

VHF Unity Gain Roof Mount



The SW35 is the mobile antenna which RFI recommends in VHF low band, two frequency simplex or duplex applications. The relatively broad bandwidth of this base loaded antenna allows coverage of both transmit and receive frequencies in a small, physically manageable antenna.

The whip section of highly flexible 17-7PH stainless steel provides maximum durability, retaining its shape after knocks, bumps or bends. This whip section is fitted to a base loading coil which incorporates an impedance matching circuit. The coil is housed in black fibreglass with chrome plated brass end-fittings. The antenna is suitable for field tuning over the band 35-45 MHz.

The antenna is designed to fit standard VHF bases, such as the MB9 and can utilise the full line of accessories and fittings which are offered with this range.

- Recommended for two frequency applications
- Broad bandwidth allows coverage of both transmit and receive frequencies (Tx to Rx splits of up to 2 MHz)
- Base loaded construction
- · Strong fibreglass coil with chrome plated brass end-fittings
- Flexible 17-7PH tapered stainless steel radiator takes the knocks and keeps its shape



Electrical

Model No.	SW35		
Gain	Unity over a 1/4 wave		
Frequency MHz	35 - 45		
Power W	100		
Tuned Bandwidth	1.5 MHz @ 1.5:1 VSWR		
	2 MHz @ 1.75:1 VSWR		
Tuning	Field tune to minimum VSWR		

Model No.	SW35
Whip Material	Tapered 17-7PH stainless steel
Whip Length mm	1600 (including base coil)
Mounting	MB9, MB10 or MB12 bases (not included)
Cable and Connector	Not included, order separately



VHF Unity Gain Roof Mount

In the 66-175 MHz band, ¹/₄ wave antennas are preferred in many mobile applications. Mounted high on a vehicle they provide excellent omnidirectional performance, are easily tuned and are extremely affordable. They fit standard VHF roof mount bases such as the MB9 and can utilise the full line of accessories and fittings available for such applications.

SW1

- · Parallel stainless steel whip
- Interference thread locking mechanism prevents loosening of whip due to vibration

TSW1

- 17-7PH tapered stainless steel whip
- · Resilient construction retains shape after bending or knocks

111ST

- 1/4 wave stainless whip with integral spring
- · Ideal for heavy industrial applications





Electrical

Model No.	SW1	TSW1	111ST		
Gain	Unity over a 1/4 wave				
Frequency MHz	66 - 88 66 - 175				
Power W	100				
Tuned Bandwidth	3% @ <1.5:1 VSWR on MB9 base (typically at 70MHz)				
Tuning	Field tune to minimum VSWR				

Model No.	SW1	TSW1	111ST		
Whip Material	Parallel stainless steel	Tapered 17-7PH stainless steel	Parallel stainless steel with integral spring		
Whip Length mm	1205	1277	1270		
Mounting	Suit MB9, MB10 or MB12 bases (not included)				
Cable and Connector	Not included, order separately				



Delta Series Broad Band Roof Mount





Delta Series antennas are broadband ¹/₄ wave antennas designed to cater to modern mobile transceivers which commonly cover an entire operating band of frequencies.

The Delta series antennas allow coverage of greater than 6% bandwidth for a VSWR of less than 1.5:1 in the VHF bands. This bandwidth is even greater at UHF frequencies due to the increased diameter to length ratio of the whip section.

This bandwidth is made possible through the extraordinary performance characteristics of the MB14 antenna base. The MB14 base is intricately constructed, much like a coaxial connector, and provides a useable frequency range extending well above 1000 MHz. The precisely controlled termination results in a superb match, and facilitates the unusually broad bandwidth.

Delta Series antennas are unity gain antennas, which deliver a standard, omnidirectional pattern when mounted in the centre of a metal roof.

The radiating sections are constructed from extremely flexible 17-7PH stainless steel to resist bending and deformity. The DSW1401 features a bright stainless steel finish and the DSW1402 is finished in stylish black high gloss plating. The antennas are supplied packaged complete with whip section, mounting base fitted with cable and an instruction sheet for easy installation by semi-skilled personnel.

- Broad bandwidth allows coverage of entire operating bands
- MB14 constant impedance base designed specifically for high performance at frequencies up to and above 1000 MHz
- Whip sections are interchangeable and easily replaced in the field
- 17-7PH stainless steel whip section
- Supplied package includes base, whip, cable and instruction sheet for easy installation
- Slimline ferrule



Delta Series Broad Band Roof Mount

66-1000 MHz DSW1401 DSW1402



Electrical

Model No.		DSW140	01Series	DSW1402 Series	
Gain		Unity over a ¹ / ₄ wave			
Frequency	MHz	66 - 175 118 - 1000			1000
Power W		100			
Tuned	1.5:1 VSWR	>5 MHz @ 70 MHz	>9 MHz @ 150 MHz	>40 MHz @ 450 MHz	>95 MHz @ 850 MHz
Bandwidth	2.0:1 VSWR	>10 MHz @ 70 MHz >18 MHz @ 150 MHz >80 MHz @ 450 MHz >230 MHz @ 850 M			>230 MHz @ 850 MHz
Tuning		Field tune with supplied chart			

Model No.	DSW1401 Series	DSW1402 Series		
Whip Material	Tapered 17-7PH stainless steel	17-7PH stainless steel with black high gloss finis		
Whip Length mm	1260	655		
Mounting	MB14 base (included)			
Cable and Connector	Pre-terminated with 9001 Cellfoam®, specify with order. Connectors not included			



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VHF High Gain Roof Mount

The FW11 is a fibreglass roof mount antenna which provides the highest gain available in this frequency band. The gain and performance of this antenna make it ideal in areas with low or inconsistent signal strength. It fits standard VHF mounting bases such as the MB9 and can utilise the full line of accessories and fittings which are offered with this range.

It is important to note the narrow operating bandwidth of this antenna limits it's use to single frequency applications.

The antenna is supplied to be tuned over its entire operating band. The antenna must be tuned in its installed position for minimum VSWR, with tuning quite critical due to the inherently high Q of the antenna. It fits standard VHF mounting bases, such as the MB9 and can utilise the full line of accessories and fittings which are offered with this range.

- 2.5dB high gain for superior performance
- · Ideal in areas with low or inconsistent signal strength
- End fed ³/₄ wave in a ⁵/₈ wave package





Electrical

Model No.	FW11	FW11-28	FW11-29		
Gain	2.5dB over a 1/4 wave				
Frequency MHz	70 - 85	81 - 88	89 - 108		
Power W	50				
Tuned Bandwidth	0.5 MHz @ 1.5:1 VSWR				
Tuning	Field tune to minimum VSWR				

Model No.	FW11	FW11-28	FW11-29	
Whip Material	UV stable heatshrink over copper wound fibreglass with black heat shrink			
Whip Length mm	1550			
Mounting	Suits MB9, MB10 or MB12 bases (not included)			
Cable and Connector	Not included, order separately			



VHF Roof Mount

70-175 MHz

HPM-RM-99



The HPM-RM-99 is a flexible, helically loaded electrical ¹/₄ wave for applications where height restrictions prohibit the use of standard quarter wave antennas.

Fitted to a standard MB9 antenna base, the HPM-RM-99 is less than 350mm tall. The lower section of the antenna is a solid fibreglass former. The upper section is a helically wound stainless steel section providing a flexible antenna suitable for height restricted areas. The antenna is ideal in mining applications because of this flexibility.

The antenna is ordered to a specified frequency and should be fine tuned in the field.

- Helically loaded electrical $1\!\!\!/_4$ wave which stands less than 350mm tall
- Extremely small and flexible

NOTE: For low profile applications, also consider the TLA80 Series of transmission line style antennas

Electrical

Model No.	HPM-RM-99
Gain	-3dB over a 1/4 wave
Frequency MHz	70 - 175
Power W	25
Tuned Bandwidth	1.1% @ <1.5:1 VSWR
Tuning	Specify frequency, fine tune in field

Model No.	HPM-RM-99
Whip Material	Fibreglass brass and stainless steel
Whip Length mm	350mm (max)
Mounting	Suits MB9 (not included)
Cable and Connector	Not included, order separately



VHF Ground Independent Mopole™

The CD17 and CD18 are ground plane independent Mopole[™] antennas which provide excellent performance in a "compromise" mounting position. The CD17 and CD18 also provide an extended bandwidth in a physical arrangement which is ideal for every application from sedans to the heaviest industrial vehicles.

- Ground independent Mopole™ design allows installation in a variety of mounting locations
- Bandwidth of over 3MHz for VSWR <1.5:1 (slightly less for CD18) Accommodates most duplex requirements
- High impedance matching transformer allows end feeding of electrical half wave element
- Shortened half wave radiators suit restricted height applications
- Tapered stainless steel or fibreglass versions available





NOTE: The CD17 and CD18 are highly compressed ½ wave antennas and although they function independently of a ground plane, perform markedly better if earthed. Earthing via a gutter or mirror style bracket will ensure the best possible field performance.

Electrical

Model No.	CD17-xx-73	CD17-xx-50	CD18-xx-73	CD18-xx-50	
Gain	1.5dB over a ¼ wave				
Frequency MHz	xx denotes Freq band: 26 = 70 - 77 MHz 27 = 77 - 85 MHz				
Power W	50				
Tuned Bandwidth	3.0 MHz @ <1.5:1 VSWR 2.5 MHz @ <2.0:1 VSWR				
Tuning	Field tune to minimum VSWR with supplied chart				

Model No.	CD17-xx-73	CD17-xx-50	CD18-xx-73	CD18-xx-50
M/bip Material	17-7PH stainless steel whip with		Fibreglass helically loaded whip with	
whip waterial	fibreglass base coil assembly		moulded base coil assembly	
Whip Length mm	1500		1050	
Mounting	Threaded stud	MBC base (included)	Threaded stud	MBC base (included)
Cable and Connector	5.0m RG58 C/U	Not included	5.0m RG58 C/U	Not included



VHF High Gain Roof Mount



The SW12 stainless steel and FW12 fibreglass antennas are base loaded e wave high gain antennas which, when mounted high on a roof clear of obstructions, provide superior gain and pattern characteristics. The antennas are identical in performance so the choice of antenna depends on user preference.

Both antennas are easily tuned in the field for minimum VSWR. They mount via standard VHF bases and can utilise the full line of accessories and fittings which are offered in this range.

SW12

- 17-7PH tapered stainless steel whip fitted to a durable fibreglass base loading coil
- Resilient construction retains shape after bending or knocks

FW12

- · Braided fibreglass antenna with integrated base loading coil
- Black UV stabilised heatshrink mounted over chrome plated brass ferrule



Electrical

Model No.	SW12	FW12			
Gain	3dB over	over a 1/4 wave			
Frequency MHz	148 - 175				
Power W	100				
Tuned Bandwidth	3.0 MHz @ 1.5:1 VSWR				
Tuning	Field tune to minimum VSWR				

Model No.	SW12	FW12		
Whip Material	Tapered 17-7 PH stainless steel	Fibreglass with black heatshrink		
Whip Length mm	1340	1345		
Mounting	MB9, MB10 or MB12 bases (not included)			
Cable and Connector	Not included, order separately			



VHF Unity Gain Roof Mount

In the 136-175 MHz band, ¼ wave roof mount antennas remain a popular choice. Mounted high on a vehicle they provide excellent omnidirectional performance, are easily tuned and are extremely affordable. All of these antennas can be mounted to a standard 5/16 " - 26 TPI base such as the MB9, MB10 or MB12. They can utilise the full line of accessories and fittings available for such applications.

SW2

- · Parallel stainless steel whip
- Interference thread locking mechanism prevents loosening of whip due to vibration

TSW1

- 17-7PH tapered stainless steel whip
- · Resilient construction retains shape after bending or knocks

111ST

- 1/4 wave stainless whip with integral spring
- · Ideal for heavy industrial applications



SW2, TSW1, 111ST



Electrical

Model No.	SW2	TSW1	111ST			
Gain	Unity over a 1/4 wave					
Frequency MHz	136 - 175 66 - 175					
Power W	100					
Tuned Bandwidth	6% @ <1.5:1 VSWR (Typically at 150MHz)					
Tuning	Field tune to minimum VSWR					

Model No.	SW2	111ST			
Whip Material	Parallel stainless steel with chrome plated ferrule	Tapered 17-7PH stainless steel	Parallel stainless steel with integral spring		
Whip Length mm	633 1277 1270				
Mounting	MB9, MB10 or MB12 bases (not included)				
Cable and Connector	Not included, order separately				



VHF Ground Independent Mopole[™]

148-175 MHz	1
148-175 MHz CD25	The CI restricti applica The CI CD28 s for lowe bandwi The er transfor high im whip se The CI use in or non- MBC b replace • Redu
	• Robu • Uniqu
CD25	

The CD25 has been designed for applications where height restrictions are an issue. The antenna lends itself well to mining applications or other low clearance installations .

The CD25 is essentially a "shortened" version of our popular CD28 series antenna design. As the height has been shortened for lower profile applications, so the performance and associated bandwidth have been compromised.

The end fed design of this Mopole[™] incorporates a unique transformer in the base section. The transformer is housed in a high impact thermoplastic moulding matched to a rugged PVC whip section.

The CD25 is a ground independent antenna, making it ideal for use in "alternative" mounting locations such as gutters, mirrors or non-conductive surfaces. The antenna is supplied with an MBC base allowing for the entire antenna to be removed and replaced at will.

- · Reduced height ideal for use in mining and underground use
- Robust construction
- Unique patented design (Aust Pat. #596830)



Electrical

Model No.	CD25-42-50	CD25-43-50		
Gain	Unity over a 1/4 wave			
Frequency MHz	148 - 163 157 - 175			
Power W	10			
Tuned Bandwidth	2% @ <2.0:1 VSWR			
Tuning	Field tune to minimum VSWR			

Model No.	CD25-42-50 CD25-43-50				
Whip Material	Black nylon p	lastic housing			
Whip Length mm	570	540			
Mounting	MBC base	MBC base (included)			
Cable and Connector	Not included, order separately				



VHF Ground Independent Mopole™

The CD28 series are ground independent Mopole $^{\rm TM}$ antennas ideal in "alternative" mounting positions such as gutter, mirror or trunk mounts.

Utilising a patented matching circuit, the CD28 series antennas are end fed dipole antennas combining a durable thermoplastic housing with a flexible tapered stainless whip section resistant to knocks and bends.

- Performance Exhibits 3 dB improvement in performance over a ¹/₄ wave whip
- Versatile Ground independent design allows use in alternative mounting locations
- Rugged The transformer circuit is housed within a high impact thermoplastic moulding which is virtually indestructible
- Unique termination method simplifies installation and re-cabling in the field
- Designed, manufactured and patented in Australia [Australian Patent # 596830 and 656793]



133-175 MHz

CD28





The CD28 Series Mopole™ antenna is shown here mounted on the driver's side gutter. The pattern demonstrates that the antenna is providing excellent omnidirectional performance. TEST FREQUENCY: 160 MHz REFERENCE ANTENNA MODEL: SW2 MOUNT: MB9 Roof Centre TEST ANTENNA MODEL: CD28 MOUNT: Gutter Mount Drivers Side

Electrical

Model No.	CD28-37-50	CD28-41-50	CD28-37-70	CD28-41-70			
Gain	3dB over a ¼ wave. See note (1)						
Frequency MHz	133 - 163 148 - 175 133 - 163 148 - 175						
Power W	50						
Tuned Bandwidth	4 MHz @ 1.5:1 VSWR 4 MHz @ 1.5:1 VSWR 4 MHz @ 1.5:1 VSWR 5 MHz @ 1.5:1 VSWR 8 MHz @ 2.0:1 VSWR 8 MHz @ 2.0:1 VSWR 8 MHz @ 2.0:1 VSWR 10 MHz @ 2.0:1 VSWR						
Tuning	Field tune to minimum VSWR using supplied chart						

Mechanical

Model No.	CD28-xx-50 CD28-xx-70			
Whip Material	17-7 PH tapered stainless steel whip with moulded base coil assembly			
Whip Length mm	1340			
Mounting	MBC base (included) Threaded stud			
Cable and Connector	Not included, order separately. See note (2)			

Mopole™ antennas such as the CD28 have been shown to exhibit a 3dB improvement in received signal level in the field when compared to a ¼ wave whip however in pattern tests exhibit only 1.5 to 2dB over a ¼ wave (equivalent to 1.5-2dBi). This improvement in performance can be attributed to a lower radiation angle level of these ground independent antennas.
 Available preterminated with 5m 8058 RG58C/U. Use -73 or -53 suffix to replace -70 or -50 suffix.

Australian Patent No. 596830 and 656793



VHF Glass Mount

144-175 MHz

APS151.3



The APS151.3 is a glass mount antenna employing a small, stylish coupling box mounted inside the vehicle. This allows the radio signal to be transmitted through the vehicle glass to a half wave radiating element mounted externally. This high impedance matching network delivers low loss power transfer and the end result is comparable to a roof mounted antenna without drilling a hole.

- Performance unity gain end fed ¹/₂ wave elements don't require a ground plane to achieve low VSWR and low radiation angle
- · Secure Mounting the high performance mounting provides long lasting holding power
- Convenient installation and tuning complete in minutes with comprehensive instructions



The APS151.3 is most commonly mounted on a rear window. This pattern is a little distorted in shape but will offer good all round performance.

TEST FREQUENCY: 160 MHz REFERENCE ANTENNA MODEL: SW2 MOUNT: MB9 Roof Centre TEST ANTENNA MODEL: APS151.3 ---MOUNT: Glass Mount Rear Window

Electrical

Model No.	APS151.3
Gain	Unity over a 1/4 wave
Frequency MHz	144 - 175
Power W	100
Tuned Bandwidth	3.8 MHz @ 1.5:1 VSWR
Tuning	Field tune to minimum VSWR

Model No.	APS151.3
Whip Material	Stainless steel with black high gloss finish
Whip Length mm	838
Mounting	Glass mount
Cable and Connector	Supplied with 5.0m 8058 (RG58)



UHF Roof Mount

Mounted high on a vehicle, 1/4 wave antennas provide excellent omnidirectional performance, are easily tuned and are extremely affordable. All of these antennas can be mounted to a standard 5 1/16" - 26 TPI base such as the MB10 or MB12 and utilise the full line of accessories and fittings available for such applications.

SW20

- · Flexi whip UV stabilised PVC coating on twisted stainless wire
- Supplied within specified bands (colour coded) then trimmed for fine tuning

SW7

- · Parallel Stainless steel whip
- Interference thread locking mechanism prevents loosening of whip due to vibration
- · Trimmed to user frequency



380-520 MHz

SW24



Electrical

Model No.	SW7	SW22	SW23	SW24	SW25	SW26	
Colour Code	-	White	Black	Red	Blue	Yellow	
Gain		Unity over a 1/4 wave					
Frequency MHz	380 - 520	380 - 400 400 - 420 450 - 470 470 - 490 490 - 520					
Power W		100					
Tuned Bandwidth	Any 40 MHz segment @ <2.0:1 VSWR	Entire specified band @ <2.0:1 VSWR					
Tuning	Field tune to minimum VSWR	Supplied pre-tuned for specific bands					

Model No.	SW7	SW20 Series		
Whip Material	Parallel stainless steel with chrome plated ferrule	Flexible stranded stainless steel whip coated with black PVC		
Whip Length mm	330 (un-tuned)	165 (max)		
Mounting	MB10 base or MB12 base			
Cable and Connector	Not included, order separately			



UHF Ground Independent Mopole[™]



CD50

The CD50 and CD51 Series UHF ground independent Mopole[™] antennas are versatile and popular antennas, providing excellent performance in virtually any mounting position.

