product code Copper	Product code Aluminium	Product code PVC Ally
20x3	MTB203		20x3		MTA203	
25x3	MTB253	MBP253	25x3		MTA253	MAP253
38x6			38x6			
50x6	MTB506		50x6			

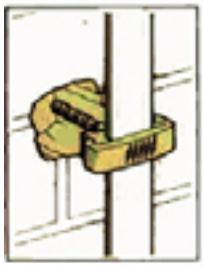
Non metallic DC clip



Non metallic DC clip

For Bare conductor			For PVC covered conductor		
Size mm	Colour	Product code	Size mm	Colour	Product code
20 x 3	Brown	NM203B	25 X 3	Brown	NP253B
20 x 3	Grey	NM203G	25 X 3	Grey	NP253G
25 x 3	Brown	NM253B	25 X 3	Stone	NP253S
25 x 3	Grey	NM253G	25 X 3	Black	NP253BL
25 x 6	Brown	NM256B	25 X 3	Green	NP253G
25 x 6	Grey	NM256G	25 X 3	White	NP253W

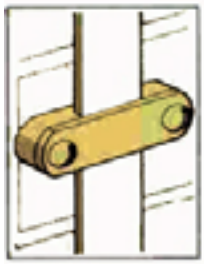
Non metallic DC clip with plug



Non metallic DC clip with plug

For Bare conductor			For PVC covered conductor		
Size mm	Colour	Product code	Size mm	Colour	Product code
20 x 3	Brown	NMP203B	25 X 3	Brown	NPP253B
20 x 3	Grey	NMP203G	25 X 3	Grey	NPP253G
25 x 3	Brown	NMP253B	25 X 3	Stone	NPP253S
25 x 3	Grey	NMP253G	25 X 3	Black	NPP253BL
25 x 6	Brown	NMP256B	25 X 3	Green	NPP253G
25 x 6	Grey	NMP256G	25 X 3	White	NPP253W

Metallic DC clip



Metallic DC clip

Size mm	Copper	PVC copper	Lead copper	Bare alluminium	PVC Aluminium
12x3	DCG123				
20x3	DCB203			DCA203	
25x3	DCB253	DGP253	DCL253	DCA253	DAP253
25x4	DCG254				
25x6	DCG256	DGP256		DCA256	DAP256
31x3					
31x6	DCG316				
38x3	DCG383				
38x5	DCG385	DGP385	DCL385		
38x6	DCG386			DCA386	
50x3	DCG503	DGP503			
50x4					
50x5	DCG505				
50x6	DCB506	DGP506		DCA506	DAP506

Adhesive base

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Lightning protection solutions

Multi-point

Thread Dia (mm)	Product code
16	MPC16
20	MPC20

Elevation rods

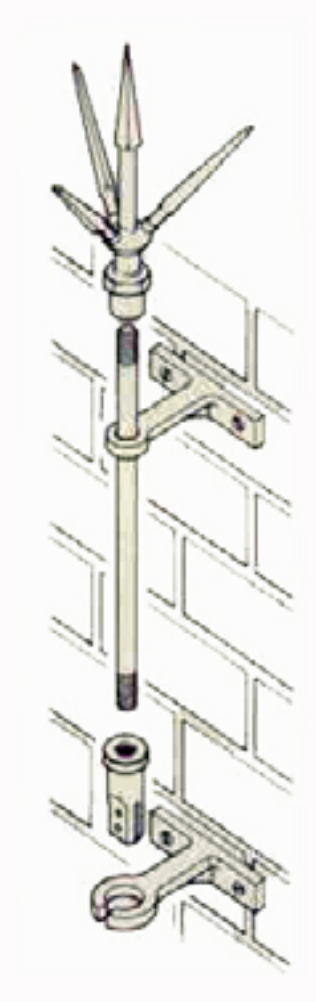
Length (mm)	Thread dia (mm)	Copper Product code	Aluminium Product code
500	16	ATC120	ATA120
1000	16	ATC139	ATA139
1500	16	ATC160	ATA160
2000	16	ATC179	ATA179

Side mounting brackets

Thread Dia (mm)	Gunmetal Product code	Aluminium Product code
16	AMBG16	AMBA16
20	AMBG20	AMBA20

Rod to tape coupling

Thread Dia (mm)	Copper Product code	Aluminium Product code
16	AOG16	AOA16
20	AOG20	AOA20



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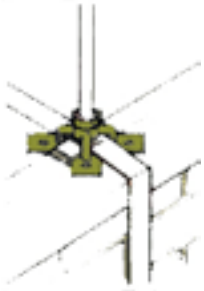
Lightning protection solutions

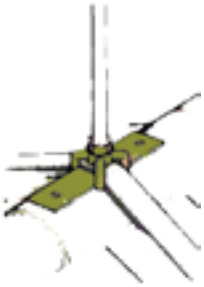

Taper pointed air rod

Rod length	Thread dia	Copper code	Aluminium code
300mm	16mm	ATC112	ATA112
500mm	16mm	ATC120	ATA120
1000mm	16mm	ATC139	ATA139
1500mm	16mm	ATC160	ATA160
2000mm	16mm	ATC179	ATA179
500mm	20mm	ATC220	
1000mm	20mm	ATC239	
2000mm	20mm	ATC279	