When mounted on a vehicle gutter or similar position, these UHF Mopoles[™] provide optimum performance with a largely omnidirectional pattern. Due to the low angle of radiation inherent in the dipole antenna pattern, a 4.0 dB improvement in performance is typical when compared to a ¹⁄₄ wave whip in the centre of a metal roof.

The end fed design of the UHF Mopoles[™] incorporates a truly unique transformer in the base section. In this patented feed assembly, the dielectric of the coaxial feeder cable is trimmed to a set length and then introduced into the coil in termination. The result is a precisely matched feed which is so consistent that tuning to frequency from a chart becomes a matter of course.

CD51 antennas are fitted with a flexible nylon radome over a copper element - ideal in industrial applications. CD50 antennas have an elegant and durable tapered stainless steel whip section.

There are two styles of mounting arrangements offered. The CD50-xx-70 and CD51-xx-70 versions mount via a threaded stud and nut assembly. The antenna can be easily terminated, tuned and re-terminated in the field using the instructions supplied. Its patented design allows the coaxial cable to be replaced in the field without specialised tools or soldering.

The CD50-xx-50 and CD51-xx-50 versions mate with the MBC coaxial base providing an internal, permanent connection in a completely sealed unit. The MBC base is easy to install and allows the entire antenna to be removed and replaced at will.

- Versatile Ground plane independence allows alternative mounting locations
- Performance High performance and largely omni-directional pattern when not centre roof mounted
- Convenient Patented design allows termination or retermination in seconds
- Stainless steel whip or flexible nylon whips cater to individual needs
- Durable Base coil is virtually indestructible
- Unique transformer design
- Australian Patents #596830 and #656793



UHF Ground Independent Mopole™





Electrical

Model No.	CD50-65-50	CD50-65-70	CD50-68-50	CD50-68-70	CD51-65-50	CD51-65-70	CD51-68-50	CD51-68-70
Gain		4dB over a 1/4 wave. See note (1)						
Frequency MHz	380 - 440 450 - 520 380 - 440 45					450	- 520	
Power W		50						
Tuned Bandwidth	13 MHz @ <1.5:1 VSWR							
Tuning		Field tune to minimum VSWR using supplied tuning chart						

Mechanical

Model No.	CD50-XX-50 CD50-XX-70		CD51-XX-50	CD51-XX-70	
Whip Material	17-7 PH Sta	ainless steel	Copper braid element in flexible nylon tubing		
Whip Length mm	39	95	360		
Mounting	MBC base (included) Threaded stud		MBC base (included)	Threaded stud	
Cable and Connector	Not included, order separately. See note (2)				

(1) Mopole[™] antennas such as the CD50 and CD51 exhibit a 4dB improvement in performance over a ¼ wave whip but in pattern tests deliver only 2.0 to 2.5dB of actual gain. This improvement in performance can be attributed to a lower angle of radiation and is of particular benefit to users in rugged terrain conditions and in heavily built up city areas.

(2) Available preterminated with 5m 8058 RG58C/U. Use -73 or -53 suffix to replace -70 or -50 suffix.

Australian Patent No. 596830 and 656793



380-520 MHz

UHF Phasemaster[™] Roof Mount

400-520 MHz

CSW10 Series CSW20 Series



CSW24

The CSW10 and CSW20, the original Phasemaster[™] antennas, are our most popular roof mounts due to their unmatched performance and superior strength. The highly flexible stainless steel whip and consistent 4.5dB gain has made them a favourite in virtually all roof mount applications.

- Outstanding performance precisely matched phasing coil separating ⁵/₈ wave over ¹/₂ wave electrical elements
- Available in classic s/s finish or black high gloss finish
- · Supplied in colour coded bands then fine tuned in field with chart
- Flexible 17-7PH Stainless steel whip will always bounce back after knocks and bumps



This pattern shows that the Phasemaster™ antenna is meeting the gain and omnidirectional performance we have stated in our specifications. The antenna is m producing a "textbook" pattern and is delivering 4.5dB gain. This antenna is an excellent performer and is highly recommended for any roof mount application.

TEST FREQUENCY: 460 MHz REFERENCE ANTENNA MODEL: SW7 MOUNT: MB9 Roof Centre TEST ANTENNA MODEL: CSW24 ------MOUNT: MB10 Centre Roof

Electrical

Model No.	CSW13/ CSW23	CSW13-66/ CSW23-66	CSW14/ CSW24	CSW15/ CSW25	CSW16/ CSW26		
Gain		4.5dB over a 1/4 wave					
Frequency MHz	400 - 420	420 - 440	450 - 470	470 - 490	490 - 520		
Power W		100					
Tuned Bandwidth		20 MHz @ <1.5:1 VSWR (<1.2:1 VSWR @ resonant frequency)					
Tuning		Trim to frequency using supplied tuning chart					

Model No.	CSW13	CSW13-66	CSW14	CSW15	CSW16	CSW23	CSW23-66	CSW24	CSW25	CSW26
Colour Code	Black	Black	Red	Blue	Yellow	Black	Black	Red	Blue	Yellow
Whip Material		17-7 PH Stainless steel				17-7 PH Stainless steel with black high gloss plating				
Whip Length mm	720	687	630	590	560	720	687	630	590	560
Mounting		MB10 or MB12 bases								
Cable and Connector		Not included, order separately								



UHF Elevated Feed Mopole™

The CD91 Series are 4 dB elevated feed Mopole[™] antennas which are suited to mounting on vehicle roof racks and gutters. These antennas are specifically designed for use on emergency service vehicles to elevate a ¹⁄₄ wave antenna above lights and sirens.

The antenna can easily be upgraded to a high gain antenna in seconds, by unscrewing and replacing the whip section. The antenna is ordered pre-tuned to a specific band.

- Performance provides 4 dB improvement over 1/4 wave even when mounted on roof rack or gutter mount
- Quality construction choke assembly is hand crafted from solid brass and chrome plated
- Ideal on emergency service vehicles elevating the antenna above lights and sirens
- Upgrades to high gain antenna in seconds
- Order in pre-tuned bands
- Can be used with a variety of mounts. See accessories section for options.



Typical VSWR response (CD91)



Electrical

Model No.	CD91-65-70	CD91-70-70	CD91-71-70	CD91-72-70			
Gain		4dB over a 1/4 wave. See note (1)					
Frequency MHz	400 - 420	450 - 470	470 - 490	490 - 520			
Power W		100					
Tuned Bandwidth		Entire specified band @ <1.5:1 VSWR					
Tuning		Supplied pre-tuned					

Mechanical

Model No.	CD91-65-70	CD91-70-70	CD91-71-70	CD91-72-70			
Colour Code	Black	Red	Blue	Yellow			
Whip Material	Flex	Flexible stranded stainless steel whip with black PVC coating and chrome plated brass elevated feed choke assembly					
Whip Length mm	395 (includes whip and choke section)						
Mounting	Threaded stud and nut assembly mounts in either 16mm or 13mm dia. mount hole						
Cable and Connector	Not included, order separately. See note (2)						

(1) Mopole[™] antennas such as the CD91 exhibit a 4dB improvement in performance over a ¼ wave whip but in pattern tests deliver only 2.0 to 2.5dB of actual gain. This improvement in performance can be attributed to a lower angle of radiation and is of particular benefit to users in rugged terrain conditions and in heavily built up city areas.

(2) Available preterminated with 5M RG58 cable. Use -73 (8058 cable) or -75 (9001 cable) to replace -70 suffix.



UHF Elevated Feed Mopole[™]

400-520 MHz

CD93 Series CD94 Series



CD93

Typical VSWR response (CD93 Series)

Frequency MHz From Centre Frequency The CD93 and CD94 Series are high performance elevated feed mobile antennas which can be used in virtually any mounting position. When gutter or roof bar mounted, high above a vehicle, CD93 and CD94 Series antennas deliver a full 6.5dB of gain over a 1/4 wave whip.

- Totally ground plane independent
- · Elevated feed boosts radiating element above obstructions
- "Phasemaster™" whip section provides superior performance and strength
- Quality construction choke assembly is crafted from solid brass and available in both chrome and black finishes
- · Fibreglass whip option available
- Can be used with a variety of mounts. See accessories section for options.

See also new CD900 Series UHF CBRS antennas on page 132



This pattern shows that when elevated above obstructions, the CD93 is fully ground independent and delivers superior gain. This pattern is showing that the published gain figures of 6.5dB over a ¼ wave whip are justified. TEST FREQUENCY: 460 MHz REFERENCE ANTENNA MODEL: SW7 MOUNT: MB10 Roof Centre TEST ANTENNA MODEL: CD93 MOUNT: GM2 Gutter Drivers Side

Electrical

/SWR

12

Model No.	CD93-65-70	CD93-70-70	CD93-71-70	CD93-72-70		
	CD94-65-70	CD94-70-70	CD94-71-70	CD94-72-70		
Colour Code	Black	Red	Blue	Yellow		
Gain		6.5dB over a ¼ wave. See note (1)				
Frequency MHz	400-420	450-470	470-490	490-520		
Power W		100				
Tuned Bandwidth	Entire specified band @ <1.6:1 VSWR					
Tuning	Supplied pre-tuned					

Mechanical

Model No.	CD93 Series	CD94 Series			
Whip Material	17-7PH stainless steel with black high gloss finish	17-7PH plain stainless steel			
Whip Length mm	810 max (Includes whip and choke section)				
Mounting	Threaded stud and nut assembly mounts in either 13mm or 16mm dia. mount hole				
Cable and Connector	Not supplied, order separately. See note (2)				

Mopole™ antennas such as the CD93 and CD94 have been shown to exhibit a 6.5dB improvement in received signal level in the field when compared to a ¼ wave whip however in pattern tests exhibit only 1.5 to 2dB over a ¼ wave (equivalent to 1.5-2dBi). This improvement in performance can be attributed to a lower radiation angle level of these ground independent antennas.
 Available preterminated with 5M RG58 cable. Use -73 (8058 cable) or -75 (9001 cable) to replace -70 suffix.



UHF Broadband Dipole

The CD440 is a broadband UHF Mopole[™] designed to cover the entire 400-470MHz band without adjustment. Being a ground independent design, the CD440 is suited to alternative (non-roof) mounting locations such as bull bar or roof rack. It's versatility makes it ideal for emergency service applications requiring broad bandwidth and high performance.

- Broadband covers 400-470MHz without adjustment
- Circuit board radiator provides consistent gain across entire frequency band
- Versatile Ground plane independent allowing alternative mounting locations
- · Durable thick fibreglass radome fitted to a heavy duty spring
- Can be used with a variety of mounts. See accessories section for options.





Electrical

Model No.	CD440
Gain	4dB over a 1/4 wave. See note (1)
Frequency MHz	400 - 470
Power W	100
Tuned Bandwidth	Entire specified band @ <1.5:1 VSWR
Tuning	Supplied pre-tuned

Mechanical

Model No.	CD440
Whip Material	31mm dia. woven black fibreglass
Whip Length mm	490
Spring	Electropolished stainless steel (integrated)
Mounting	Mounts via a 12mm dia. threaded stud
Cable and Connector	5.0m RG58C/U fitted, no connector supplied

(1) As the CD440 is a half wave dipole antenna, actual pattern tests show unity gain vs. a half wave dipole. In the field, however, the CD440 will deliver performance which is approximately 4dB better than a 1/4 wave whip mounted in the centre of a metal roof, mainly because it exhibits a lower angle of radiation.



UHF Glass Mount

380-474 MHz

AP354 Series



The AP354 is a broadband glass mount antenna specifically designed for Tetra mobile applications. Featuring patented On-Glass technology the AP354 transmits and receives through the glass making it ideal for fleet use with a no-holes installation. The antenna has been specifically designed for broadband use with no additional tuning required across the whole band from 380-474MHz for a VSWR of less than 1.9:1.

- Unique glass mount design transmits and receives through the glass
- Weatherproof water cannot enter the vehicle through gasket failure or cable channels
- Efficient mounts high on the vehicle for maximum omnidirectional radiation pattern
- Broadband requires no field tuning across entire frequency range
- Time-saving simple mounting method allows no-hole installation in minutes



Electrical

Model No.	AP354			
Gain	Unity over 1/4 wave			
Frequency MHz	380 - 474			
Power W	10			
Tuned Bandwidth	94 MHz @ <1.9:1 VSWR			
Tuning	Supplied tuned			

Model No.	AP354	
Whip Material	Stainless steel with black high gloss finish	
Whip Length mm	254	
Mounting	Glass mount	
Cable and Connector	5.0m RG58C/U fitted, no connector supplied	



UHF Glass Mount

The AP454 Series is a third generation glass mount antenna for UHF applications. The AP454 features an unobtrusive interior mounted coupling box and a number of whip options.

- · Convenient installation and tuning completed in minutes
- · High gain options available
- Broadband AP454-72-4G provides broadband 3dB gain across entire specified bandwidth

WHIP OPTIONS





TEST FREQUENCY: 460 MHz REFERENCE ANTENNA MODEL: SW7 MOUNT: MB10 Roof Centre

AP454-3G

TEST ANTENNA MODEL: AP454.3G ----MOUNT: Glass Mount

Rear Window

400-520 MHz

AP454 Series

Electrical

Frequency MHz From Centre Frequency

Model No.	AP454-3G	AP454-65-5G	AP454-70-5G	AP454-71-5G	AP454-72-4G
Gain	Unity over a 1/4 wave	3dB over a 1/4 wave		2dB over a 1/4 wave	
Frequency MHz	403 - 520	400 - 420	450 - 470	470 - 490	500 - 520
Power W	100				
Tuned Bandwidth	12 MHz @ <1.5:1 VSWR	<1.5:1 10 MHz @ <1.5:1 VSWR Entire s band @ VS			Entire specified band @ <1.5:1 VSWR
Tuning	Field tune to minimum VSWR				

Mechanical

Model No.	AP454.3G	AP454-xx.5G Series	AP454-72-4G
Whip Material	Stainless steel with black high gloss finish		
Whip Length mm	230	871	380
Mounting	Glass mount		
Cable and Connector	5.0m RG58C/U		



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VHF Low Profile



The TLA80 is a low profile transmission line antenna for use in mobile applications with severe height restrictions. Transmission line design allows the antenna to deliver excellent omnidirectional coverage with a substantial height reduction over standard whip style antennas.

These exceptionally rugged antennas are commonly used in high risk applications such as trains and emergency vehicles or in high vibration environments.

The TLA80 is constructed from alodined aluminium and supplied with a rubber gasket for secure sealing.

- Low Profile Only 70mm tall makes it ideal for height restricted applications
- · Vertically polarised radiation pattern when mounted horizontally
- Frequency tuneable in the field



Electrical

Model No.	TLA80-BK	TLA80-R	TLA80-G	
Gain		-3dB over 1/4 wave		
Frequency MHz	70 - 75	75 - 80	80 - 85	
Power W	100			
Tuned Bandwidth	0.6 MHz @ <2.0:1 VSWR			
Tuning	Field tune to minimum VSWR			

Model No.	TLA80 Series	
Whip Material	Alodined Aluminium	
Length mm	954	
Height mm	70	
Width mm	40	
Cable and Connector	UHF female connector fitted. Cable not included	



VHF Low Profile

Transmission line antenna designs, as used in this group of antennas, provide excellent omnidirectional radiation patterns for vertically polarised antennas but allow a substantial height reduction over standard ¼ wave whip style antennas. A number of design styles available to suit a variety of applications including heavy duty industrial, mining, rail, commercial, airforce and security.

- TLA150 For extra heavy duty applications
- TLA160 Lightweight, field tunable
- TLR Series Enclosed radiator, field tunable





Electrical

Model No.	TLA160	TLA150	TLR160	TLR150	
Gain	-2dB over 1/4 wave				
Frequency MHz	148 - 175 (also available in 118-136)	166 - 175	148 - 160	160 - 174	
Power W	100				
Tuned Bandwidth	3.0 MHz@ <1.5:1 VSWR	1.5 MHz@ <1.5:1 VSWR	1.6 MHz@ <	2.0:1 VSWR	
Tuning	Field tune to minimum VSWR	Supplied tuned to user specified frequency	Field tune to m	ninimum VSWR	

Model No.	TLA160	TLA150	TLR Series
Whip Material	Alodined aluminium	Rugged cast aluminium coated in chlorinated rubber	Copper plated steel element covered in ASA plastic radome
Length mm	650		429
Height mm	100		104
Width mm	56		83
Cable and Connector	N-type receptacle connector fitted. Cable not included.		UHF female connector fitted. Cable not included.



UHF Low Profile



The TLA600 series is a range of low profile transmission line antennas for use in applications where little or no ground plane exists.

These antennas can be used on buses, trucks, trains or in telemetry applications where the antennas are to be mounted on a fibreglass roof or similar non-conductive surface.

- Available with integrated active GPS antenna for asset tracking/vehicle location applications on request. *
- Functions with or without a ground plane, allowing one antenna to be used in an entire system, regardless of mounting application.**
- Performance equivalent to a 1/4 whip wave mounted in the centre of a metal roof
- All antennas supplied pre-tuned to the nominated bands and require no field adjustment
- Low profile (<80mm) height overall
- Plastic moulded radome is attractive and durable, resistant to car washes, UV Stable and weatherproofed
- Neoprene gasket seal provides excellent waterproofing of fitted antenna
- Available in all major UHF bands



* When ordering specify - GPS suffix - i.e. TLA600-57-GPS ** TLA620-99 cannot be used without a ground plane



UHF Low Profile

255-530 MHz

TLA600 Series

Electrical

Model No.	TLA600-57	TLA600-65	TLA600-70	TLA600-71	TLA600-72	TLA620-99
Gain		Unity over a 1/4 wave				
Frequency MHz	380 - 400	400 - 420	450 - 470	470 - 500	500 - 530	255 - 380
Power W		50				
Tuned Bandwidth	Entire band @ VSWR <2.0:1 off ground plane <2.4:1 on ground plane	Entire operating band @ <2.0:1 VSWR on or off ground plane			4% @<1.5:1 VSWR 5% @ <2.0:1 VSWR	
Tuning	Supplied pre-tuned			Supplied pre- tuned, requires ground plane		

Mechanical

Model No.	TLA600 Series	
Construction	White Geloy ASA radome	
Length mm	375	
Height mm	78	
Width mm	140	
Mounting	Screw and gasket	
Termination	N female connector. Alternative BNC connector also available (subject to MOQ) Optional GPS unit terminates with MCX connector	

GPS Specifications

Model No.	TLA600-XX-GPS	
Fo	1575.42 MHz	
Operation Temperature	-40 to +85°C	
Storage Temperature	-40 to +100°C	
System Gain at Fo	28dBi including cable and filter losses	
Impedance	50 Ohm	
Polarization	RHCP	
VSWR at Fo	1.5:1	
Noise Figure at Fo	<1.8 dB max.	
Power Input	+2.5Vdc to +12Vdc input, Auto Switching	
Power Consumption	11mA to 13mA (max)	
Power Input	Reverse Polarity Short Circuit Shutdown	
Over-Current	Thermal over-current shutdown >+150°C	



UHF Unity Gain Low Profile



The TLA400 is a low profile transmission line antenna ideal for applications with strict height requirements. The TLA400 delivers performance equivalent to a 1/4 wave whip, yet measures only 66mm tall. It's rugged construction and low profile make it an ideal choice for industrial, rail and mining applications.

- · Low Profile Only 66mm tall ideal for height restricted applications
- · Extremely Rugged Cast aluminium construction
- · Reliable Fully pattern tested in verified range conditions
- Corrosion Resistant
- · Fully interchangeable with existing products in the field



Electrical

Model No.	TLA400 Series TLA401 Series				
Gain	Unity over	Unity over a 1/4 wave			
Frequency MHz	380 -	380 - 520			
Power W	100				
Tuned Bandwidth	Supplied in 20 MHz bands @ <1.5:1 VSWR. See note (1)				
Tuning	Supplied pre-tuned				

Mechanical

Model No.	TLA400 Series	TLA401 Series		
Whip Material	Rugged cast aluminium coated with baked enamel finish			
Length mm	25	55		
Height <i>mm</i>	66.5			
Width <i>mm</i>	60			
Hole spacing for mounting <i>mm</i>	44 40			
Cable and Connector	N connector, no cable supplied, order separately (UHF connector available subject to MOQ)			

(1) When ordering specify suffix:

-57 (380-400MHz) -65 (400-420MHz) -70 (450-470MHz) -71 (470-490MHz) -72 (500-520MHz)



Cellular Transit Antenna

The TLA2000 is an ideal antenna solution for GSM data applications in both fixed and mobile situations. Designed to offer true dual band performance the TLA2000 is ready for use with the latest GSM (GPRS) modems. With a high impact resistant vacuum formed ABS radome and neoprene mounting gasket, the TLA2000 can be used for indoor or outdoor applications.

- Applications include public vending machines, ATM kiosks and industrial automotive use
- · Designed for use on conductive or nonconductive surfaces
- TLA3000 model incorporates integrated GPS antenna





Electrical

Model No.	TLA2000/3000
Gain <i>dBi</i>	2
Frequency MHz	890 - 960 / 1710 - 1880
Power W	10
Tuned Bandwidth	Entire specified band @<2.5:1 VSWR
Tuning	Pre-tuned

Mechanical

Model No.	TLA2000	TLA3000
Construction	White Geloy ASA radome	
Diameter mm	135	
Height mm	61 (including gasket)	
Mounting	M4 hardware (not included)	
Cable and Connector	500mm low loss 9014 RG58 type	Cellular: 5m 9014 RG58 type - FME connector GPS: 5m low loss RG174 type - MCX connector

GPS Specifications

Fo	1575.42 MHz	
Operation Temperature	-40 to +85°C	
Storage Temperature	-40 to +100°C	
System Gain at Fo	28dBi including cable and filter losses	
Impedance	50 Ohm	
Polarization	RHCP	
VSWR at Fo	1.5:1	
Noise Figure at Fo	<1.8 dB max.	
Power Input	+2.5Vdc to +12Vdc input, Auto Switching	
Power Consumption	11mA to 13mA (max)	
Power Input	Reverse Polarity Short Circuit Shutdown	
Over-Current	Thermal over-current shutdown >+150°C	



Trunking Glass Mount

806-870 MHz

AP868.3



The AP868.3 has been specifically designed for the 806-870MHz international trunked mobile band. The antennas look identical to their cellular cousins but are optimised for full 3dB gain performance within the trunking band.

- · Limited lifetime warranty
- No-fuss installation antenna supplied completely assembled and ready for installation
- High performance unique coupling design delivers genuine 3 dB gain
- · Pliable mounting foot for maximum adhesion to curved windows
- Black high gloss plating won't scratch, chip or peel



Electrical

Model No.	AP868.3	
Gain	3dB over a 1/4 wave	
Frequency MHz	806 - 870	
Power W	50	
Tuned Bandwidth	Entire specified band @ <1.9:1 VSWR	
Tuning	Supplied pre-tuned	

Model No.	AP868.3
Whip Material	Stainless steel with high gloss plating
Whip Length mm	355
Mounting	Glass mount
Cable and Connector	5.0m RG58C/U fitted, please specify connector



High Gain Trunking Roof Mount

The SW1585 antenna is derived directly from our high performance cellular roof mount antenna. It is a 3 dB gain antenna, optimised for the 806-870MHz international trunked mobile bands. The SW1585 will deliver excellent all-round performance and is generally considered to be the optimum choice for professional users.

At the heart of the SW1585 is the MB14 antenna base. This base is intricately constructed, much like a coaxial connector. The precisely controlled termination which is achieved is reliable electrically and mechanically and provides a superb match, resulting in a broad bandwidth, and extremely low VSWR.

- High performance
- · Limited lifetime warranty
- Roof mounting for optimum performance
- MB14 base for superior match and bandwidth
- · Black high gloss plating won't scratch, chip or peel



SW1585



Electrical

Model No.	SW1585	
Gain	3dB over a ¼ wave	
Frequency MHz	806 - 870	
Power W	50	
Tuned Bandwidth	Entire specified band @ <1.9:1 VSWR	
Tuning	Supplied pre-tuned	

Model No.	SW1585	
Whip Material	17-7PH Stainless steel with brass ferrule and black high gloss finish	
Whip Length mm	310	
Mounting	MB14 base	
Cable and Connector	5.0m CellFoam®, connector not included	



High Gain Trunking Collinear

806-870 MHz

CD1595



The CD1595 is a high gain mobile trunking band antenna providing a genuine 6 dB gain, ideally suited for use in fringe areas and rural applications where performance is paramount.

These antennas are extremely robust in design with the radiating element housed in a black fibreglass radome fitted to an integral heavy duty electropolished stainless steel spring.

With a 13mm stud mount, these antennas may be installed onto a number of mounting brackets such as mirror, bull bar, gutter or fender mounts and are ideal for installations in commercial vehicles, four wheel drives and trucks.

These antennas have been factory terminated with an FME connector and are supplied complete with a Mini-UHF adapter to simplify installation.

- Suits Australian and International trunking bands
- 6 dB Gain ideal for fringe areas and rural applications
- · Supplied pre-terminated with connectors to suit most radio types
- · Robust design for heavy duty applications



Electrical

Model No.	CD1595	
Gain	6dB over 1/4 wave	
Frequency MHz	806 - 870	
Power W	50	
Tuned Bandwidth	Entire specified band @ <1.5:1VSWR	
Tuning	Supplied pre-tuned	

Model No.	CD1595	
Whip Material	Black fibreglass radome	
Length mm	890	
Spring	Electropolished stainless steel	
Mounting	Threaded stud and nut assembly 13 or 16mm clearance hole required	
Cable and Connector	5.0m Cellfoil® low loss cable with FME fitted mini UHF adaptor included	



Systems engineering services

RFI offer an extensive range of design, development and related services in support of our customers. These include:

- Site layout and construction advice
- RF systems design
- Intermodulation and interference analysis
- Retuning
- Reconfiguration advice
- Site fault finding
- Multicoupling equipment design and selection

We welcome the opportunity to work with you through each requirement including initial design, tender preparation, right through to installation and commissioning of systems.

Our objective is to provide you with the most complete service utilising our extensive engineering expertise and product knowledge across our entire product portfolio.

For more information on the extensive range of specialist systems products and services call us today or...

visit www.rfi.com.au





NSTALLAT

Dual Band Cellular Glass Mount



A breakthrough in mobile antenna design!

Finally, an antenna which can radiate effectively from the inside of the vehicle. Unlike most mobile antennas, which have a vertical whip section, the antenna is a tiny radiator which lies flat inside the vehicle windscreen!

Not only is the Duet[™] the first truly effective antenna designed to be mounted inside the vehicle, it provides full dual band performance, covering both the 900 and 1800 MHz bands. The secret of the design lies in it's unique patented matching circuit. The antenna uses a stripline fed slot radiator with a patch circuit used to introduce dual resonance at 900 MHz and 1800 MHz. The result is an omnidirectional pattern in both bands and a unique mix of vertical and horizontally polarized radiation.

In performance terms the Duet[™] is extraordinary. Free space field tests show the antenna exhibiting unity gain over a 1/4 wave at GSM900 (2.1 dBi) and 1.5 dB Gain over a 1/4 wave in the GSM1800 MHz band (3.5dBi). When mounted on a vehicle in full network drive tests however the amazing performance of this antenna is really revealed.

The Duet[™], mounted on a vehicle screen and tested in network drive tests, is rated at -2dB over a 1/4 wave, but this is some 4-5 dB BETTER than even the best externally mounted glass mount antennas and more than 11dB better than using a portable phone in the car without an external antenna! The unique mix of polarization and great efficiency of the radiator make the Duet[™] a high performance antenna, not a performance trade off as would normally be expected when using an internal antenna.

Superb performance (especially in urban areas) and no external parts. This simplifies installation, pleases ever more fastidious car owners and eliminates vandalism and car wash problems. The Duet[™] antenna is truly a breakthrough product, one which finally addresses the requirements of the network operators and still meets the desires of end users.



Dual Band Cellular Glass Mount

- Easy to install A simple peel and stick mounting foot is placed on the inside of the vehicle glass. Run the preterminated cable assembly to the car kit - connect and go!
- · Discreet The mounting section is slimline and unobtrusive
- Dual Band compatible Designed to operate in single and dual band GSM applications
- Completely Internal No threat of vandalism, no concerns of external wind noise and no car wash damage
- Versatile The tiny radiating section can be mounted on front or rear windscreens
- High Performance Optimised for operation with mixed polarization cell sites. Eliminates signal fading and outperforms most external glass mounted antennas



Electrical

Model No.	ITG2000	
Gain <i>dBi</i>	2.1	3.5
Frequency MHz	890 - 960	1710 - 1880
Power W	10	
Tuned Bandwidth	Entire specified band @ <2.0:1 VSWR	
Tuning	Supplied pre-tuned	

Mechanical

Model No.	ITG2000	
Housing Material	Black ABS/Polycarbonate alloy	
Dimensions	70 x 70 x 16mm	
Mounting	On glass inside vehicle. Pre-fitted with self adhesive foam tape.	
Cable and Connector	5.0m 9014 low loss, fully shielded cable terminated with SMA male (antenna end) and FME nipple (adapters available).	

Australian Patent No. 764117, USA Patent No. 6346919, Germany Patent App No. 100 38 831.0, Israel Patent App No. 137716



890-960 MHz 1710-1880 MHz ITG2000

Multi Band Cellular Glass Mount

806-890 MHz 890-960 MHz 1710-1880 MHz 1850-1990 MHz

ITG4000



The Global Antenna

The Quadrant[™] is perhaps the most versatile cellular antenna in the world. It can be used in almost any of the existing cellular systems, will provide superior performance to externally glass mounted antennas and yet can be mounted quickly and easily inside the vehicle with no external parts.

A derivation of the Duet[™] dual band product (and included in the same patent), the Quadrant[™] uses the same stripline fed slot radiator technology with patch circuits used to introduce multi band performance. Being slightly larger than the dual band Duet[™], the Quadrant[™] has been configured to suit not only GSM900 and GSM1800 systems but also covers AMPS, TDMA and CDMA 800 systems. It also covers the GSM1900 and PCS1900 bands. This enables the Quadrant[™] to be used in more than nine out of ten cellular systems anywhere on the globe.

Ship the Quadrant[™] to almost any market in the world, and the antenna can be installed quickly, easily and yet deliver incredible performance. With a unique mix of vertical and horizontal polarisation (as is also shown by the cell sites themselves), the Quadrant[™] will work especially well in urban and suburban areas. It even (just) out performs it's sister, the Duet[™], because of the very slightly larger footprint.

Free space field tests show the Quadrant[™] exhibiting just over unity gain relative to a quarter wave at GSM900 and AMPS/TDMA/CDMA 800 Bands (i.e. 2.5 dBi) and 1.8 dB of Gain relative to a quarter wave in the GSM1800 MHz and GSM/PCS1900 MHz bands (i.e. 4dBi). When mounted on a vehicle and tested in full network drive tests (which were performed in an urban environment) it performs even better.

Mounted on a vehicle screen, the Quadrant^M is rated at -1dB over a ¹/₄ wave, but this is some 5-6 dB BETTER than even the best externally mounted glass mount antennas and more than 12dB better than using a portable phone in the car without an external antenna!

The Quadrant[™] is truly a breakthrough. There is no performance trade-off. One antenna provides global cellular coverage (ideal for vehicle manufacturers or hands-free kit manufacturers) with a single item. No installation mistakes, with one antenna for every job, and a simple installation with no external parts to be fitted.

Supplied complete with mounting instructions and a preterminated low loss, fully shielded coaxial cable, the Quadrant[™] can help reduce inventories, reduce installation costs, boost air time and deliver superior customer satisfaction in just about every cellular system in the world.


Multi Band Cellular Glass Mount

- Truly global cellular coverage.- One antenna suits all of the following systems: GSM 900, GSM 1800 (DCS 1800, PCN 1800), GSM 1900, AMPS, TDMA, CDMA 800, DECT, PCS 1900, (CDMA1900)
- Superb performance approaches a quarter wave antenna and easily out-performs external mounted glass mount antennas. Patented mixed polarity design.
- Reduce inventories one antenna suits all systems and can be shipped globally
- Completely internal no impact on prestige vehicles, no threat of vandalism, no car wash damage and simplified installation
- Supplied ready to go with peel and stick mounting and pre-terminated, fully shielded low loss coaxial cable

806-890 MHz 890-960 MHz 1710-1880 MHz 1850-1990 MHz

ITG4000



Electrical

Model No.	ITG4000					
Gain <i>dBi</i>	2.5 4			4		
Frequency MHz	806 - 890 890 - 960 1710 - 1880			1850 - 1990		
Power W		10				
Tuned Bandwidth	Entire specified band @ <2.0:1VSWR					
Tuning	Supplied pre-tuned					

Mechanical

Model No.	ITG4000
Housing Material	Black ABS/Polycarbonate alloy
Dimensions	80 x 80 x 16mm
Mounting	On glass inside vehicle. Pre-fitted with self adhesive foam tape.
Cable and Connector	5.0m 9014 low loss, fully shielded cable terminated with SMA male (antenna end) and FME nipple (adapters available).

Australian Patent No. 764117, USA Patent No. 6346919, Germany Patent App No. 100 38 831.0, Israel Patent App No. 137716



Multi Band Cellular-GPS Combination

806-890 MHz 890-960 MHz 1710-1880 MHz 1850-1990 MHz 1910-2170 MHz

ITG5000 ITG5001



The Quintet[™] offers incredible versatility. It can be used in almost any cellular system, will provide superior performance to externally glass mounted antennas and yet can be mounted quickly and easily inside the vehicle with no external components.

A derivation of the Duet[™] and Quadrant[™] dual/multi band products, the antenna uses stripline fed slot radiator technology with patch circuits used to introduce multi band performance. Being slightly larger than the multi band Quadrant[™], the Quintet[™] has been configured to suit not only GSM900 and GSM1800 systems but also covers AMPS, DAMPS and CDMA 800, SMR systems, PCS1900, DCS1800 and UMTS/3G.

The incredible versatility of the ITG5001 is taken one step further with the ITG5000 version which is effectively two antennas in one. This antenna provides global cellular coverage and GPS satellite coverage making it an ideal telematics solution for vehicle manufacturers, or car kit installers, reducing inventory and installation time.

The GPS element is a small ceramic patch antenna with a high performance active amplifier and industry leading noise figure to ensure faster acquisition of multiple satellites. The Quintet[™] is equally appropriate for in-vehicle integrated telematics solutions or after market applications calling for both cellular and GPS installations in recreational or industrial vehicles.

Ship the Quintet[™] to any market in the world, and the antenna can be installed quickly, easily and yet deliver incredible performance. With a unique mix of vertical and horizontal polarization (as is also shown by the cell sites themselves), the antenna can be mounted at any angle and still deliver optimum performance.

- The ultimate telematics solution GPS and cellular in one antenna for almost any market worldwide. (ITG5000)
- Perfect solution for private vehicles, fleet management and vehicle OEMs etc.
- Completely internal simple installation, no external parts.

Australian Patent No. 764117, USA Patent No. 6346919, Germany Patent App No. 100 38 831.0, Israel Patent App No. 137716



Multi Band Cellular-GPS Combination



806-890	MHz
890-960	MHz
1710-1880	MHz
1850-1990	MHz
1910-2170	MHz



Electrical

Model No.	ITG5000 / ITG5001					
Gain <i>dBi</i>	1	.1	4.	4	4.5	
Frequency MHz	806 - 890	890 - 960	1710 - 1880	1850 - 1990	1910 - 2170	
Max Power W		10				
Tuned Bandwidth	Entire specified band @ <2.0:1 VSWR					
Tuning	Supplied pre-tuned					

Mechanical

Model No.	ITG5000 / ITG5001			
Housing Material	Black ABS/Polycarbonate alloy			
Dimensions	90 x 90 x 17mm			
Mounting	On glass inside vehicle. Pre-fitted with self adhesive foam tape.			
Cable and Connector	Cellular feeder of 5.0m 9014 low loss, fully shielded cable terminated with SMA male and FME nipple (adapters available).			
	ITG5000 ONLY - GPS feeder of 5.0m RG174 type cable MCX connector fitted			

GPS Specifications

Fo	1575.42 MHz
Operation Temperature	-40 to +85°C
Storage Temperature	-40 to +100°C
System Gain at Fo	28dBi including cable and filter losses
Impedance	50 Ohm
Polarization	RHCP
VSWR at Fo	1.5:1
Noise Figure at Fo	<1.8 dB max.
Power Input	+2.5Vdc to +12Vdc input, auto switching
Power Consumption	11mA to 13mA (max)
Power Input	Reverse polarity short circuit shutdown
Over-Current	Thermal over-current shutdown >+150°C



Embedded Cellular Antenna

890-960MHz 1710-1880MHz

EAM2000



EAM2000

The EAM2000 is a breakthrough antenna, able to be mounted completely inside wireless equipment. This makes it ideal for use in a variety of "new" wireless applications including ATM's, vending machines and remote monitoring units.

Being ground plane insensitive it can be installed either on or off ground plane. With a depth of only 13 mm, this makes the EAM2000 ideal for the tightest of mounting positions.