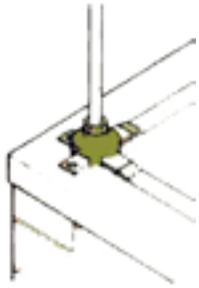

Flat saddle

Thread diameter	Conductor max width	Gunmetal product code	Aluminium product code
16	25	ASGF16	ASAF16
20	25	ASGF20	ASAF20




Ridge saddle

Thread diameter	Conductor max width	Gunmetal product code	Aluminium product code
16	31	ASGR16	ASAR16
20	31	ASGR20	ASAR20




Light duty saddle

Thread diameter	Conductor max width	Gunmetal product code	Aluminium product code
16	25	ASGL16	ASAL16
20	25	ASGL20	ASAL20

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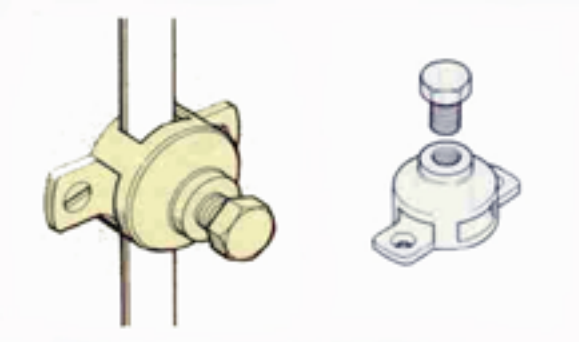
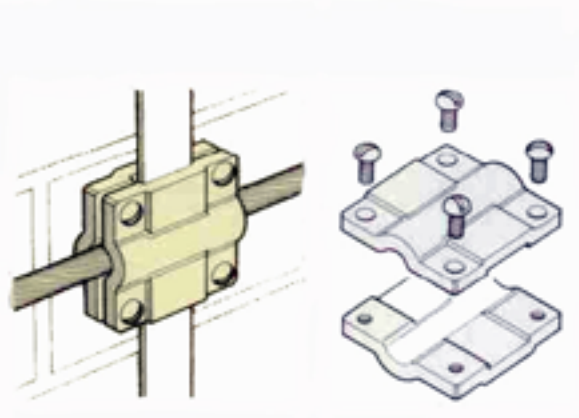


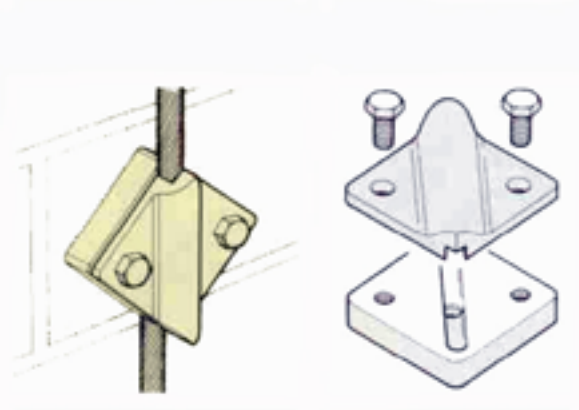
Circular tape connector

Conductor size mm	Copper Product code	Aluminium product code
25x3	JCG253	JCA253



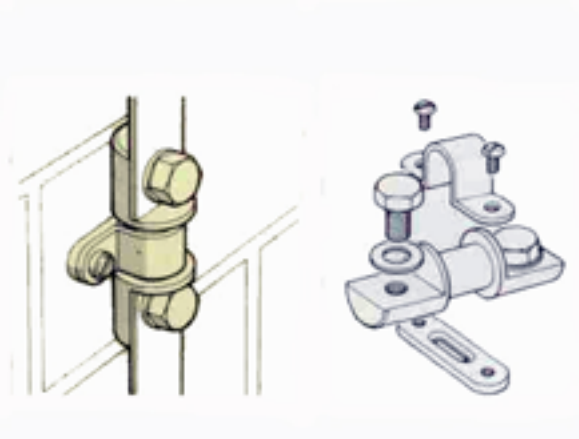
Cable to tape junction clamp

Circular Conductor mm2	Flat Conductor size	Copper product code
50	25x3	JOM253



Cable to test clamp

Conductor Circular size mm	Copper Product code
8 to 10	JCC10



Bi-Metallic connector

Conductor size mm	Copper Product code	Aluminium product code
25x3	BIM253	BSS253

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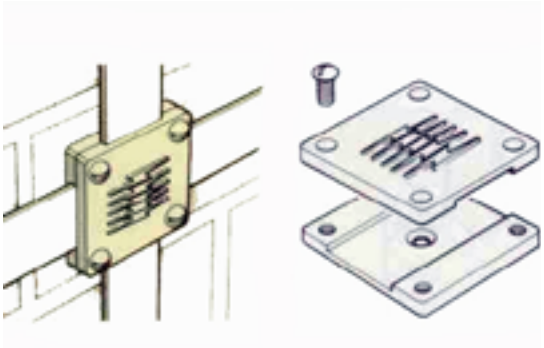
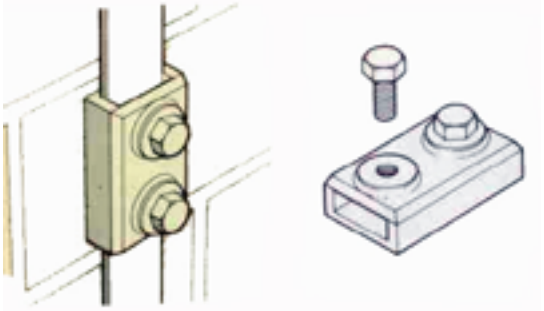