- · Ideal for the latest M2M applications
- Slimline for ease of installation
- GSM Dual or single band compatible
- · Completely internal no threat of vandalism or damage



Electrical

Model Number	EAM2000
Gain <i>dBi</i>	2
Frequency	890 - 960 MHz / 1710 - 1880 MHz
Max Power W	5
Tuned Bandwidth	Entire specified band @ <2.5:1 VSWR
Tuning	Supplied pre-tuned

Model Number	EAM2000
Construction Material	FR4 composite and tinned brass
Dimensions <i>mm</i>	68 x 43 x 13
Mounting	Customer specific
Connector	SMA female connector



Cellular Roof Mount

Roof mount antennas are recommended by system operators, mobile manufacturers and system designers as they provide the strongest reception and most reliable performance of any cellular mobile antenna.

At the heart of each RFI roof mount antenna is the MB14 base. The base is intricately constructed, much like a coaxial connector. The precisely controlled termination is reliable electrically and mechanically provides a superb match resulting in a broad bandwidth.

- Roof mounting for optimum performance
- · Black finish will not scratch or peel
- · Limited lifetime warranty
- SW1495 (CDMA only) offers 5 dB gain for maximum range in country or fringe areas
- SW1486/1686 Magnetic base versions available for portable applications complete with protective rubber boot



824-960 MHz



This antenna is providing excellent gain and omnidirectional performance as expected when mounted as recommended. The published gain figure for this antenna of 3 dB is conservative and could more correctly be stated at 3.5dB. TEST FREQUENCY: 825 MHz REFERENCE ANTENNA MODEL: SW1405 MOUNT: MB14 Roof Centre TEST ANTENNA MODEL: SW1485 MOUNT: MB14 Roof Centre

Electrical

Model No.	SW1405	SW1605	SW1485/6	SW1685/6	SW1495
Gain	Unity ove	r 1/4 wave	3dB over	r 1/4 wave	5dB over 1/4 wave
Frequency MHz	824 - 896	890 - 960	824 - 896	890 - 960	824 - 896
Power W	50				
Tuned Bandwidth	Entire specified band @ <1.9:1 VSWR				
Tuning	Supplied pre-tuned				

Model No.	SW1405	SW1605	SW1485	SW1685	SW1486	SW1686	SW1495
Whip Material		17-7 PH stainless steel with brass ferrule, black finish					
Whip Length mm	70	65	350	340	380	370	624
Mounting	MB14 Heavy duty magnetic mo			duty mount	MB14		
Cable and Connector	Supplied with 5.0m Cellfoam® cable. Please specify mini UHF, FME or TNC connector.						



e-glass[®] Cellular Dual Band



The EG800 series e-glass® antennas are genuine dual band antennas designed specifically for GSM 900/GSM 1800 applications. All of these antennas offer superb, true dual band performance.

The e-glass® utilises an elliptical slot radiator in the coupling box, with a patch element housed in the mounting foot. The patch element is E-shaped to allow the coupling of both bands very effectively. The whip element is fully moulded with dual phasing coils (3dB whip only), the result being an antenna that provides abundant gain in both the 900MHz and 1800MHz bands.

Featuring a new-look mounting foot and coupling box, e-glass® antennas are supplied complete with a pre-terminated lead of low loss, fully shielded coaxial cable.

- True dual band performance at 900 and 1800 MHz
- · Fully shielded low loss pre-terminated cable supplied
- EG884 combination kit supplied with unity and 3dB gain whips offering choice of gain and reducing inventory



Electrical

Model No.	EG880	EG883	EG884		
Gain	Unity over a 1/4 wave	3dB over a 1/4 wave	Unity and 3dB over a 1/4 wave		
Frequency MHz	890 - 960 & 1710 - 1880				
Power W	50				
Tuned Bandwidth	Entire specified band @ <2:1 VSWR				
Tuning	Supplied pre-tuned				

Mechanical

Model No.	EG880	EG883	EG884		
Whip Material	One piece black chrome plated stainless steel with plastic over moulding				
Whip Length mm	155	352	As per EG880 + EG883		
Mounting	Flexible polyurethane moulded mounting foot attaches with self adhesive foam tape				
Cable and Connector	Pre-terminated lead with 5m 9014 flexible foam dielectric low loss fully shielded cable pre-terminated with FME nipple connector for transceiver connector and SMA male to suit coupling box				

Australian Patent App No. 34316/02



CDMA Cellular Glass Mount

The glass mount antenna has long been the world standard for cellular mobile antennas. This glass mount antenna is supplied completely assembled ready for quick, effortless installation. The mounting foot is constructed from flexible plastic and mounts securely using very high bond tape.

Established as the world's premier cellular mobile antenna, the glass mount antenna is ideal for both end-users and original equipment manufacturers ideal for virtually all applications.

- 'Solid State' Slimline Coupling Box Unsurpassed performance in a low profile housing
- Pliable mounting foot for maximum adhesion to curved windows coupled with a choice of whips.
- Simple Installation Supplied completely assembled and ready for installation with very high bond tape (VHB) simply peel and stick
- Distinctive packaging for easy stock identification
- Incorporates turbulence spiral for whisper quiet performance



AMD877.3



The pattern shown for the AMD873.3 shows that the antenna provides an excellent, largely omnidirecitonal radiation pattern and exhibits 3dB gain over a ¼ wave whip mounted in the centre of a metal roof. TEST FREQUENCY: 850 MHz REFERENCE ANTENNA MODEL: SW1405 MOUNT: MB14 POSITION: Roof Centre TEST ANTENNA MODEL: AMD873.3 -----MOUNT: Glass Mount POSITION: Rear Window

Electrical

Model No.	AMD877.3 Series
Gain	3dB over a ¼ wave
Frequency MHz	820 - 896
Power W	50
Tuned Bandwidth	Entire specified band @ <1.9:1 VSWR
Tuning	Supplied pre-tuned, ready for installation

Model No.	AMD877.3 Series
Whip Material	Stainless steel with black finish
Whip Length mm	386
Mounting	Mounted on glass with VHB tape
Cable and Connector	Supplied with 5.0m Cellfoam® cable. Please specify mini UHF, FME or TNC connector.



Cellular Elevated Feed

820-960 MHz

CD1210 CD1610 CD1515



This elevated feed 1.5dB gain mobile antenna is available in CDMA, GSM and PTMP bands. The "elevated feed" construction of the antenna is designed to keep the upper radiating portion of the antenna above the roof level to achieve an omnidirectional pattern.

This versatile ground independent design allows installation in "alternative" mounting locations where a roof or glass mount antenna is not desired or will not provide adequate performance. The antenna can be used with or without the optional mounting kits available. These mounting kits provide these antennas with the versatility to be mounted on vehicle gutter, fender, boot and other locations.

- High performance Elevated feed design requires no ground plane for omnidirectional 1.5 dB gain coverage
- Ground independent design allows installation in almost any location

/SWR

• Large variety of mounts available to suit any application

2.0 1.9 1.8 1.7 1.6 1.5 1.4 1.3 1.2 50 0 +50 MHz From Centre Frequency

Typical VSWR response (CD1610)

Electrical

Model No.	CD1210	CD1610	CD1515
Gain		1.5dB over a 1/4 wave	
Frequency MHz	820 - 896	890 - 960	850 - 930
Power W	40		
Tuned Bandwidth	Entire specified band @ <1.9:1 VSWR		
Tuning	Supplied pre-tuned ready for installation		

Model No.	CD1210	CD1610	CD1515
Whip Material	Stainless steel with black finish		
Whip Length mm	195	180	188
Mounting	14mm Stud mount		
Cable and Connector	Supplied with 5.0m Cellfoam® cable. Specify FME, mini UHF, FME or N-male connectors		



Cellular Elevated Feed

Elevated feed antennas provide high performance in virtually any mounting position. The elevated feed design raises the radiating element above the vehicle roof or other obstructions to provide a strong omnidirectional pattern and high performance for vehicle gutter, fender, boot or magnetic mounting.

- · High performance omnidirectional gain
- 'Problem Solver' Elevated feed design eliminates need for a ground plane and boosts the radiating element over obstructions
- Black finish will not scratch or peel
- · Limited lifetime warranty
- CD1250 (CDMA only) offers 5 dB gain for maximum range in country or fringe areas
- Range of fittings available including fender (shown), gutter and magnetic mount



This pattern clearly shows that when mounted on the gutter clear of obstructions, this antenna is providing a gain of 4.5dB or more over a 1/4 wave whip and a pattern variance of only 1-2dB. The antenna is clearly operating independent of the ground plane and is a superior choice in this mounting position.

TEST FREQUENCY: 850 MHz REFERENCE ANTENNA MODEL: SW1405 MOUNT: MB14 Roof Centre TEST ANTENNA MODEL: CD1225 MOUNT: Gutter Mount Passenger Side

Electrical

Model No.	CD1225 Series	CD1625 Series	CD1228 Series	CD1628 Series	CD1250
Gain		3dB over a 1/4 wave			5dB over a 1/4 wave
Frequency MHz	824 - 896	890 - 960 1710 - 1880	824 - 896	890 - 960 1710 - 1880	824 - 896
Power W	50				
Tuned Bandwidth	Entire specified band @ <2.0:1 VSWR				
Tuning	Supplied pre-tuned, ready for installation				

Mechanical

Model No.	CD1225 Series	CD1625 Series	CD1228 Series	CD1628 Series	CD1250
Whip Material	17-7PH Stainless steel black finish				
Whip Length mm	470	432	595	557	765
Mounting	14mm Stud		FK-851 Fender Mount 14mm Stud		14mm Stud
Cable and Connector	Supplied with 5.0m Cellfoam® cable. Please specify mini UHF, FME or N-male connectors.				



824-1880 MHz

CD1220 Series CD1620 Series CD1250 Series



Cellular High Gain Collinear

824-960 MHz

CD1790 Series



The CD1790 Series are high gain mobile cellular antennas catering for both CDMA and GSM900 bands and ideally suited for use in fringe areas and country applications.

These antennas are extremely robust in design with a patented PCB designed radiating element housed in a black or white fibreglass radome fitted to an integral heavy duty electro-polished stainless steel spring.

With a 13mm stud mount, these antennas may be installed on a number of mounting brackets and are ideal for installations in commercial vehicles, four wheel drives and trucks. They can also be used as fixed base station antennas for wireless local loop applications.

These antennas have been factory terminated with an FME connector to simplify installation and come complete with a TNC and Mini-UHF adapter to suit all phones and require no further cable termination.

- CDMA and GSM900 compatible
- · High gain ideal for fringe areas and rural applications
- Available in white: CD1795-W or CD1797-W
- Available with GPS sub-assembly (see page 53)
- Patented PCB based collinear design offering the ultimate in pattern and gain stability

Other model and gain variations available upon request



Electrical

Model Number	CD1795	CD1797	
Gain <i>dBi</i>	6.5dB over a 1/4 wave	7.5dB over a 1/4 wave	
Frequency MHz	824 - 960		
Max Power W	25		
Tuned Bandwidth	Entire specified band @ <2.0:1 VSWR		
Tuning	Supplied pre-tuned		

Mechanical

Model Number	CD1795	CD1797	
Whip Length mm	860 1100		
Mounting	Threaded stud and nut assembly 13mm clearance hole required		
Cable and Connector	5.0m of RG58 9006 fitted with FME 101 connector and supplied with TNC (A-86) and Mini UHF (A-87) adapters		

USA Patent: 6909403

Patent App. No.: Australia 2003255049 / Europe 03 023406.6 / China 200310100548.5 / India 844/CHE/2003



Elevated Feed Mopole[™]

These 1.5 dB gain elevated feed antennas are ideal in applications where height and aesthetics are a consideration. The elevated feed design raises the radiating element above the vehicle roof level to provide a strong omnidirectional pattern and high performance. The ground independent design provides consistent performance regardless of mounting position. Mounting kits are available for both gutter and mirror mounts.

- Economical Our most affordable cellular antenna for gutter and mirror mount or fixed applications
- Performance Ground plane independent design allows mounting in a variety of applications
- Simple Installation Stud mounted design allows for installation on a gutter or mirror mount
- Flexible PVC enclosed radiator allows for superior flexibility





Electrical

Model No.	CD1140	CD1150	CD1160	
Gain		1.5dB over a 1/4 wave		
Frequency MHz	806 - 870	820 - 896	890 - 960	
Power W	40	50		
Tuned Bandwidth	Entire specified band @ <1.5:1 VSWR	70 MHz @ <2:1 VSWR		
Tuning	Supplied pre-tuned, ready for installation			

Model No.	CD1140	CD1150	CD1160
Whip Material	Brass elevated feed, radiator enclosed in flexible PVC tubing		
Whip Length mm	195 (including elevated feed section)		
Mounting	Threaded stud and nut assembly 16mm clearance hole required		
Cable and Connector	5.0m Cellfoa	m® cable. Please specify conn	ector



GPS Antenna



The GPS1 is a high performance compact GPS antenna designed to accommodate automotive applications and a wide variety of OEM, system integrator and end user applications.

This 25mm patch antenna is coupled with a 28dBi gain active amplifier which operates from 2.5 VDC to 12 VDC with a low 11mA consumption (at 2.5 VDC).

The GPS1 comes enclosed in a UV stable, high impact, fully weatherised housing, with 5m of double screened low-loss RG174 (type) cable terminated with an MCX connector (other connectors available on request).

The GPS1-BKT is an optional mounting bracket kit which mates with the GPS1 antenna. This kit includes a black chrome plated stainless steel bracket and fittings. The bracket's 16mm hole allows mounting of a variety of RFI ground independent mobile antennas. The result is a neat multiband antenna installation.

Electrical

Model	GPS1
Frequency MHz	1575.42
System Gain	28dBi
Impedance	50 Ohm
Cable Attenuation	4 dB over 5m
Polarization	RHCP
VSWR	1.5 typical @ fo
Noise Figure	+2.75 dB
Power Input	+2.5Vdc to +12Vdc input, auto switching
Power Consumption	11mA to 15mA (max)
Power Input	Reverse polarity short circuit shutdown
Over-Current	Thermal over-current shutdown > +150°C

Mechanical

Model	GPS1
Operation Temperature	-40 to +85°C
Storage Temperature	-40 to +100°C
Dimensions <i>mm</i>	44 x 34 x 12 ±0.5mm
Weight kg	0.088
Mounting	Magnet
Cable and Connector	5m RG174 terminated with MCX connector. See note (1)

(1) GPS1 available terminated with other connectors subject to a MOQ upon request



WLAN Mobile

The CDM2400 series are a range of mobile antennas specifically designed for mobile WLAN applications. Utilising a fibreglass radome with a heavy duty stainless steel spring these antennas offer a robust and high performance solution, well suited to mining, warehousing, public transport and emergency services applications.

The CDM2400 series utilise a patented PCB based collinear design offering the ultimate in pattern stability. Their ground independent design makes them suitable for a variety of mounting positions including bullbar, gutter and roof rack.

- Robust construction
- Integrated heavy duty spring
- Outstanding performance





Electrical

Part No	CDM2402	CDM2406	CDM2408	CDM2410
Gain <i>dBi</i>	2	6	8	10
Frequency MHz	2400 - 2500			
Beamwidth E / H	81° / 360°	22° / 360°	16.5° / 360°	8° / 360°
VSWR	Entire specified band @ <1.5:1 VSWR			

Mechanical

Part No	CDM2402	CDM2406	CDM2408	CDM2410
Description	White fibreglass, ISM band, collinear antenna with stainless steel spring			
Dimensions mm	250 (L) 16 (Dia)	420 (L) 16 (Dia)	510 (L) 16 (Dia)	1200 (L) 16 (Dia)
Weight kg	0.25	0.26	0.27	0.4
Mounting	Supplied with spring and nut for stud mount. Requires 16mm hole.			
wounting	Suits a variety of RFI brackets			

USA Patent: 6909403

Patent App. No.: Australia 2003255049 / Europe 03 023406.6 / China 200310100548.5 / India 844/CHE/2003



UHF CBRS Mopole[™]

476-477 MHz

CD33 Series



The CD33 Series Mopole[™] antenna is specifically designed to be used in a variety of mounting positions such as vehicle mirror, gutter or roof bar mounts according to individual needs.

Mounted in such positions, the CD33 is the ideal substitute for an antenna which would normally need to be mounted in the centre of a metal roof to obtain maximum efficiency.

The CD33 Series antenna is an end-fed dipole ($\frac{1}{2}$ wave). A tuned circuit has been incorporated in the base and the radiating element enclosed in a flexible nylon radome. The end result is an attractive, yet tremendously rugged package suited for almost any application.

- Workhorse A terrific antenna for agricultural and work vehicle applications where durability is critical
- Versatile Ground plane independent design allows installation in almost any location
- High Performance Exhibits 4 dB gain over 1/4 wave whip mounted in the centre of a metal roof
- Rugged- Radiating element is enclosed in flexible UV resistant nylon tubing
- Convenient Available in a number of kits with full instructions for fitting by inexperienced installers



Electrical

Model No.	CD33-71-73	
Gain	4dB over a 1/4 wave. See note (1)	
Frequency MHz	476 - 477	
Power W	20	
Tuned Bandwidth	Entire specified band @ <1.5:1 VSWR	
Tuning	Supplied pre-tuned	

Mechanical

Model No.	CD33-71-73	
Whip Material	UV resistant flexible nylon tubing	
Whip Length mm	330	
Mounting	Base mounts in 16mm hole	
Cable and Connector	5.0m RG58C/U cable fitted.	
	A variety of pre-packed kits including connectors and fittings are also available	

(1) As the CD33 is a half wave dipole antenna, actual pattern tests show unity gain vs. a half wave dipole. In the field, however, the CD33 will deliver performance which is approximately 4dB better than a 1/4 wave whip mounted in the centre of a metal roof, mainly because it exhibits a lower angle of radiation.



UHF CBRS Mopole[™]

The CD63 Series Mopole[™] antennas offer complete versatility in mounting options. Unlike conventional roof mount antennas, the CD63 Series antennas have true ground independence which allows mounting in a variety of positions including vehicle mirror, gutter or roof bar mounts.

This extraordinary performance is made possible by the use of an exclusive (and patented) high impedance matching circuit in the base coil. This allows the end feeding of the collinear whip section, a $\frac{5}{6}$ over $\frac{1}{2}$ wave radiator wound from a single piece of high resilience 17-7PH stainless steel.

- Available in two mounting options, removable MBC style (CD63-71-50) or threaded stud and nut (CD63-71-70)
- Excellent performance Exhibits 6.0dB gain over a ¼ wave whip mounted in the centre of a metal roof
- Flexible Stainless steel whip returns to original shape after bending
- Rugged The base coil is housed in a high impact thermoplastic moulding and is practically indestructible
- Stylish Attractive black finish, complements vehicle styling

Typical VSWR response



Electrical

Model No.	CD63-71-50	CD63-71-70	
Gain	6dB over a 1/4 wa	ive. See note (1)	
Frequency MHz	476 - 477		
Power W	20		
Tuned Bandwidth	Entire specified band @ <1.5:1 VSWR		
Tuning	Supplied pre-tuned		

Mechanical

Model No.	CD63-71-50	CD63-71-70	CD63-71-73
Whip Material	17-7PH Stainless steel		•
Whip Length mm	800 (whip and coil only)		
Mounting	MBC base supplied to fit 16mm hole 16mm stud mount		ud mount
Cable and Connector	None supplied		5m RG58C/U cable

(1) Mopole[™] antennas such as the CD63 have been shown to exhibit a 6dB improvement in received signal level in the field when compared to a ¼ wave whip however in pattern tests exhibit only 1.5 to 2dB over a ¼ wave (equivalent to 1.5-2dBi). This improvement in performance can be attributed to a lower radiation angle level of these ground independent antennas.

Australian Patent No. 596830



Elevated Feed Mopole[™]

470-490 MHz

CD900 Series



CD921-71-75

The CD900 Series are high performance elevated feed mobile antennas which can be used in virtually any mounting position. When gutter or roof bar mounted, high above a vehicle, CD900 series antennas deliver a full 6.5dB gain over a ¹/₄ wave whip. When mounted in other positions, such as on a vehicle fender or bull bar, the elevated feed design places a large portion of the antenna above the vehicle cabin, providing good all round performance regardless of mounting position.

- Totally ground plane independent
- · Elevated feed boosts radiating element above obstructions
- MSW25 "Phasemaster II™" whip section provides unsurpassed performance and strength
- Quality construction Choke assembly is crafted from solid brass and available in both chrome and black finishes
- · Supplied pre-terminated with FME connector and UHF adaptor
- Can be used with a variety of mounts. See accessories section for options.



Electrical

Model No.	CD900 Series	
Gain	6.5dB over 1/4 wave. See note (1)	
Frequency MHz	470 - 490	
Power W	100	
Tuned Bandwidth	Entire UHF CBRS band for <1.25:1 VSWR; Entire 470-490 MHz band for <1.6:1 VSWR	
Tuning	Supplied pre-tuned	

Mechanical

Model No.	CD920-71-75	CD921-71-75	CD930-71-75	CD931-71-75
Whip Material	Polyurethene over mould plated whip section or	ed 17-7PH black chrome bright chrome choke	Polyurethene over mould plated whip section of	led 17-7PH black chrome n black chrome choke
Spring Options	No spring	SK954 spring included	No spring	SK953 spring included
Whip Length mm	850			
Mounting	Threaded stud and nut assembly mounts in either 13 or 16mm dia. hole			
Cable and Connector	5m Cellfoam™ with FME-101 terminated, UHF adapter supplied.			

(1) Mopole[™] antennas such as the CD900 Series has been shown to exhibit a 6.5dB improvement in received signal level in the field when compared to a ¼ wave whip however in pattern tests exhibit only 1.5 to 2dB over a ¼ wave (equivalent to 1.5-2dBi). This improvement in performance can be attributed to a lower radiation angle level of these ground independent antennas.



UHF CBRS Collinear

The CD5000 is a high gain mobile CBRS antenna providing a genuine 5 dB gain and is ideally suited for use in fringe areas and country applications where performance is paramount.

This antenna is extremely robust in design with the patented PCB designed radiating element housed in a black or white (CD5000-W) fibreglass radome fitted to an integral heavy duty electro-polished stainless steel spring.

With a 13mm stud mount and ground plane independent design, this antenna may be installed onto a number of mounting brackets such as mirror, bull bar, gutter or fender mounts and are ideal for installations in commercial vehicles, four wheel drives and trucks. They can even be used as a base station antenna due to their ground plane independent design.

- 5 dB Gain ideal for fringe areas and country applications
- · Robust design for heavy duty applications
- Available with GPS sub-assembly on request (see page 53)
- · Available in white CD5000-W
- Patented PCB based collinear design offering the ultimate in pattern and gain stability





Electrical

Model No.	CD5000	
Gain	5dB over a ¼ wave	
Frequency MHz	476 - 477	
Power W	25	
Tuned Bandwidth	Entire specified band @ <1.5:1 VSWR	
Tuning	Supplied pre-tuned	

Mechanical

Model No.	CD5000
Whip Length mm	900
Mounting	Threaded stud and nut assembly 13mm clearance hole required
Cable and Connector	5.0m 9006 supplied with FME-101 connector terminated and UHF adapter supplied

USA Patent: 6909403

Patent App. No.: Australia 2003255049 / Europe 03 023406.6 / China 200310100548.5 / India 844/CHE/2003



UHF CBRS Collinear

476-477 MHz

CD6000 Series



The CD6000 Series antenna is an ultra high performance antenna for use with 477 MHz UHF CB transceivers. The antenna delivers superior gain and will deliver exceptional range in fringe and country applications.

The radiating element is a series fed collinear enclosed in either a black or white fibreglass radome. The heavy duty stainless steel spring mounted at the base allows the antenna to flex and absorb vibrations.

The CD6000 is easy to install being fitted simply with a 12mm (M12) bolt. The antenna can be installed on a number of mounting brackets but we recommend use of a heavy duty bullbar mount for most applications. The CD6000 can be used on 4-wheel drives, trucks, agricultural machinery, boats or even as a base station antenna and will provide superior gain and performance in all applications.

- The ultimate in range and performance for UHF CB
- Built for extreme environments with stainless steel spring integrated for vibration absorption
- Retail ready Packaged complete with cable and connector for hassle free installation
- · Also available in white CD6000-W



Electrical

Model No.	CD6000	
Gain	6dB over a 1/4 wave	
Frequency MHz	476 - 477	
Power W	20	
Tuned Bandwidth	Entire specified band @ <1.5:1 VSWR	
Tuning	Supplied pre-tuned	

Model No.	CD6000		
Whin Material	Black fibreglass radome fitted with a 30cm	White fibreglass radome fitted with a 30cm	
	aluminium mount tube locked to the base assembly aluminium mount tube locked to the base assembly		
Whip Length mm	2000		
Mounting	Base assembly is heavy duty electropolished stainless steel spring and collar		
Mounting	fitted with 12mm aluminium bolt. Fixes to mounting bracket up to 12mm thick.		
Cable and Connector	5.0m 9001 supplied to mate with UHF receptacle on base of antenna.		
	UHF connector supplied for radio connection.		



27 MHz Marine

The 27MHz marine antenna range includes three ground independent antennas designed specifically for the harsh marine environment. The ground independent design allows great mounting versatility in the marine environment.

These 27MHz marine unity gain antennas are housed within a flexible fibreglass radome with a tightly sealed enclosed element to provide protection in inherently corrosive marine applications.

The MDA Series deck mount antennas utilise the MAM1 marine mount which can be adjusted through 180° across both planes for great flexibility in mounting. The MDA-201 measures 1.9m tall and is ideal when mounting on a flybridge, above obstructions or on smaller vessels. The 3.1m MDA-301 antenna is designed to mount to the lower deck and provides the extra height needed to boost performance for long range communications.

The MMA-301 is a 3.4m antenna which mounts to a mast using two stainless steel U-bolts (not included).

- Performance Ground independent design allows for mounting in virtually any location
- MAM1 Marine mount allows for adjustability in every direction
- Rugged Designed specifically for the marine environment





Electrical

Model No.	MDA-201	MDA-301	MMA-301	
Gain	Unity over a ¼ wave			
Frequency MHz	27.7 - 28.0			
Power W	25			
Tuned Bandwidth	Entire specified band @ <2.0:1 VSWR			
Tuning	Supplied pre-tuned			

Model No.	MDA-201	MDA-301	MMA-301	
Whip Material	Flexible white fibreglass radome			
Whip Length mm	1900	3100	3400	
Mounting	MAM1 marine mount (supplied) 2 x UB2 U-bolts (not included)			
Cable and Connector	3.6m RG58 cable, no connector supplied			



VHF Mast Mount Marine



These VHF marine antennas are designed specifically for the VHF international maritime bands and seaphone frequencies. They are ground independent mast mounting antennas which mount to a mast using customer chosen mounting hardware.

The antennas are housed within a fibreglass radome, with a tightly sealed radiating element to provide protection from the corrosive marine environment.

The MME-101 is a unity gain antenna measuring 1.5 m high and is ideal for mounting on a flybridge, above obstructions.

The MME-331 antenna is a 3 dB gain antenna which measures 2.9m in length. It is ideal in applications requiring high gain or in situations where extra height is needed.

- Unity or 3 dB gain versions
- Performance ground independent design allows for mounting in virtually any location
- · Rugged designed specifically for the marine environment

Electrical

Model No.	MME-101	MME-331	
Gain	Unity over a 1/4 wave	3dB over a 1/4 wave	
Frequency MHz	156 - 162		
Power W	25		
Tuned Bandwidth	Entire specified band @ <1.8:1 VSWR		
Tuning	Supplied pre-tuned		

Model No.	MME-101	MME-331		
Whip Material	Flexible fibre	fibreglass radome		
Whip Length mm	1500	2900		
Mounting	2 x UB2 U-bolts	2 x UB2 U-bolts (not included)		
Cable and Connector	Short RG213 cable tail fitted with N-type connector (female)			



VHF Marine Deck Mount

These VHF marine antennas are designed specifically for the VHF international maritime bands and seaphone frequencies. The ground independent design allows great mounting flexibility in the marine environment.

The antennas are housed within a fibreglass radome with the radiating element tightly sealed to provide protection from the corrosive marine environment.

The MDE Series deck mount antennas mount on an MAM1 marine mount which can be adjusted through 180° in both planes allowing great mounting flexibility. The MDE101 is a unity gain antenna measuring 1.3m high and is ideal for mounting on a flybridge, above obstructions or on smaller vessels.

The MDE331 antenna is a 3 dB gain antenna measuring 2.7m high. The MDE331 is ideal when mounting on the lower deck where it provides the extra height needed to elevate the radome section above flybridges and other obstructions. It is also useful in applications requiring a deck mounted high gain antenna.

- Unity or 3 dB gain versions
- Performance Ground independent design allows for mounting in virtually any location
- · MAM1 marine mount allows flexibility in mounting attitude
- · Rugged Designed specifically for the marine environment



Electrical

Model No.	MDE-101	MDE-331	
Gain	Unity over a 1/4 wave	3dB over a 1/4 wave	
Frequency MHz	156 - 162		
Power W	25		
Tuned Bandwidth	Entire specified band @ <1.8:1 VSWR		
Tuning	Supplied pre-tuned		

Model No.	MDE-101	MDE-331	
Whip Material	White fibreg	/hite fibreglass radome	
Whip Length mm	1300	2700	
Mounting	MAM1 marine mount (supplied)		
Cable and Connector	3.6m RG58 cable. No connector supplied.		



Cellular Marine Deck Mount



MDG-203

The MDD and MDG Marine antennas are high gain omnidirectional antennas designed specifically for marine applications. The antennas do not require a ground plane and are supplied with a MAM1 marine antenna mount which allows the antenna to be mounted vertically regardless of the mounting surface which is used.

The high gain (3 dB) radiating element is enclosed in a white fibreglass radome. The radiating element has been placed near the top of the radome to ensure maximum range and to maintain omnidirectivity by keeping the antenna well above obstructions or occupants of the vessel.

To minimise connection and cable losses the MDD and MDG are supplied with 10.0 metres of 9006 low loss cable which is preterminated to ensure the integrity of this vital connection. The antenna is supplied complete with adapters to allow connection to almost any cellular phone car kit even by inexperienced installers.

The MDD and MDG offer superior performance, maximum range and the ultimate in reliability for marine applications.

- MAM1 Marine Mount allows for 180° adjustability
- · Rugged design specifically for harsh marine environments
- · Flexible construction from heavy duty fibreglass
- Retail ready packaging with pre-terminated feeder for use by inexperienced installers

Electrical

Model No.	MDD-203 MDG-203		
Gain	3dB over a ¼ wave		
Frequency MHz	824 - 896	890 - 960	
Power W	10		
Tuned Bandwidth	Entire specified band @ <1.5:1		
Tuning	Supplied pre-tuned		

Model No.	MDD-203	MDG-203	
Whip Material	Flexible white fit	Flexible white fibreglass radome	
Whip Length mm	1500		
Mounting	MAM1 marine mount (supplied)		
Cable and Connector	10m Cellfoil® fitted with FME connector. Mini UHF and TNC adapters included.		



hand portable antennas



Hand Portable Antennas



Typical Data for a 1/4 Wave Whip Antenna

RFI offer an extensive range of hand portable antennas for PMR, SMR and trunking applications. The majority of common connector options are catered to in a variety of different formats. The range of antennas is offered in an ideal form for workshop use with most models being tuneable in the field over an extended range of frequencies using the tuning chart provided. This results in reduced inventories and allows dealers to carry antennas "off the shelf" to be tuned to customer specified frequencies as required.

Each individual band is served by a separate series including:

HPCB Series

A tightly compressed helical ¹/₄ wave antenna, shrink coated. Flexible only in the upper 200mm, L.O.A. approximately 400mm. The antennas are supplied pre-tuned for the 27 MHz citizen band, have a narrow bandwidth (approximately 200 KHz) and are not suited for fine tuning.

HPM Series

A fully flexible heatshrink coated helical antenna. L.O.A. is approximately 400mm at its lowest frequency and the antenna can be tuned using the supplied tuning chart over the band 66-88 MHz. Tuned bandwidth is approximately 3% of centre frequency.

HPH Series

A flexible helical antenna which is fully injection moulded for maximum durability. L.O.A. is approximately 250mm at its lowest frequency and the antenna can be tuned over the range 140-250 MHz using the tuning chart supplied. Tuned bandwidth is approximately 3%.

HPHS Series

A flexible, highly compressed helical which is fully injection moulded for maximum durablity. L.O.A. is approximately 200mm at the lowest frequency and the antenna can be tuned over the range 118-175 MHz using the tuning chart supplied. Tuned bandwidth is approximately 3%.



HPU Series

These are full ¹/₄ wave antennas for maximum performance, fully injection moulded for maximum durability. L.O.A. is approximately 200mm at the lowest frequency and the antenna can be tuned over the range 380 - 1000 MHz using the supplied tuning chart. The antenna covers UHF, 800 MHz, and Tetra applications in a single antenna. Tuned bandwidth is approximately 7%.

HPUS Series

These are flexible helically loaded ¹/₄ wave antennas which are fully injection moulded for maximum durability. L.O.A. is approximately 175mm and the antenna can be tuned over the range 260 - 800 MHz, covering Tetra and UHF applications. Tuned bandwidth is approximately 6%.

CRD Series

These half wave dipole antennas are available only with BNC or TNC terminations and offer a true high performance UHF antenna in hand held applications. The dipole element is enclosed in a flexible PVC tubing and the antennas can be trimmed using the enclosed tuning chart over the specified band. Tuned bandwidth is approximately 2% of centre frequency.

Hand Portable Antennas

MX Thread	BNC Male	TNC Male Overmoulded	UHF Male
	8		
SM SMA Male	SF Motorola SMA female flush dielectric	SFU Universal SMA female recessed dielectric	KR Series

Portable radio antenna reference chart

Band	HPCB Series	HPM Series	HPHS Series	High Band Helical	HPU Series ¹ / ₄ Wave	HPUS Series Helical	CRD Series Dipoles
Frequency MHz	27	66-88	118-175	140-250	380-1000	260-800	400-520
Tuning Specifications	Pre-Tuned	Tune with chart	Tune with chart	Tune with chart	Tune with chart	Tune with chart	Tune with chart
BNC Plug	HPCB-BNC	HPM-BNC-28	HPHS-BNC-33	HPH-BNC-37	HPU-BNC-67	HPUS-BNC-67	CRD-BNC-65 CRD-BNC-68
TNC Plug	-	-	HPHS-TNC-33	HPH-TNC-37	HPU-TNC-67	HPUS-TNC-67	CRD-TNC-68
UHF Plug	HPCB-UHF	HPM-UHF-28	-	-	-	-	-
MX Thread	-	-	-	-	HPU-MX-67	HPUS-MX-67	-
Bendix King	-	-	-	-	-	HPUS-KR-67	-
Universal (SFU Version Recessed dielectric)	-	-	-	-	HPU-SFU-67	HPUS-SFU-67	-
Motorola SMA Female (SF Version Flush dielectric)	-	HPM-SF-28	-	-	HPU-SF-67	HPUS-SF-67	-
SMA Male	-	-	HPHS-SM-33	-	HPU-SM-67	HPUS-SM-67	-

Note: Normal "stocked" configurations shown. Other formats and terminations are also available. Contact your nearest sales office for configurations not shown. (Minimum order quantities may apply on some items.)





All of the **ANDREW**® cable you'll ever need is available at RFI







HELIAX[®] is the Andrew brand name that stands for the most complete, cost effective, high performance coaxial cable systems in the world. In land mobile, broadcast, cellular, HF, earth station, terrestrial microwave and many other applications, HELIAX® coaxial cable products are the industry standard of excellence. These outstanding cables are complemented by a range of compatible connectors. hangers. grounding systems and other installation accessories that form a complete RF transmission line system.