Square test clamp

Conductor size mm	Copper product code	Aluminium product code
25x3mm	JG253	JA253
25x6mm	JG256	JA256
38x6mm	JG386	JA386
50x6mm	JG506	



Oblong test or oblong box clamp

Conductor size mm	Copper product code	Aluminium product code
25x3mm	JGO253	JAO253
38x6mm	JGO386	
50x6mm	JGO506	JAO506

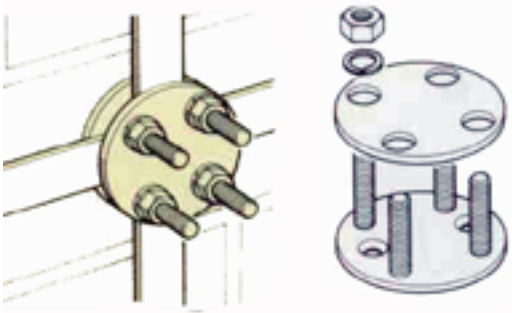
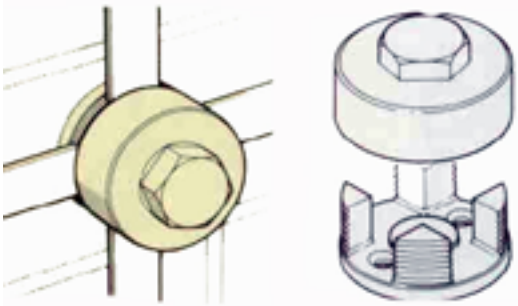


Plate type test clamp

Conductor size mm	Copper product code	Aluminium product code
25x3mm	JPG253	JPA253
38x6mm	JPG386	
50x6mm	JPG506	



Screw down test clamp

Conductor size mm	Copper product code
25x3mm	JSG253
38x6mm	JSG386
50x6mm	JSG506

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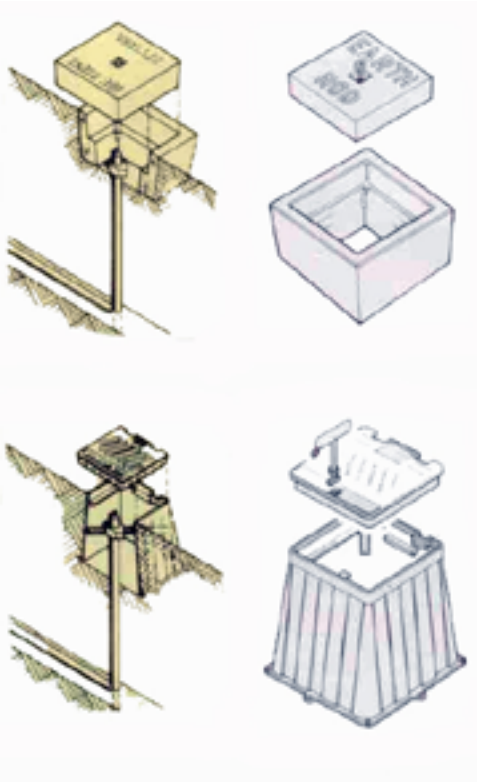

Concrete inspection housing

Concrete inspection housing	Earth bars 5 hole product code	Earth bars 7 hole product code
ERH01	EBC05	EBC07

Lightweight lockable inspection housing

Lightweight housing product code	Grey lid colour	Earth bars 5 hole Product code	Earth bars 7 hole Product code
ERH20	ERL21	EBC25	EBC27

Earth Plates

Solid copper earth plate

Size mm	Product code
600x600x1.6	EMP601
600x600x3	EMP603
900x900x1.6	EMP901
900x900x3	EMP903

Lattice copper earth mats

Size mm	Product code
600x600x3	EML603
900x900x3	EML903

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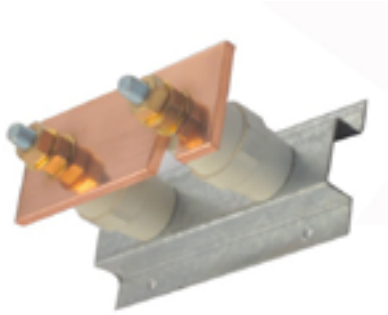
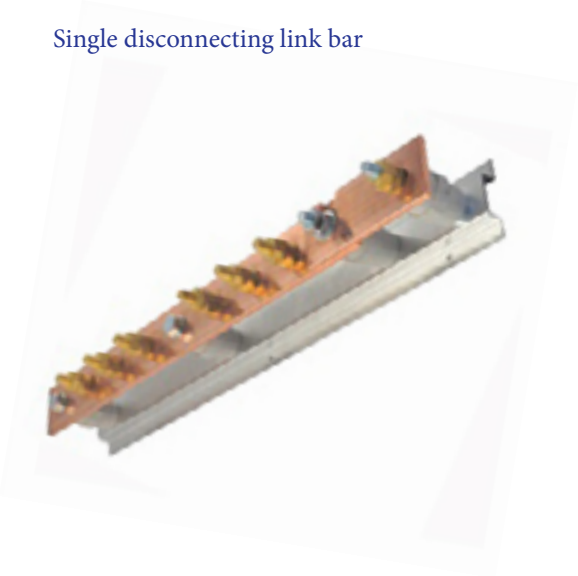
Lightning protection solutions

Disconnecting link



Standard earth bars (no disconnecting links)

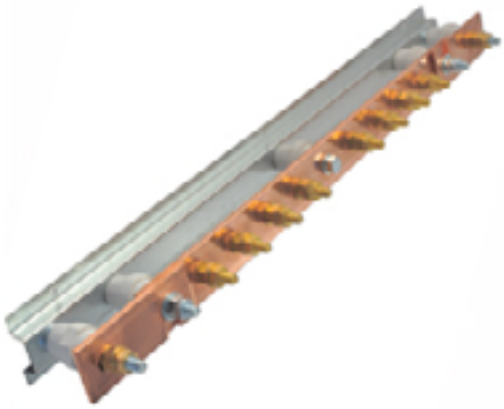
Single disconnecting link bar



Item decription	Product code
Insulator only (10mm hole)	EBI001
Insulator only complete with studs	EBI002
Wooden base disconnecting link	EBW001
Channel base disconnecting link	EBC001
6 way standard earth bar	EBC006
6 way single disconnecting link	EBC106
6 way double disconnecting link	EBC206

Other configurations available please contact us

Double disconnecting link bar



Insulator

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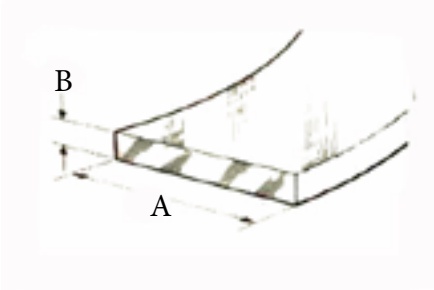
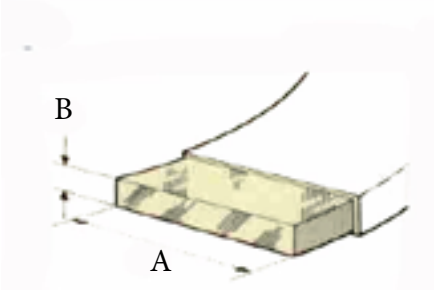


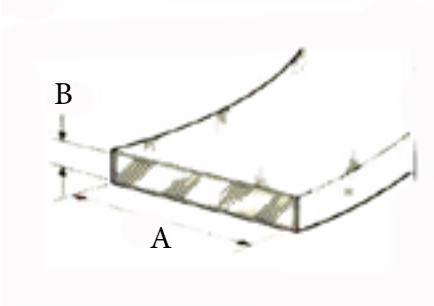
Flat bare copper tape

Size A	Size 1.5	Size 3	Size 4	Size 5	Size 6
12	TC121	TC123			
20	TC201	TC203			
25	TC251	TC253	TC254		TC256
31					TC316
38				TC385	TC386
50		TC503			TC506



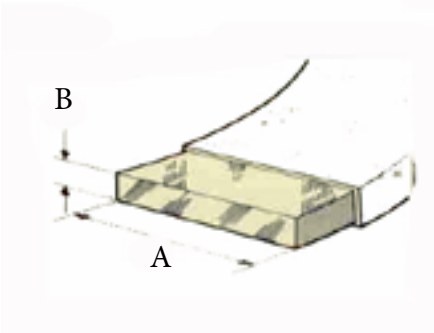
PVC covered copper tape

A x B mm	Brown	Grey	Black	White	Stone	Green
25x3	TP253B	TP253G	TP253BL	TP253W	TP253S	TP253GR
25x6	TP256B	TP256G	TP256BL	TP256W	TP256S	TP256GR
50x6	TP506B	TP506G	TP506BL	TP506W	TP506S	TP506GR