With our comprehensive stockholding and experienced sales team, RFI offers:

- Complete Product range
- One Stop Shopping
- Fast Delivery

So call us today for all your Andrew infrastructure requirements



accessories

Mopole[™] Accessories

Options for all Mopole™ antennas

Antenna Series Whip	Replacement	Other
CD17-XX-50	TSW150	
CD28-XX-50		MBC base available with or without 5.0m of RG58C/U cable
CD50-XX-50	TSW125	
CD28-XX-70		
CD50-XX-70		Base coil can be re-cabled in the field
CD51-XX-70	Replacement whip not available	
CD91 Series CD91-65 CD91-70 CD91-71 CD91-72	SW23 SW24 SW25 SW26	Choke section not sold separately. Choke can be recabled in the field using RG58 size cables including RG58C/U, CellFoam® or CellFoil® low noise foam cable
CD93 Series CD93-65 CD93-70 CD93-71 CD93-72	CSW23 CSW24 CSW25 CSW26	Choke section not sold separately. Choke can be recabled in the field using RG58 size cables including RG58C/U, CellFoam® or CellFoil® low noise foam cable
CD94 Series CD94-65 CD94-70 CD94-71 CD94-72	CSW13 CSW14 CSW15 CSW16	Choke section not sold separately. Choke can be recabled in the field using RG58 size
CD920 Series CD930 Series	MSW25	cables including RGS8C/U, CellFoam® or CellFoil® low noise foam cable

Mounting Optic	ons for all Mopole	e™ antennas
Part. No.	Illustration	Description
GM7		Fibreglass reinforced plastic adjustable vehicle gutter mount. Attaches to gutter using a philips screwdriver.
GM2		Heavy duty cast aluminium adjustable gutter mount. Attaches to vehicle gutter using allen key (provided) and includes buffer plate.
TLM Series		Trunk Lip Mount Series brackets made of stainless steel. (TLM-6 shown)
TLM-1	Heavy duty "L" shaped b antennas su	racket for use with larger ch as CD93.
TLM-2	Heavy duty extra lip "Z" sh larger antennas	naped bracket for use with such as CD93.
TLM-3	Standard "L" s	haped bracket
TLM-4	Standard extra	lip "Z" bracket
TLM-5	Identical to TLM	I-3 except black
TLM-6	Identical to TLM	I-4 except black
TLM-7	Standard "Z" shaped brack (for use on tightly	et with compensation angle raked trunk lids)
BK850		A black stainless steel bonnet or boot mount. Mounts directly to the bonnet or boot lid.
WM1	E	Slimline window mount allows ground independent antennas to be mounted on vehicles without gutters. Attaches using double sided tape and is angle adjustable with the use of an allen key.
MM2		Heavy duty mirror mount allows any mobile antenna to be mounted on a truck style mirror, roof rack or bull bar.
SK950 SK954		Heavy duty springs to suit CD90 Series antennas. SK950 - Parallel spring SK954 "Bellied" spring Both of stainless steel with plated-brass fittings
SK953		SK953 black chrome equivalent to SK954
BBM-1	R	Black powder coated bull bar bracket for mounting mobile antennas onto vehicle bull bars. Comes complete with s/s hose clamp.
BBM-2		Polished stainless steel bull bar bracket for mounting mobile antennas onto vehicle bull bars. Comes complete with s/s hose clamp.
BBWM-1		Polished wrap around stainless steel bull bar bracket with 6mm cable slot for ease of antenna mounting
BBWM-2	BBWM-2	BBWM-1 = 50mm BBWM-2 = 45mm



Antenna Bases & Re-installation Kits

Part No.		Description	Part No.	D	escription
MBC		Coaxial base providing an internal, permanent connection in a sealed unit. Easy to install and allows the entire antenna to be removed and replaced at will. Available with or without cable.	MSF1		Lightweight spring, fits any standard mobile antenna with 5/16 " thread. Allows flexibility for low clearance such as car parks or overhanging trees.
MBC-00-50F		MBC base with mini (RG174)lead. Allows feeder to be run through door jam or boot lid without crushing.	BAF2	ð	Black ball adjuster to swivel the antenna so the correct vertical angle can be gained when the antenna base is on a slope. Easy to adjust and tighten.
MB3		Magnetic style base, allows antennas to be transferred from car to car with ease. Complete with 5.0m of RG58 cable.	KAV385	WINDOW CLEANING PACHET	Re-installation kit for glass mount II, III, IV antennas
MK-850		Magnetic base for CD90 Series, CD1225 and CD1625 antennas. Rubber boot prevents magnet from scratching vehicle paint work. Cable exits via mounting turning.	KAV382	SILCONT MARKET	Re-installation kit for glass mount antennas
MB9		VHF mobile base mounts either through the roof or on a bracket. Easy to terminate. 19mm hole required for blind hole mounting, Available with or without cable.	KG880		Re-installation kit for E-glass antennas
MB10		UHF mobile base mounts on a bracket or through the roof. A popular model measuring only 30mm diameter. 20mm hole required for blind hole mounting. Available with or without cable.	KG2000		Re-installation kit for ITG-2000
MB12		UHF mobile base mounts on a bracket or through the roof, measures 40mm in diameter. 20mm hole required for blind hole mounting. Available with or without cable.	KG4000	CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING CERTAINING	Re-installation kit for ITG-4000
MB14	6	Mobile base suitable for frequencies up to 2GHz. It delivers a precisely controlled termination resulting in a superb match. 19mm hole required for blind mounting. Only available with 5.0m of 8058 or 9001 cable pre-terminated.	KG5000		Re-installation kit for ITG-5000 series.



DC to DC Voltage Converters





A complete line of high quality switch mode DC to DC converters in compact housings. These high efficiency converters are suitable for applications requiring a stable output and low energy consumption, such as radio and navigation equipment.

- The SDC 20 and SDC 30 can also be used as a 13.8Vdc battery charger enabling the charging of a 12V starter or accessory battery from a 24V system.
- The IDC-charger 12-24V can be used to charge a 24V battery from a 12V system, isolated. The output voltage of this model can be adjusted with a potentiometer.

Non isolated Converters

Models	SDC05	SDC08	SDC12	SDC20	SDC30	STEP7	STEP10
Input voltage range V	18-35	18-35	20-35	20-35	20-35	9-18	9-18
Output voltage V	13.2	13.2	13.2	13.8	13.8	24	24
Max. output current A	5.5	8	12	20	30	7	10
Fan assisted cooling (temp. controlled)	no	no	no	no	yes	no	no
Galvanic isolation	no	no	no	no	no	no	no
Off load current <i>mA</i>	< 5	< 5	< 5	appr.25	appr.25	< 15	< 15
Temperature increase after 30 minutes at full load	30°C	20°C	30°C	25°C	33°C	30°C	30°C
Weight <i>kg</i>	0.17	0.25	0.26	0.48	0.6	0.3	0.4
Dimensions <i>H</i> x <i>W</i> x <i>D</i> in mm	49x88x68	49x88x98	49x88x98	49x88x126	49x88x151	49x88x98	49x88x126

Isolated Converters

Models	IDC 100W	IDC 200W	IDC 360W		
Power rating W	100	200	360		
Galvanic isolation	yes	yes	yes		
Temperature increase after 30 minutes at full load	25°C	30°C	30°C		
Fan assisted cooling (temp. controlled)	no	yes	yes		
Weight kg	0.5	0.6	1.4		
Dimensions H x W x D in mm	49 x 88 x 152	49 x 88 x 182	64 x 163 x 160		
Input voltage V	A (9-18) B (20-	35) C (30-60)	D (60-120) See note (1)		
Output voltage V	12.5 or 24				

Common Characteristics

Output voltage stability %	2% (STEP7 and STEP10: +0% / -5%)				
Output noise <i>mV</i>	<50 rms				
Off load current mA	<25 (isolated converters)				
Efficiency %	Non isolated: appr. 92% Isolated: appr. 85%				
Isolation Vrms	>400 between input, output and case (isolated products only)				
Operating temperature °C	-20 to +30. Derate linearly to 0A at 70°C				
Humidity %	Max 95% non condensing				
Casework	Anodised aluminium				
Connections	6.3mm push-on flat blade connectors				
Protection: Overcurrent Overheating Reverse polarity conn. Overvoltage	Short circuit proof Reduction of output voltage Fuse and reverse connected diode across input Varistor (also protects against load dump)				
Standards: Emissions Immunity Automotive directive	EN 50081-1 EN 50082-1 95/45/EC				

(1) When ordering 9 - 18 volt model specify suffix -A When ordering 20 - 35 volt model specify suffix -B When ordering 30 - 60 volt model specify suffix -C When ordering 60 - 120 volt model specify suffix -D



Batteryguard

The Unitek universal programmable batteryguard (BG) prevents excessive battery discharge and protects electric appliances against overvoltage.

Two models are available, 25A (BG 30) and 60A (BG 60). The mosfet switch is capable of carrying either 25A or 60A continuous load, and up to 40A or 80A transient load.

- Fully programmable with jumpers, the Batteryguard can be set to engage/disengage at several different voltages.
- Overvoltage protection load disconnected when DC voltage exceeds 16V or 32V.
- Ignition proof No relay but MOSFET switches, and therefore no sparks.
- Alarm output The alarm output is activated if the battery voltage drops below the preset disconnect level for more than 15 seconds. Starting the engine or genset will therefore not activate the alarm. The alarm output is an open collector output to the negative (minus) rail, max. current 500mA. The alarm is typically used to activate a buzzer and/or lamp.
- Load disconnect 1 minute after the alarm has been activated the load will be disconnected, but if the battery voltage increases to the connect threshold within this minute (after the engine/genset has been started for example) the load will not be disconnected.



Models	BG30	BG60			
Maximum continuous load current	25A	60A			
Operating voltage range	6 - 35V				
Current consumption	<7mA				
Alarm output delay	15 seconds				
Load disconnect delay	1 minute				
Casework	Anodised aluminium, black				
Weight kg <i>lbs</i>	0.2 (0.5)	0.2 (0.5)			
Dimensions H x W x D in mm H x W x D in inches	49 x 88 x 68 2.0 x 3.5 x 2.7	80 x 60 x 40 3.2 x 2.4 x 1.6			



www.rfi.com.au

DC to DC Voltage Converters

24V DC to 12V DC Converters



RFI's VC Series 24V-12V DC converters have been designed specifically for mobile applications in the communications industry. The VC Series converters incorporate excellent protection features, including overload, short circuit and voltage surge protection.

All units employ a linear output design with over-voltage protection. This is provided in conjunction with a high power relay which is triggered in milliseconds to interrupt supply. The converters utilise an advanced ridged pattern heatsink extrusion, allowing the units to operate at lower temperatures than previously designed converters.

- Over-Voltage Protection Converters utilise a crowbar protective device to shut down the unit in 35 milliseconds with a high power relay which resets when power supply is interrupted. This eliminates the need to open the converter to replace blown internal fuses
- Overload Safeguard Units automatically foldback the output to less than one half of the peak output rating and return to normal operation when the overload is corrected
- Cooler Operation Heatsink extrusions are based on a ridged pattern which substantially increases heat dissipation capacity and improves reliability
- Clear Communications Low ripple, low noise circuitry to minimise radio interference
- Linear Output Stage Unit uses 2N3055 transistors for reliability
- · Designed and manufactured in Australia

Models	VC2412-3	VC2412-6	VC2412-10	VC2412-15	VC2412-20				
Input voltage Vdc	22 (Min), 30 (Max)								
Output voltage Vdc		13.5							
Peak Rating A	3	6	10	15	20				
Continuous rating A	3	4.3 7		10.5	14				
	Length	130	130	155	220	290			
Dimensions <i>mm</i>	Width	Footprint 95 Body 80	Footprint 140 Body 115		Footprint 140 Body 115				
	Height	38	6	0	6	0			
Applications	Cellular phones	CB and UHF CB Synthesised radios, mobile radios cellular phones to 25 watts		Synthesised mobile radios to 25 watts	HF radios				
Operating Temperature	-30°C to 50°C								





Base Station Power Supply & Battery Charger

The SME240 series power supplies have been designed specifically for telecommunications applications demanding high reliability, low noise, fully automatic battery backup, battery protection and full protection of the output. Ideal in remote sites, they can be used completely unattended. With a host of protection features, the units are safe and reliable in any application.

The SME240-12-10 & SME 240-24-5 power supplies provide a power output of 140 watts at 13.6 and 27.2V respectively. The nominal input mains maybe 200V to 240V and 50Hz or 60Hz.

- · Low noise output, ideal for telecommunications applications
- · Lighter and more compact than comparable linear power supplies
- · Battery overdischarge protection with automatic reset
- · Mains failure and battery reverse polarity alarm output
- · Convenient plug in output connector
- 5 year warranty
- Local technical support
- C-Tick approved (EMI/EMC)



240V Power Supplies

Model No.	SME240-12-10	SME240-12-5					
Input Voltage Vac (Hz)	200-240						
Output Voltage V adjustable	12.0 - 14.0	24.0 - 28.0					
Output Ripple Voltage <i>mVp-p</i>	<20	<20					
Output Current A	10.0	5.0					
Over Voltage Protection V	<16.0	<32.0					
Load Regulation 1	±2% from set point taking into account all of line and load regulation and temperature coefficient when load powered by power supply						
Load Regulation 2	+0-2% of battery terminal voltage when load powered by battery						
Alarm Relay Contact Rating	Normally closed c	ontact 60V @ 0.2A					
Operating Environment	0-50°C Ambient. Convection cooled						
Efficiency	90% Typical						
Weight <i>kg</i>	<1.0						
Compliance	AS3260, AS3548, ACA, EMC compliance, C-Tick Mark						













For more than 25 years RFI has served the needs of the wireless communications market. RFI has grown to be not only a world class manufacturer of antennas but also a leading distributor of over 6000 wireless products from around the globe.

We have formed alliances with "best of breed" wireless technology companies around the world. So, whatever your network: land mobile, cellular, paging, telemetry, telematics, WLAN, we are able to provide components from antenna port to air interface.

In renewable energy we are fast gaining the reputation as the industry's benchmark distributor. Extensive stockholdings, competitive pricing, comprehensive range and an extensive dealer network all contribute to this reputation for service.

Extensive product range
Competitive pricing
Fast delivery
Technical advice















50 Ohm Braided Coaxial Cables

	RFI	Jacket	Construction					Nomina		- (
Cable Type	Part	O.D.	Distantia	Centre S		Shield	Shield		Velocity	Jacket
	No.	mm	Dielectric	Conductor	No.	Туре	Coverage	Chinis	%	buoker
RG178 B/U	8178	1.8	Solid PTFE	7 x SCCPS 0.1mm	1	SC Braid	96%	50	69	Tinted Brown FEP
	8174	2.79	Solid Polyethylene	7 x CCS 0.16mm	1	TC Braid	88%	50	66	Black PVC Non Contaminating UV stabilised
RG174/U										
	9014	4.62	Cellular Polyethylene (Foam)	22 x TC 0.98mm	2	TC Braid & Al foil	100%	50	80	Black Non Contaminating PVC
RG58 Type										
	8058	4.9	Solid Polyethylene	19 x TC 0.98mm	1	TC Braid	89%	50	66	Black PVC Non Contaminating UV stabilised
RG58 C/U										
	9001	4.9	Cellular Polyethylene (Foam)	19 x TC 0.2mm	1	TC Braid	96%	50	76	Black PVC Non Contaminating UV stabilised
RG58 CellFoam®										
	9006	5.1	Cellular Polyethylene (Foam)	1 x BC 0.94mm	2	TC Braid & Al foil	100%	50	80	Black PVC Non Contaminating UV stabilised
RG58 CellFoil®										
	8142	4.95	Solid PTFE	1 x SCCPS 0.88mm	2	SC Braids	98%	50	70	Tinted Brown FEP
RG142 B/U										
	9142	4.95	Solid PTFE	19 x SC 0.98mm	2	SC Braids	98%	50	70	Black Polyethylene UV stabilised
RG142 Style										
RG400	8400	4.95	Solid PTFE	19 x SC 0.98mm	2	SC Braids	98%	50	70	Tinted Brown FEP
	8223	5.4	Solid Polyethylene	1 x SC 0.91mm	2	SC Braids	98%	50	66	Black PVC Non Contaminating UV stabilised
RG223/U										



50 Ohm Braided Coaxial Cables

	BEI	Jacket O.D.	Construction						Nominal	
Cable Type	Part		Dielectric	Centre	Shield			Impedance Ohms	Velocity	Jacket
	NO.	mm	Dielectric	Conductor	No.	Туре	Coverage		%	
RG213	8213	10.3	Solid Polyethylene	7 x BC 2.75mm	1	BC Braid	96%	50	66	Black PVC Non Contaminating UV stabilised
RG8 Style	CNT400	10.3	Foam Polyethylene	1 x CCA 2.75mm	2	Al Foil TC Braid	100%	50	87	Black Polyethylene UV stabilised
RG214/U	8214	10.8	Solid Polyethylene	7 x SC 2.26mm	2	SC Braids	98%	50	66	Black PVC Non Contaminating UV stabilised
10DFB Style	9005	13.0	Cellular Polyethylene (Foam)	1 x BC 3.5mm	2	TC Braid & Al foil on plastic tape	100%	50	80	Black Polyethylene UV stabilised

	RFI	Jacket	Construction						Nominal	Turne of
Cable Type	Part	O.D.	Dioloctrio	Centre		Shield		Ohms	Velocity	lacket
	No.	mm	Dielectric	Conductor	No.	Туре	Coverage	Onins	%	Udeket
RG179	8179	2.54	Solid PTFE	7 x SC 0.03mm	1	SC Braid	95%	75	69.5	Tinted Brown FEP
RG59B/U	8059	6.15	Solid Polyethylene	1 x CCS 0.57mm	1	BC Braid	95%	75	66	Black PVC Non Contaminating UV stabilised
RG59B/U	9008	6.15	Solid Polyethylene	1 x CCS 0.57mm	1	BC Braid	95%	75	66	Black Polyethylene UV stabilised
RG62A/U	8062	6.15	Polyethylene Helix Spiral	1 x CCS 0.64mm	1	BC Braid	93%	93	84	Black PVC Non Contaminating UV stabilised
RG11A/U	8011	10.3	Solid Polyethylene	7 x BC 0.4mm	1	BC Braid	96%	75	66	Black PVC Non Contaminating UV stabilised
RG11/U	9011	10.3	Foam Polyethylene	1 x BC 1.62mm	1	BC Braid	97%	75	84	Black Polyethylene UV stabilised


Corrugated Heliax[®] Coaxial Cables

	Jacket	Construction				Impedance	Nominal		
Cable Type	O.D.	Dielectric	Centre		Shield		Ohms	Velocity	Type of Jacket
	mm	Dielectric	Conductor	No.	Туре	Coverage	- Chinis	%	
FSJ1-50 Heliax®	7.4	Cellular Polyethylene (Foam)	1 x CCA 1.9mm	1	Corrugated Solid BC	100%	50	84	Black Polyethylene UV stabilised
FSJ2-50 Heliax®	10.5	Cellular Polyethylene (Foam)	1 x CCA 2.8mm	1	Corrugated Solid BC	100%	50	83	Black Polyethylene UV stabilised
FSJ4-50 Heliax*	13.2	Cellular Polyethylene (Foam)	1 x CCA 3.6mm	1	Corrugated Solid BC	100%	50	81	Black Polyethylene UV stabilised
LDF1-50 Heliax®	8.8	Low Density Polyethylene (Foam)	1 x CCA 2.6mm	1	Corrugated Solid BC	100%	50	86	Black Polyethylene UV stabilised
LDF2-50 Heliax®	11.2	Low Density Polyethylene (Foam)	1 x CCA 3.1mm	1	Corrugated Solid BC	100%	50	88	Black Polyethylene UV stabilised
LDF4-50A Heliax®	15.9	Low Density Polyethylene (Foam)	1 x CCA 4.6mm	1	Corrugated Solid BC	100%	50	88	Black Polyethylene UV stabilised
VXL5-50 Heliax*	27.5	Low Density Polyethylene (Foam)	1 x CCA 9.4mm	1	Corrugated Solid BC	100%	50	88	Black Polyethylene
LDF5-50A Heliax®	28.0	Low Density Polyethylene (Foam)	1 x BC (Hollow) 9.0mm	1	Corrugated Solid BC	100%	50	88	Black Polyethylene UV stabilised
LDF6-50 Heliax*	39.4	Low Density Polyethylene (Foam)	1 x BC (Hollow) 13.1mm	1	Corrugated Solid BC	100%	50	89	Black Polyethylene UV stabilised
LDF7-50 Heliax®	50.1	Low Density Polyethylene (Foam)	1 x BC (Hollow) 17.3mm	1	Corrugated Solid BC	100%	50	88	Black Polyethylene UV stabilised
RXL4-1A Heliax®	19.0	Low Density Polyethylene (Foam)	1 x CCA 4.6MM	1	SlottedBC	Not defined	50	88	Black Polyethylene
AVA5-50 Heliax®	28.0	Low Density Polyethylene (Foam)	1 x BC (Hollow) 9.45mm	1	Corrugated Solid BC	100%	50	91	Black Polyethylene UV stabilised
BR-400	10.29	Low Density Polyethylene (Foam)	1 x CCA 2.95mm	1	Corrugated Spiral Alluminium	100%	50	84	Black Polyethylene UV stabilised