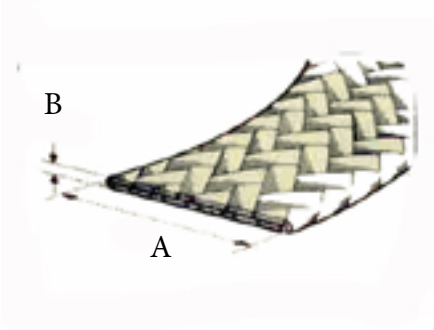
Tinned bare copper tape

Conductor A x B	Tinned copper tape product code
25x3mm	TT253
25x6mm	TT256



Lead covered copper tape

Conductor A x B	Tinned copper tape product code
25x3mm	TL253
25x6mm	TL256



Flexible copper braid

Conductor A x B	Tinned copper tape product code
25x3.5mm	FB253

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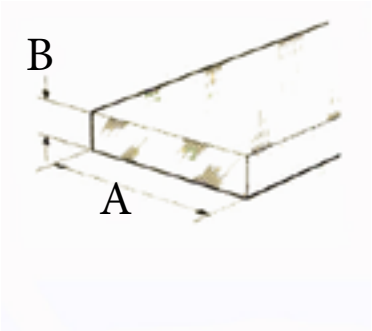
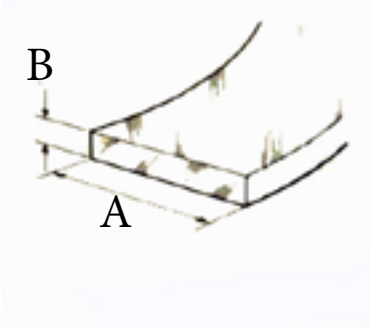


Hard drawn copper bar

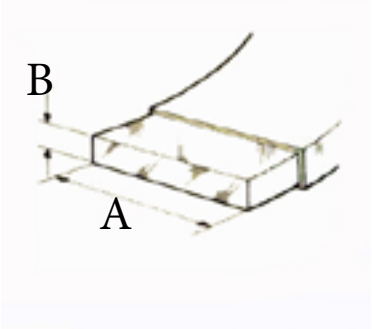
Size A	Size B = 3mm	Size B = 6mm	Size B = 10mm
25mm	HD2503	HD2506	HD2510
38mm		HD3806	HD3810
50mm		HD5006	HD5010
75mm		HD7506	HD7510

Other sizes available on request



Aluminium bare tape

Size A	Size B = 3mm	Size B = 6mm
20mm	TA203	
25mm	TA253	TA256

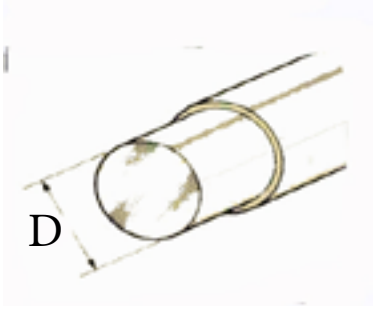


PVC covered aluminium tape

A x B mm	Brown	Grey	Black	White	Stone	Green
25x3	TP253B	TP253G	TP253BL	TP253W	TP253S	TP253GR
25x6	TP256B	TP256G	TP256BL	TP256W	TP256S	TP256GR
50x6	TP506B	TP506G	TP506BL	TP506W	TP506S	TP506GR

Solid circular condutor

Conductor diameter mm	Copper product code	Aluminium product code
8	CSC08	CSA08



PVC covered solid circular conductor

Material	Diameter	Brown	Grey	Black	White	Stone
Copper	8mm	CPC08B	CPC08G	CPC08BL	CPC08W	CPC08S
Alumini-um	8mm	CPA08B	CPA08G	CPA08BL	CPA08W	CPA08S

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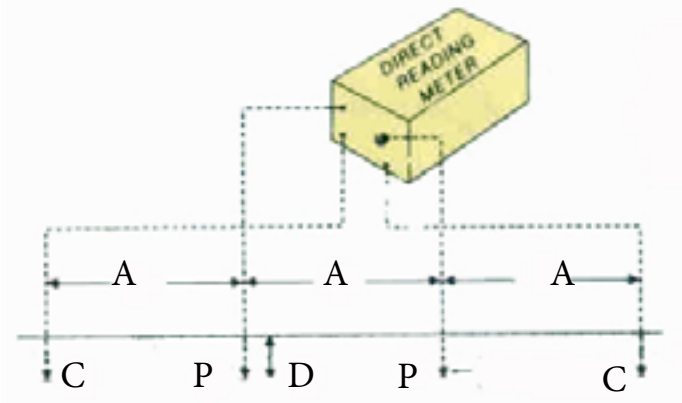

A = Distance between electrodes

C = Current electrodes

D = Driven depth $\frac{A}{20}$

P = Potential electrodes

Earthing efficiency

Copper bond earth rods can be driven (mechanically or manually) in quantities and to the depth necessary to effect a suitably low resistance.

Soil resistivity

The resistance of an earth electrode is proportional to the soil resistivity, and table 1 shows typical specimen soil values.

When the soil resistivity of a site is unknown it can be measured without excavation, by using a direct reading meter, with earth spikes as shown in fig. D - from which the meter reading R in ohms can be applied to the following formula:-

r = 192A R
where r = soil resistivity

Which will give the average resistivity of the ground to a depth equal to the distance (A) in feet between electrodes. By varying (A) the average resistivity to different depths can be measured

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Resistance of electrodes - The table shows the appropriate resistance in ohms for typical earth rods in soil of resistivity 1'000 ohms cm.

Multiple rods should in general be separated by a distance not less than their driven length.

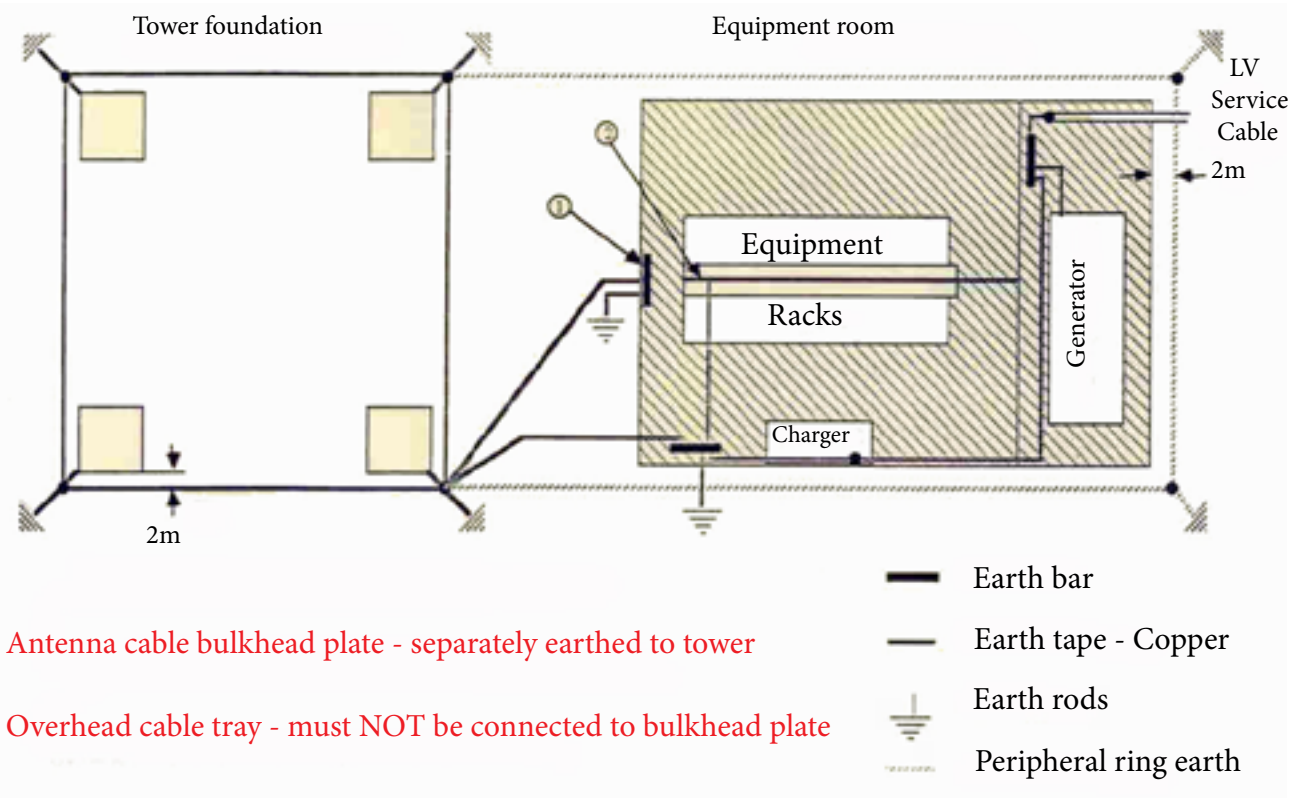
Earth rod	Number of parallel			
	1	2	3	4
5/8" dia x 8ft	4.2	2.31	1.68	1.26
5/8" dia x 12ft	3	1.65	1.2	0.9
5/8" dia x 16ft	2.3	1.26	0.92	0.69
5/8" dia x 20ft	1.9	1.05	0.76	0.57
5/8" dia x 24ft	1.6	0.98	0.64	0.48
5/8" dia x 28ft	1.4	0.77	0.56	0.42
5/8" dia x 32ft	1.3	0.72	0.52	0.39

Deep earthing - Shows in graph form the lower resistance figures generally to be found the deeper an earth rod is driven.

Alongside is actual readings from three different types of soil at three depths

Soil type	Rod resistance to earth (ohms) depth			
		8ft depth	16ft depth	32ft depth
Fills - Ashes, cinders, waste	2.37	9.63	5.35	2.94
Clay, shale, loam	4.06	16.49	9.16	5.04
Clay, shale, loam with varying proportions of sand and gravel	15.80	64.18	35.65	19.60

Tower and equipment room earthing system



1/ Antenna cable bulkhead plate - separately earthed to tower

2/ Overhead cable tray - must NOT be connected to bulkhead plate

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Earthing requirements for radio sites

The purposes of providing earthing at radio sites is to protect equipment and personnel from damage resulting from excess potential rise during a lightning strike. This can be achieved by arranging that lightning discharge current is prevented from entering equipment rooms and by bonding to ensure equi-potential conditions as far as possible throughout the site. These criteria should be bourne in mind when evaluating the efficiency of an existing earthing system or designing a new one.

Tower and equipment room earth system

The general arrangement of earthing for radio sites is shown.