- BC Bare Copper
- TC Tinned Copper
- SC Silver Coated Copper
- CCS Copper Clad Steel
- CCA Copper Clad Aluminium
- SCCPS Silver Coated Copper Clad Steel



Coaxial Cable Attenuation Chart

Nominal attenuation of 30.5 metres (100ft)

Cable Type	RFI Part Number	70-85 MHz	148-174 MHz	400-520 MHz	806-960 MHz	2.4-2.45 GHz	5.8-5.85 GHz
RG178B/U	8178	12.4 dB	17.0 dB	30.4 dB	40.8 dB	_	_
RG179	8179	9.2 dB	11.5 dB	17.0 dB	22.3 dB	_	_
RG174/U	8174	7.8 dB	10.8 dB	19.2 dB	26.9 dB	_	_
RG58C/U	8058	4.6 dB	7.1 dB	13.5 dB	18.2 dB	_	_
CELLFOAM™	9001	4.1 dB	5.6 dB	9.8 dB	13.2 dB	_	_
CELLFOIL™	9006	2.8 dB	4.2 dB	6.9 dB	9.0 dB	_	_
RG142B/U	8142	3.3 dB	4.9 dB	8.9 dB	12.0 dB	_	_
RG223/U	8223	4.2 dB	5.7 dB	10.0 dB	13.7 dB	_	_
RG59B/U	8059	3.1 dB	4.9 dB	9.0 dB	13.2 dB	_	_
RG62A/U	8062	2.3 dB	3.4 dB	5.9 dB	8.0 dB	_	_
RG11/U	8011	1.8 dB	2.5 dB	4.8 dB	6.6 dB	_	_
RG213/U	8213	2.0 dB	2.6 dB	5.0 dB	7.4 dB	_	_
RG214/U	8214	1.9 dB	2.6 dB	5.0 dB	7.4 dB	_	_
10D-FB Type	9005	0.9 dB	1.2 dB	2.4 dB	3.1 dB	_	_
RG8 Type	CNT-400	1.2 dB	1.7 dB	3.1 dB	4.5 dB	7.0 dB	10.6dB
1/4" Superflex	FSJ1-50	1.3 dB	2.2 dB	4.2 dB	5.6 dB	9.9 dB	15.8dB
3/8" Superflex	FSJ2-50	1.1 dB	1.5 dB	2.8 dB	3.8 dB	6.9 dB	10.9dB
1/2" Superflex	FSJ4-50	0.8 dB	1.3 dB	2.4 dB	3.4 dB	5.9 dB	10.2dB
1/4" HELIAX®	LDF1-50	1.1 dB	1.5 dB	2.7 dB	3.6 dB	5.8 dB	11.2dB
3/8" HELIAX®	LDF2-50	0.9 dB	1.3 dB	2.3 dB	3.3 dB	5.7 dB	9.5dB
1/2" HELIAX®	LDF4-50	0.6 dB	0.8 dB	1.6 dB	2.2 dB	3.7 dB	5.9dB
7/8" HELIAX®	VXL5-50	0.3 dB	0.5 dB	0.9 dB	1.3 dB	2.3 dB	_
7/8" HELIAX®	AVA5-50	0.3 dB	0.4 dB	0.8 dB	1.1 dB	2.0 dB	_
7/8" HELIAX®	LDF5-50	0.3 dB	0.4 dB	0.9 dB	1.2 dB	2.1 dB	
1 ¹ / ₄ " HELIAX®	LDF6-50	0.2 dB	0.3 dB	0.6 dB	0.9 dB	1.6 dB	-
15⁄8" HELIAX®	LDF7-50	0.2 dB	0.3 dB	0.5 dB	0.7 dB	1.4 dB	_



DC Power Cables

				DC Power Cables
Cat. No.	Description	Roll Size	Area of Conductor mm ²	Conductor No./Diameter mm
3T-30	3mm Twin Fig 8	30	1.13	16/0.3
3T-100	3mm Twin Fig 8	100	1.13	16/0.3
4T-30	4mm Twin Fig 8	30	1.84	26/0.3
4T-100	4mm Twin Fig 8	100	1.84	26/0.3
5S-30	5mm Single (Red or Black)	30	2.90	41/0.3
5S-100	5mm Single (Red or Black)	100	2.90	41/0.3
6S-30	6mm Single (Red or Black)	30	4.59	65/0.3
6S-100	6mm Single (Red or Black)	100	4.59	65/0.3
3DS-100	3mm Twin Double Sheath	100	1.13	16/0.3
4DS-30	4mm Twin Double Sheath	30	1.84	26/0.3
4DS-100	4mm Twin Double Sheath	100	1.84	26/0.3
5DS-30	5mm Twin Double Sheath	30	2.90	41/0.3
5DS-100	5mm Twin Double Sheath	100	2.90	41/0.3
6DS-30	6mm Twin Double Sheath	30	4.59	65/0.3
6DS-100	6mm Twin Double Sheath	100	4.59	65/0.3
FPC6B-100	6mm Sq Single Core Black	100	6.00	192/0.2
FPC6R-100	6mm Sq Single Core Red	100	6.00	192/0.2
FPC10B-100	10mm Sq Single Core Black	100	10.00	322/0.2
FPC10R-100	10mm Sq Single Core Red	100	10.00	322/0.2

Speaker Cables

Cat. No.	Description	Roll Size m	Conductor Description mm
SPK-14	Light Duty Fig 8	100	14/0.14
SPK-24	Heavy Duty Fig 8	100	24/0.2

4 T -100	6DS-100	FPC10R-100	SPK-24



BNC Series			ANDREW	-lålse-
Model. No.	Description	Cable Type	Centre Conductor	Crimp Set* or Tool
Cable Plugs				
BNC-04	Clamp	RG58, 9001, 9006	Solder	-
BNC-07	Clamp	RG59	Solder	-
BNC-09	Clamp	RG213	Solder, captive	-
BNC-97	Crimp	RG59	Crimp, captive	В
BNC-113	Crimp	RG58, 9001, 9006	Crimp, captive	A
BNC-113RG	Crimp	RG58, 9001, 9006	Crimp, captive	A
BNC-174	Crimp	RG174	Crimp, captive	E
BNC-223	Crimp	RG223, RG142	Crimp, captive	A
BNC-239	Right angle crimp	RG58, 9001, 9006	Crimp, captive	A
FIPBM-C	Clamp	FSJ1-50	Captive	-
Cable Jacks			1	
BNC-86	Crimp	RG58, 9001, 9006	Crimp, captive	А
BNC-87	Crimp	RG59	Crimp, captive	В
Panel Mount Jacks		1	1	Mounting size and direction
BNC-27	Flange mount (four holes)	Solder Pot	Solder captive	11.5mm (front), 8.5 (rear)
BNC-33	Bulkhead mount	Solder Pot	Solder captive	9.7mm (front)
BNC-88	Bulkhead mount	RG58, R9001, 9006	Crimp, captive	13mm (rear) A - crimp set
Adaptors				
BNC-41	F-F barrel			
BNC-49	M-F Right angle adaptor			
BNC-51	M-M barrel			
BNC-54	M-F-F Tee adaptor			
BNC-80	F-F-F Tee adaptor			

* See Pages 165-167 for Crimp Tools Matrix ** All listed BNC connectors feature the standard 50 Ohm interface dimensions. 75 Ohm interface dimensional connectors and an expanded range of other BNC connectors are available. Contact your nearest sales office for details.



BNC-04





BNC-41



BNC-51



BNC-86



BNC-88



BNC-97





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-lålse-	ANDREW			N Series
Model. No.	Description	Cable Type	Centre Conductor	Crimp Set* or Tool
Cable Plugs			1	1
N-07	Clamp - Silver plated	RG213	Solder, captive	-
N-15	Clamp - Nickel	RG58, 9001, 9006	Solder, captive	-
N-41	Right angle clamp	RG58, 9001, 9006	Solder, captive	-
N-87	Crimp silver plated	RG142, RG223	Crimp, captive	A
N-88	Crimp - Nickel	RG58, 9001, 9006	Crimp, captive	А
N-89	Crimp - Silver plated	RG58, 9001, 9006	Crimp, captive	А
N-95	Right angle crimp	RG58	Crimp, captive	A
N-114	Crimp - Nickel	RG213	Crimp, captive	С
N-119P	Crimp - Nickel plated	RG214	Crimp, captive	D
N-201	Crimp white bronze plated	CNT400, LMR400	Spring finger	D
N-203	Crimp Nickel plated	CNT400, LMR400	Spring finger	D
N-205	Crimp Nickel plated	CNT400, LMR400	Solder, captive	D
N-223	Crimp - Nickel plated	RG142, RG223	Crimp, captive	А
N-258	Right angle clamp	RG213, RG214	Solder, captive	-
N-284	Crimp	RG214	Crimp, captive	D
NP-10DFB	Clamp - Nickel	9005	Solder	-
L4PNM-RC	Ringflare	LDF4-50, RXL4-50	Captive, spring finger	Easiax Plus
L4PNR-HC	Right angle clamp, Self-Flare	LDF4-50, RXL4-50	Captive, spring finger	Easiax
L5PNM-RPC	Onepiece, Ring flare	LDF5-50	Captive, spring finger	Easiax Plus
L6PNM-RPC	Onepiece, Ring flare	LDF6-50	Captive, spring finger	Easiax Plus
L7PNM-RPC	Onepiece, Ring flare	LDF7-50	Captive, spring finger	Easiax Plus
F1PNM-HC	Hex Head, Self-Flare	FSJ1-50	Captive, spring finger	Easiax
F2PNM-HC	Hex Head, Self-Flare	FSJ2-50	Captive, spring finger	Easiax
F4NMV2-HC	Hex Head, Crush-Flare	FSJ4-50	Captive, spring finger	Easiax Plus
BR400PNM-TC	Crimp Silver Plated	BR-400	Spring Finger	D
CNT-400 Plugs		-	1	
400PNM-H-CR	Crimp Tri Metal Plated Hex	CNT-400, LMR-400	Solder	D
400PNM-HC-CR	Crimp Tri Metal Plated Hex	CNT-400, LMR-400	Spring Finger	D
* See Pages 165-167	for Crimp Tools Matrix			









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N-203



N-88



N Series			ANDREW	-làke-	
Model. No.	Description	Cable Type	Centre Conductor	Crimp Set* or Tool	
Cable Jacks					
N-28	Clamp - Nickel	RG213, RG214	Solder, captive	-	
N-30	Clamp - Nickel	RG58, 9001, 9006	Solder, captive	-	
N-96	Crimp - Silver plated	RG142, RG223	Crimp, captive	A	
N-98	Crimp - Silver plated	RG58, 9001, 9006	Crimp, captive	A	
N-118	Crimp - Nickel	RG213	Crimp, captive	С	
N-200	Crimp, White Bronze plated	CNT400, LMR400	Spring finger	D	
N-202	Crimp, Nickel plated	CNT400, LMR400	Spring finger	D	
N-204	Crimp, Nickel plated	CNT400, LMR400	Solder, captive	D	
N-210	Crimp, Silver plated	RG59	Crimp, captive	В	
L4PNF-RC	Ring Flare	LDF4-50, RXL4-50	Captive, spring finger	Easiax Plus	
L5PNF-RPC	One Piece Ring Flare	LDF5-50	Captive, spring finger	Easiax Plus	
L6PNF-RPC	One Piece Ring Flare	LDF6-50	Captive, spring finger	Easiax Plus	
L7PNF-RPC	One Piece Ring Flare	LDF7-50	Captive, spring finger	Easiax Plus	
F4PNF-C	Clamp, Self Flare	FSJ4-50	Captive, spring finger	Easiax	
BR400PNF-TC	Crimp, Silver plated	BR-400	Spring Finger	D	
BR400BHNF-TC	Crimp, Silver plated B/H	BR-400	Spring Finger	D	
CNT-400 Jack	S	I	1		
400PNF-C-CR	Crimp Tri Metal Plated	CNT-400, LMR-400	Spring Finger	D	
400PNF-BHC	Clamp Tri Metal Plated B/H	CNT-400, LMR-400	Spring Finger	-	
Panel Mount	Jacks			Mounting size and direction	
N-09P	Flange Mount, nickle plated		Solder pot, captive	11mm (front) 16mm (rear)	
N-12	Bulkhead mount		Solder pot, captive	13mm (front)	
N-20	Bulkhead mount, silver plated		Solder pot, captive	13mm (front)	
N-38	Cable mounted, bulkhead, RG213		Solder pot, captive	16mm (front) 13.5mm across flat	
N-120	Flange mount, silver plated		Solder pot, captive	16mm (front) 15mm (rear)	
N-213	Cable mounted flange, nickle plated F	RG213	Crimp, captive	18mm (front) 16mm (rear)	
N-237	Cable mounted flange, nickle plated F	RG58	Solder, captive	13mm (front) 16mm (rear)	
N-288	Cable mounted bulkhead nickel plated R	G58, 9001, 9006	Crimp, captive	16mm (rear) 13.7mm across flats	
Adaptors					
N-10	F-F barrel				
N-46P	F-F bulkhead feed through				
N-48	F-F-F Tee adaptor				
N-49	M-F-F Tee adaptor				
N-243	M-M barrel, Nickel plated				
N-245	M-F Right angle adaptor, nickel plated				

* See Pages 165-167 for Crimp Tools Matrix

** All listed N connectors feature the standard 50 Ohm interface dimensions. 75 Ohm interface dimensional connectors and an expanded range of other N connectors are available. Contact your nearest sales office for details.













N-30

N-204

N-288

N-28

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-Jülse-	ANDREW			7-16 DIN Series
Model. No.	Description	Cable Type	Centre Conductor	Crimp Set* or Tool
Plugs				
400PDM	Clamp Tri Metal Plated	CNT-400, LMR-400	Solder	BCPT-3400
BR400PDM-TC	Crimp Silver Plated	BR-400	Captive, Spring finger	RCT-214
F4PDMV2-C	Self Flare	FSJ4-50	Captive, Spring finger	MCPT-1412
F4PDR-C	Right Angle Self Flare	FSJ4-50	Captive, Spring finger	MCPT-1412
L4PDM-RC	Ringflare	LDF4-50	Captive, Spring finger	MCPT-L4
L5PDM-RPC	Self Flare	LDF5-50	Captive, Spring finger	MCPT-78
V5PDM-RPC	Ringflare	VXL5-50	Captive, Spring finger	MCPT-78
A5TDM-PS	Ringflare, Positive Stop	AVA5-50	Captive, Spring finger	MCPT-78
L6PDM-RPC	Ringflare	LDF6-50	Captive, Spring finger	CPTL6
L7PDM-RPC	Ringflare	LDF7-50	Captive, Spring finger	CPTL7
CH-716P	Combi Head Sucoplate	Requires CEC-142 or CEC-214	Captive, Spring finger	-
Jacks				
400PDF	Clamp Tri Metal Plated	CNT-400, LMR-400	Solder	BCPT-3400
BR400PDF-TC	Crimp Silver Plated	BR-400	Captive, Spring finger	RCT-214
F4PDF-C	Self Flare	FSJ4-50	Captive, Spring finger	MCPT-1412
L4PDF-RC	Ringflare	LDF4-50	Captive, Spring finger	MCPT-L4
L5PDF-RPC	Self Flare	LDF5-50	Captive, Spring finger	MCPT-78
V5PDF-RPC	Ringflare	VXL5-50	Captive, Spring finger	MCPT-78
A5TDF-PS	Ringflare, Positive Stop	AVA5-50	Captive, Spring finger	MCPT-78
L6PDF-RPC	Ringflare	LDF6-50	Captive, Spring finger	CPTL6
L7PDF-RPC	Ringflare	LDF7-50	Captive, Spring finger	CPTL7
CH-716J	Combi Head Sucoplate	Requires CEC-142 or CEC-214	Captive, Spring finger	-
Adapters				
CEC-142	Crimp used with Combi Head	RG142	Captive	D
CEC-214	Crimp used with Combi Head	RG214	Captive	D

* See Pages 165-167 for Crimp Tools Matrix





L4PDF-RC



UHF Series			ANDREW	-läke-
Model. No.	Description	Cable Type	Centre Conductor	Crimp Set* or Tool
Cable Plugs				
UHF-21	Clamp - Silver plated	RG58, 9001, 9006	Solder	-
UHF-44	Crimp - Nickel	RG58, 9001, 9006	Crimp, captive	A
UHF-66	Clamp - Right-angle plug	RG58	Solder, captive	-
UHF-104	Twist on nickel	RG58, 9001, 9006	Crimp, captive	А
UHF-119	Crimp - Nickel	RG58, 9001, 9006	Crimp, captive	А
UHF-204	Screw thread nickel	RG58, 9001, 9006	Solder, captive	-
UHF-45	Crimp - Nickel	RG59	Crimp, captive	В
UHF-46	Crimp - Nickel	RG213	Crimp, captive	С
UHF-27	Twist on - Nickel	RG213, RG214	Solder	-
UHF-04	Clamp - Silver plated	RG213, RG214	Solder, captive	-
MP10FB	Solder - Nickel plated	9005, 10DFB	Solder	-
44ASP	Solder, Tab flare	FSJ4-50	Solder	-
L44P	Solder, Self-Flare	LDF4-50, RXL4-50	Solder	-

* See Pages 165-167 for Crimp Tools Matrix

UHF connectors are non-constant impedance connectors suited for use at frequencies not exceeding 600 MHz. However, to ensure maximum performance at higher frequencies all UHF Series male connectors feature a high strength PTFE dielectric with the exception of the "CB style" connectors UHF-104, UHF-204 and UHF-27.





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-Júlse-	ANDREW			UHF Series	
Model. No.	Description	Cable Type	(Centre Conductor	
Cable Jacks					
UHF-42P	Solder - Nickel plated	RG58, 9001, 9006	Solder		
UHF-36	Solder - Nickel plated	RG213, RG214	Solder		
44ASU	Solder, Tab flare	FSJ4-50	Solder		
L44U	Solder - Self-Flare	LDF4-50, RXL4-50	Solder		
Panel Mount Jac	cks			Mounting size and direction	
UHF-67	Flange Mount	RG58	Clamp	9.5mm (front)	
UHF-28	Bulkhead - Nickel plated		Solder pot	12.5mm (front)	
UHF-60	Flange Mount - Nickel plated		Solder pot	15mm (front) 16mm (rear)	
UHF-117	Bulkhead - Nickel plated		Solder pot	16mm (front)	
Adaptors					
UHF-14	Double female barrel				
UHF-15	Double female bulkhead - Nickel plated				
UHF-32	T-Adaptor (2 female) - Nickel plated				
UHF-116	Double male barrel - Nickel plated				
UHF-16	90 degree, male/female - Nickel plated				

UHF connectors are non-constant impedance connectors suited for use at frequencies not exceeding 600 MHz. However, to ensure maximum performance at higher frequencies all UHF Series female connectors feature a high strength PTFE dielectric with the exception of the "CB style" UHF-15, UHF-32 and UHF-60.