Tower

At each tower leg earth rods will be driven to achieve a resistance at the leg of less than 10 ohms. These will be connected to their adjacent tower leg by copper earthing strip via a test conductor.

The lower leg earth will be joined together by an earthing system laid below ground and consisting of copper earthing strip. The strip should be laid approximately 2 metres outside the tower foundations, at a minimum depth of 0.5 metres.

Outside

Earthing rods will be driven at the ends of the equipment room remote from the tower. They will be linked to the tower earthing system by copper strip, arranged to run below ground at a minimum depth of 0.5 metres and a distance of 2 metres from the building. The purpose of this is to form an equipotential zone for the protection of personnel who may be outside but close to the building during a lightning strike.

This peripheral earthing ring should be connected to the tower earthing system via a disconnecting point to facilitate measurement of earth resistance. The earth resistance of the ring isolation from the tower earth should not exceed 10 ohms.

If either the tower or radio building are within 3 metres of any other metal structure (eg. a steel fence) the structure shall be bonded to the site earthing system by at least two points. This is required to reduce the possibility of danger the personnel from the 'side flash'.

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Aviation warning - Obstruction lamps

Single obstruction warning lamp - Available in Halogen, LED & Solar powered

Low energy and long life LED versions.
FAA approved
Optional photocell for day off control
Maintenance free
Available in various colour options
Fully compliant with ICAO
Solar powered options available
Low investment cost
Various mounting options or bespoke

Double (Dual) obstruction warning lamp - Available in Halogen, LED & Solar powered

Options for automatic lamp changeover.
Low energy and long life LED versions.
FAA approved
Optional photocell for day off control
Maintenance free
Available in various colour options
Fully compliant with ICAO
Solar powered versions available
Low investment cost
Various mounting options or bespoke

If a height of a structure exceeds 45 metres obstruction lamps have to be fitted, other height structures may need obstruction lamps especially if in area of aviation. It is advisable to contact your local aviation authority and / or local councils who can advise further.

For obstruction lamp solutions not listed please contact us

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GRP and Steel enclosures

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- Extensive choice of colours (Grey or Green as standard, other colours as an optional extra)
- Option of various external finishes.
- Weather and corrosion resistant.
- Robust & Secure.
- Purpose built for specific applications
- Durability and long service life
- Quality products at extremely competitive prices.

GRP Range enclosures			
Product code	Width (mm)	Depth (mm)	Height (mm)
GRPV1	470	320	660
GRPV2	550	400	650
GRPV3	660	400	1210
GRPV4	750	400	1100
GRPV5	910	450	1225
GRPV6	1095	475	1320
GRPV7	1095	680	1320
GRPV8	1300	400	1250
GRPV9	1455	700	1485
GRPV10	1710	800	1610
GRPV11	2000	500	1600
GRPV12	2000	800	1600
Steel Range enclosures			
Product code	Width (mm)	Depth (mm)	Height (mm)
STEELVRS1	750	400	1250
STEELVRS2	1250	400	1250
STEELVRS3	1250	400	1250
STEELVRS4	1500	400	1250
STEELVRS5	1600	400	1250
STEELVRS6	1500	500	1500
STEELVRS7	2000	500	1500
STEELVRS8	2250	500	1500
STEELVRS9	2750	500	1500
YALELOCKVRS	Yale type lock for steel enclosures		

Other options available - Also made to measure service

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Safety wear - Hi visibility clothing

Safety wear product examples - We also supply other safety wear

Hi-Viz long 2 band
EN471 Class 2

Hi-Viz padded bomber jacket
EN471 Class 3

Hi-Viz long sleeved
EN471 Class 3

Hi-Viz Washable
trouser - EN471

Hi-Viz Waterproof
over trouser - EN471

Hi-Viz Cargo trouser
Class 2 - EN471

Hi-Viz Polarwarm
Over trouser - EN471

Hi-Viz Rail spec
trouser

Hi-Viz Anti static
trouser

Hi-Viz Rail spec
poly cotton jacket

Hi-Viz Shorts
poly cotton

Other safety wear and colours available, please contact us for a quote

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Safety wear -

Safety wear product examples - We also supply other safety wear

Combination helmet clear visor/earmuffs

Safety helmet with strap

Safety helmet with clear visor

Thinsulate winter head liner

Clear safety googles

Tinted, clear or fog free safety googles

Tinted, clear or fog free safety glasses

Ear defenders SNR27

Ear plugs box of 200

Rigger gloves

Disposable gloves Box of 100

Other safety wear and colours available, please contact us for a quote

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Safety wear and equipment -

Safety equipment - Other types also available

Full rigging harness's
Various manufacturers

Descenders

Latchways fall
protection trolleys

Climbing karabiners

Railok fall
protection trolley

Tower rescue kits

Safety signage - Other signs / sizes available

Radio Structures supply signs to suit all applications including bespoke design signs - Let us know your requirement and we'll send you a quote.

Other safety wear and colours available, please contact us for a quote

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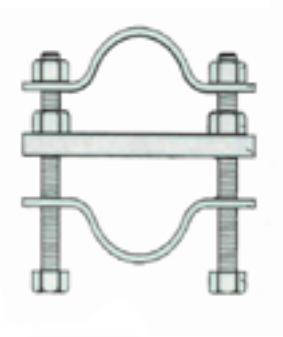
Installation hardware

Norstel scaffold clamps - Available Fixed straight, fixed 90 degree, swivel and half norstel with studding

Increasing sleeves - For use with norstel clamps so they can take 1.1/4" and 1.1/2" tube antenna booms.



CVB Tube to tube clamp - Clamp for tube to tube applications such as clamping a end fed or colinear type antenna to a vertical scaffold tube.

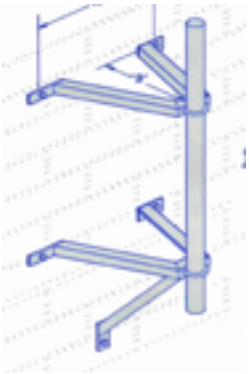
Aluminium and Mild steel tube - All types of tube supplied from the industry standard aluminium scaffold tubes to all types of light and heavy duty aluminium and steel tubes.

 CONTACT US IF YOUR UNABLE TO FIND HARDWARE TO SUIT, THIS IS NOT A COMPLETE LIST

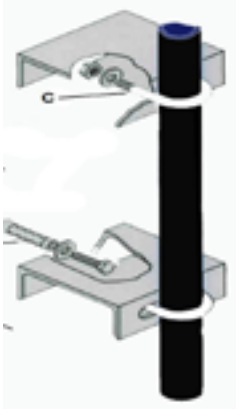
Radio Structures Ltd, TRS Complex, Gatelodge close, Round Spinney Industrial Estate, Northampton, NN3 8RJ
Telephone: +44 (0) 1604 790005 Fax: +44(0) 1604 790797 Email: sales@radiostructures.com
www.radiostructures.com

Installation hardware

Crossover clamps - Available to suit all tube sizes, crossover clamps are ideal for mounting horizontal antennas such as dipoles and Yagi's.



Wall Stand off brackets- Ideal for use when mounting a scaffold tube to the side of a building, the stand off enables the tube to stand off from the wall in sizes 12",18",24" and 36". Perfect for over hanging roofs.



Wall channel brackets- Ideal for use when mounting a scaffold tube to the side of a building, using the same principle as the Wall stand off brackets, they are perfect for applications that have little or no roof over hang. Stand off from wall in 5" and 6" versions.

Cable and connector weather proofing- Weather proofing tape kits, self amalgamating butyl and denso grease tapes to enable a fully wetherproof seal to help alleviate water and moisture ingress.

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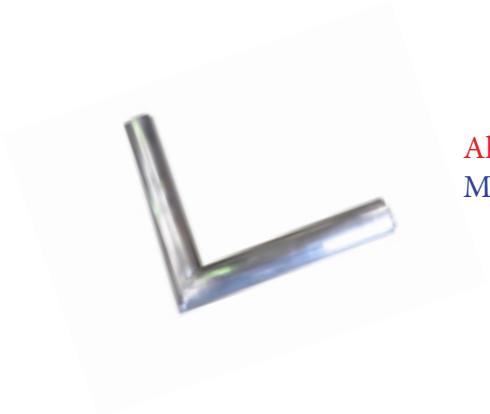
Scaffold external joint pin - Enables multiple scaffold sized tubes to be joined together.

Wall post bracket- Enables antennas to be mounted to a wall. Manufactured to a size that would suit the application.



Aluminium bend- Variety of uses and applications. Manufactured to a size that would suit the application.

Guying ring- To enable the guying of tube structures.

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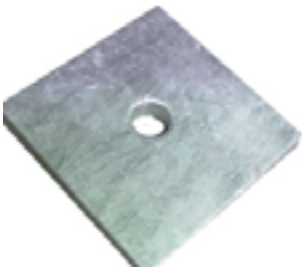
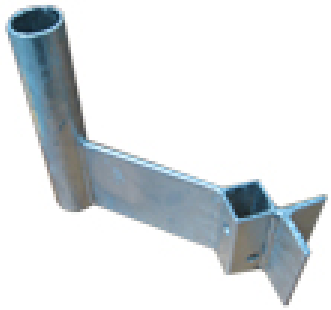


Back plates - Used to spread the load over a wider area when using through wall studding.



Angle tower brackets - Used with J-bolts to secure to the side of an angle tower.

Rawlbolts - Supplied in a variety of sizes, used as a fixing alternative to chemical anchors

Clamps, Nuts, Bolts, studding and all types of fixings -Radio Structures supply a wide range of fixings to suit all applications.

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Duplexers / Filters / Combiners / Loads

Duplexers - Duplexers / Duplex filters available for VHF and UHF

Dummy Loads - Dummy loads from 5 Watt rating to 100 Watt +
From DC to 6ghz +
Call or email for details - Options available

Splitters - SU4 4 Way Splitter Unit Frequeny Range 150-470Mhz SU4 4 Way Splitter Unit Frequeny Range 150-470Mhz

Matching harness - Antenna arrays can be built up by stacking and/or baying. This will achieve additional gain and directivity.

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