RFI

TNC Series			ANDREW	-lilse-
Model. No.	Description	Cable Type	Centre Conductor	Crimp Set* or Tool
Cable Plugs				
TNC-01	Solder - Nickel plated	RG58, 9001, 9006	Solder	-
TNC-26	Crimp - Nickel plated	RG58, 9001, 9006	Crimp, captive	А
TNC-26RG	Reverse gender - Nickel plated	RG58, 9001, 9006	Crimp	А
TNC-26RT	Reverse thread - Nickel plated	RG58, 9001, 9006	Crimp	А
TNC-223	Crimp - Nickel plated	RG223	Crimp, captive	А
TNC-207	Crimp - Nickel plated	CNT-400	Solder	D
TNC-207RG	Reverse gender crimp - Nickel plated	CNT-400	Solder	D
BR400PTM-C	Clamp - Silver plated	BR-400	Spring Finger, captive	D
Cable Jacks				
TNC-86	Crimp - Nickel plated	RG58, 9001, 9006	Crimp, captive	А
TNC-86RG	Reverse gender crimp - Nickel plated	RG58, 9001, 9006	Crimp, captive	А
TNC-206RG	Crimp - Nickel plated	CNT-400	Solder	-
Panel Mount Ja	acks			Mounting size and direction
TNC-33	Bulkhead - Nickel plated		Solder pot, captive	9.5mm (rear)
TNC-88	Cable mount, bulkhead - Nickel plated	RG58, 9001, 9006	Crimp, captive	13mm (front) A crimp set
Adaptors		•		
TNC-11	Double female barrel - Nickel plated			
TNC-15	90 degree male/female - Nickel plated			
TNC-42	Double female bulkhead - Nickel plated			
* See Pages 168	5-167 for Crimp Tools Matrix			





TNC-26RT



TNC-206RG





TNC-33



TNC-207RG



- - -



TNC-88







- <mark>lilse</mark>	ANDREW	Miscellaneous Connectors		
Model. No.	Description	Cable Type	Centre Conductor	Crimp Set*
Cable Plugs	1	1		
FME-150	FME Crimp - Nickel plated	RG174, RG316, RG179	Crimp, captive	E
MCX-02	MCX Crimp - Gold plated	RG174, RG316, RG179	Solder	E
MMCX-01	MMCX Crimp - Gold plated	RG174, RG316, RG179	Solder	E
MMCX-02	MMCX Crimp - Gold plated	RG174, RG316, RG179	Crimp	E
SMA-174	SMA Crimp - Gold plated	RG174, RG316, RG179	Crimp	E
BL-734P	Belling Lee Solder, claw type - Nickel plated	RG58, 9001, 9006	Clamp	-
FME-116	FME Plug to Plug adaptor - Nickel plated	RG58, 9001, 9006	Captive	-
FME-120	FME Nipple, crimp, male - Nickel plated	RG58, 9001, 9006	Crimp	A
MPL-604	Mini UHF crimp - Nickel plated	RG58, 9001, 9006	Crimp, captive	A
MPL-605	Mini UHF crimp - Black chrome	RG58, 9001, 9006	Crimp, captive	A
SMA-40	SMA Crimp black - Chrome	RG58, 9001, 9006	Crimp	A
SMA-104	SMA Crimp, Pulse - Nickel plated	RG58, 9001, 9006	Crimp	A (centre - 1.09mm)
SMA-104KN	SMA Knurled nut interface - Black chrome	RG58, 9001, 9006	Crimp	A (centre - 1.09mm)
SMA-104RG	SMA Reverse gender - Nickel plated	RG58, 9001, 9006	Crimp	A (centre - 1.09mm)
SMA-104RT	SMA Reverse thread - Gold plated	RG58, 9001, 9006	Crimp	A (centre - 1.09mm)
Cable Jacks				
FME-140	FME Crimp - Nickel plated	RG174, RG316, RG179	Crimp, captive	E
MMCX-03	MMCX Crimp - Gold plated	RG174, RG316, RG179	Solder	E
FME-101	FME Crimp - Nickel plated	RG58, 9001, 9006	Crimp	A
MPL-86	Mini UHF - Nickel plated	RG58, 9001, 9006	Crimp	A
SMA-186	SMA Crimp - Gold plated	RG58, 9001, 9006	Crimp	A (centre - 1.09mm)
Panel Mount	Jacks			
SMA-05	SMA Bulkhead - Gold plated	-	Solder pot	6.4mm (front)
SMA-06	SMA Cable mount bulkhead - Gold plated	RG174, RG316, RG179	Crimp	6.4mm (rear)
SMA-07	SMA Cable mount bulkhead - Gold plated	RG58, 9001, 9006	Crimp	6.4mm (rear)
*See Pages 16	55-167 for Crimp Tools Matrix			





Gillion SV

SMA-06



SMA-104



MMCX-03



MPL-604









AK-30 COAXIAL ADAPTOR KIT

SMA-104RG

The AK-30 coaxial kit allows virtually any test adaptor to be made up in seconds. Includes UHF, Mini-UHF, TNC, BNC, N and SMA male and female fittings.



Jumper Cables

Coaxial Jumper Cables

Model No.	Description	Cable Type
92-12NMNM-X	Cable Lead N Plug to N plug	LDF4-50
92-12NMNF-X	Cable Lead N Plug to N jack	LDF4-50
92-12NFNF-X	Cable Lead N Jack to N jack	LDF4-50
92-12DMDM-X	Cable Lead 7-16 DIN Plug to 7-16 DIN Plug	LDF4-50
92-12DMDF-X	Cable Lead 7-16 DIN Plug to 7-16 DIN Jack	LDF4-50
92-12DFDF-X	Cable Lead 7-16 DIN Jack to 7-16 DIN Jack	LDF4-50
92-13NMNM-X	Cable Lead N Plug to N plug	FSJ4-50
92-13NMNF-X	Cable Lead N Plug to N jack	FSJ4-50
92-13NFNF-X	Cable Lead N Jack to N jack	FSJ4-50
92-13DMDM-X	Cable Lead 7-16 DIN Plug to 7-16 DIN Plug	FSJ4-50
92-13DMDF-X	Cable Lead 7-16 DIN Plug to 7-16 DIN Jack	FSJ4-50
92-13DFDF-X	Cable Lead 7-16 DIN Jack to 7-16 DIN Jack	FSJ4-50
92-09NIMNIM-X	Cable Lead N Plug to N plug	CNT-400
92-09NMNF-X	Cable Lead N Plug to N jack	CNT-400
92-09NFNF-X	Cable Lead N Jack to N jack	CNT-400
92-09DMDM-X	Cable Lead 7-16 DIN Plug to 7-16 DIN Plug	CNT-400
92-09DMDF-X	Cable Lead 7-16 DIN Plug to 7-16 DIN Jack	CNT-400
92-09DFDF-X	Cable Lead 7-16 DIN Jack to 7-16 DIN Jack	CNT-400
		DD 400
92-23NMINM-X		BR-400
92-23NMNF-X	Cable Lead N Plug to N jack	BR-400
92-23NFNF-X	Cable Lead N Jack to N jack	BR-400
92-23DMDM-X	Cable Lead 7-16 DIN Plug to 7-16 DIN Plug	BR-400
92-23DMDF-X	Cable Lead 7-16 DIN Plug to 7-16 DIN Jack	BR-400
92-23DFDF-X	Cable Lead 7-16 DIN Jack to 7-16 DIN Jack	BR-400
92-04NMNM-X	Cable Lead N Plug to N plug	RG214
92-04NMNF-X	Cable Lead N Plug to N jack	RG214
92-04NFNF-X	Cable Lead N Jack to N jack	RG214
92-04DMDM-X	Cable Lead 7-16 DIN Plug to 7-16 DIN Plug	RG214
92-04DMDF-X	Cable Lead 7-16 DIN Plug to 7-16 DIN Jack	RG214
92-04DFDF-X	Cable Lead 7-16 DIN Jack to 7-16 DIN Jack	RG214
-		



Note 1: X denotes cable lead length in metres

Note 2: Other cable types available; LDF1-50, FSJ1-50, RG213, RG58, RG400, RG223. Minimum order quantities may apply.



Coaxial Tools

Coaxial Crimp Tools

Part No.	Description	Illustration
RCT5859	Swedish manufactured ratchet style crimp tool to suit: • RG58 • RG223 • RG400 • RG142 • RG59 Crimp Set A + B fitted	
		RCT5859
RCT-213	Ratchet style crimp tool for RG213 connectors. Comfort Grip handles. Swedish manufacture. Crimp Set C fitted	
		RCT-213
RCT-214	Ratchet style crimp tool to suit RG214 and RG63 connectors. Comfort Grip handles. Swedish manufacture. Crimp Set D fitted	
		RCT-214
RCT-174	Ratchet style crimp tool to suit RG174, RG316, and RG179 connectors. Comfort Grip handles. Swedish manufacture. Crimp Set E fitted	
		RCT-174
RCT-301G	Multi purpose tool includes 1.09mm jaw for SMA centre pin crimps and suits: • RG58 • RG59 • RG179 • RG174 • RG316	Carelo Je
		RCT-301G
RCT-330K	Crimp tool with interchangeable jaws for cables from RG214 down to RG174. Comes packaged in a robust plastic case with cable cutter, stripper and screwdriver.	
		RCT-330K



Coaxial Tools

Cable Preparation Tools

Part No.	Description	Illustration
BR-CPT-400	Cable prep tool Hand tool for fast and easy preparation of BR-400 cable. Strips jacket and cuts through outer shield and dielectric making cable ready for connector attachment. Incorporates deburring blade to prepare centre conductor.	Ter soo
		BR-CPT-400
CST-399	Coaxial cable stripping tool - Corex 2 3 blade cutter. Adjustable blade height, reversable blade cartridge. Swedish precision tool to suit: • RG58 • RG59 • RG62 • RG174 • RG188 • RG316 • RG6 • RG195	
	• RG180	CST-399
CST-213	Coaxial cable stripping tool - Maxi Corex 3 blade cutter. Adjustable blade height, reversable blade cartridge. Packaged in robust plastic case and comes complete with knife and adjustment tool. Swedish precision tool to suit: • RG213 • RG214 • RG6 • Twinax & Ethernet cables	
		CST-213
EASIAX®	Cable prep tool Hand tool for fast precision cuts in Heliax [®] cables. Available for: • FSJ1 and 4 (MCPT-1412) • FSJ2 and 4 (MCPT-3812) • LDF4 and RXL4 (MCPT-L4) • LDF5 and RXL5 (MCPT-78)	
		MCPT-L4
EASIAX® Plus	Automated cable prep tool Fit to a standard power or battery drill for fast, reliable cable preparation in seconds. Removes jacket outer conducter and foam, then cuts back and chamfers the inner conductor for correct connector attachment. Available for cables from LDF1-50 through to LDF7-50. • LDF1-50 (CPTL1) • LDF2-50 (CPT-E2L2N) • LDF4-50 (CPT-L4ARC1) • LDF5-50 (CPTL5A) • LDF6-50 (CPTL6) • LDF7-50 (CPTL7)	CPT-I 4ABC1
		CPI-L4ARC1

RFI

Tools

Cutting and Stripping Tools and Accessories

Part No.	Description	Illustration
ACT-1	Ratchet crimp tool for insulated terminals. Incorporates 3 crimping positions for pre-insulated terminals (red, blue and yellow terminals)	
		ACT-1
CST-001	Cable stripping tool for 32 to 8 AWG wires. Adjustable length stop, integrated cable cutter, strips single or twin wires. Swedish precision tool.	
		CST-001

Crimp Tool Dimensions

	•		
Crimp Set	Hex Dimensions (Outer Conductor)	Hex/Square Dimensions (Centre Conductor)	Typical Cable Sizes Using Crimp Set
А	5.41	1.69	RG58, 9001, 9006, RG142, RG223, RG400
В	6.48	1.69	RG59, RG62
С	10.54	2.54	RG213
D	10.9	2.54	RG214, RG63
E	3.25	0.72	RG174, RG63, RG179

Cross Reference to Crimp Dies

Cable Type	ERMA Crimp Code	Hex mm	Hex inch	Centre Crimp mm	Centre Crimp inch	Length mm	RFI Ref	RCT-330K
RG58C/U	HFD	5.41	0.213	1.69	0.067	8	RCT-5859	A or G
RG59C/U	ХН	6.48	0.255	1.69	0.067	8	RCT-5859	A or G
RG62A/U	ХН	6.48	0.255	1.69	0.067	8	RCT-5859	A or G
RG63B/U	HIA	10.9	0.429	2.54	0.100	10	RCT-214	К
RG142B/U	HFD	5.41	0.213	1.69	0.067	8	RCT-5859	A or G
RG174A/U	XCF	3.25	0.128	0.72	0.028	8	RCT-174	J outer only
RG178B/U	ХВ	2.67	0.105	0.72	0.028	8	RCT-174	J outer only
RG179B/U	XCF	3.25	0.128	0.72	0.028	8	RCT-174	J outer only
RG213/U	HIA	10.54	0.415	2.54	0.100	10	RCT-213	К
RG214/U	HIA	10.9	0.429	2.54	0.100	10	RCT-214	К
RG223/U	HFD	5.41	0.213	1.69	0.067	8	RCT-5859	A or G
RG316/U	XCF	3.25	0.128	0.72	0.028	8	RCT-174	J outer only
RG400/U	HFD	5.41	0.213	1.69	0.067	8	RCT-5859	A or G



Coaxial Cable Hardware

Cable Clamps	;					
Item	Part No.	Description				
KwikClamp	Ideal for installing eliminate the nee	n multiple runs (1, 2 or 3) on towers where space is limited. Self clamping hangers d for drilling or adapters.				
	L4CLAMP-RDN-1	Multi-run hanger, self clamp (1 run) suits LDF4-50				
	L4CLAMP-RDN-2	Multi-run hanger, self clamp (2 runs) suits LDF4-50				
	L5CLAMP-RDN-1	Multi-run hanger, self clamp (1 run) suits LDF5-50				
	L5CLAMP-RDN-2	Multi-run hanger, self clamp (2 runs) suits LDF5-50				
	L6CLAMP-RDN-1	Multi-run hanger, self clamp (1 run) suits LDF6-50				
	L6CLAMP-RDN-2	Multi-run hanger, self clamp (2 runs) suits LDF6-50				
	L7CLAMP-RDN-1	Multi-run hanger, self clamp (1 run) suits LDF7-50				
	L7CLAMP-RDN-2	Multi-run hanger, self clamp (2 runs) suits LDF7-50				
Angle Adapter	Ideal for mounting	g standard hangers and Click-On hangers to angle tower members up to 22mm thick				
THO .	31768A	Suits all sizes of hangers. (pack of 10)				
	UA-3	Suits snap in hangers. (pack of 10)				
Galvanised Angle Adapter Kits	247763	Galvanised and non-marring. For mounting $1/2$ " to $21/4$ " cable to angle tower members up to 19mm thick				
Compact Angle Adapter Kits	Compact, lightwe	Compact, lightweight angle adapter suitable for use with single runs up to 2- $\frac{1}{4}$ " in diameter.				
	243684-M	Suits all sizes of cables, including FSJ and LDF series (pack of 10)				
Cold Shrink Weatherproofing	Simply slips over	Simply slips over the connection and compressess around the interface using a pull tab applicator				
Touriorproomig	241474-4	Suits 1/2" to 1/2" N connectors				
	241474-5	Suits ⁷ /8" to ⁷ /8" N connectors				
Feed Thru Glands	FTN-4	Nylon, suits ¹ ⁄2" cable including LDF4-50				
Charlos	FTB-4	Brass, suits ¹ /2" cable including LDF4-50				
	40656A-3	Neoprene gasket, suits 1/2" cable including LDF4-50				
	FTN-5	Nylon, suits ⁷ ⁄/ ₈ " cable including LDF5-50				
	FTB-5	Brass, suits ⁷ /8" cable including LDF5-50				
	40656A-1	Neoprene gasket, suits ⁷ /8" cable including LDF5-50				
	40656A-5	Neoprene gasket, suits 11/4" cable including LDF6-50				
	40656A-2	Neoprene gasket, suits 1%" cable including LDF7-50				
Hoisting Grip	43094	Suits LDF4-50 cable				
	19256B	Suits LDF5-50 cable				
	29961	Suits LDF5-60 cable				
	24312A	Suits LDF7-50 cable				





Coaxial Cable Hardware

Grounding and Hanger Kits

Item	Part No.	Description
Universal Grounding Kit	UG1215-06B1	Universal grounding kit for 1/2" - 1%" cable
Sure Ground™ Grounding Kits	SGL4-06B2	SureGround [™] grounding kit with standard weatherproofing butyl rubber sealing tape, 2 hole lug for ½" cable - LDF4-50
	SGL5-06B2	SureGround [™] grounding kit with standard weatherproofing butyl rubber sealing tape, 2 hole lug for ⁷ / ₈ " cable - LDF5-50
	SGPL5-06B2	SureGround [™] Plus grounding kit with weatherproofing rubber boot , 2 hole lug for ⁷ /s" cable - LDF5-50
	SGL6-06B2	SureGround [™] grounding kit with standard weatherproofing butyl rubber sealing tape, 2 hole lug for 1¼" cable - LDF6-50
	SGL7-06B2	SureGround [™] grounding kit with standard weatherproofing butyl rubber sealing tape, 2 hole lug for 1%" cable - LDF7-50
	SGPL7-06B2	SureGround [™] Plus grounding kit with weatherproofing rubber boot, 2 hole lug for 1%" cable - LDF7-50
Hanger Kits	43211A	Standard Hanger Kit for 1/2" cable including, LDF4-50 (pack of 10)
	42396A-5	Standard Hanger Kit for ⁷ / ₈ " cable including, LDF5-50 (pack of 10)
	42396A-1	Standard Hanger Kit for 11/4" cable including, LDF6-50 (pack of 10)
	42396A-2	Standard Hanger Kit for 1%" cable including, LDF7-50 (pack of 10)
Click-On Hangers	Stackable Click-on hangers i	nstall in minutes and provide perfect fit, especially in confined spaces
	L4CLICK	Click-On hanger kit for $\frac{1}{2}$ " cable, including LDF4-50 (pack of 10)
	L5CLICK	Click-On hanger kit for $\frac{7}{8}$ " cable, including LDF5-50 (pack of 10)
	L6CLICK	Click-On hanger kit for 11/4" cable, including LDF6-50 (pack of 10)
	L7CLICK	Click-On hanger kit for 15/8" cable, including LDF7-50 (pack of 10)
Snap-In Hangers	Stackable Click-on hangers i	nstall in minutes and provide perfect fit, especially in confined spaces
	SSH-12	Snap-In hanger kit for ½" cable LDF4-50 (pack of 10)
	SSH-78	Snap-In hanger kit for ⁷ /8" cable LDF5-50 (pack of 10)
	SSH-114	Snap-In hanger kit for 11/4" cable LDF6-50 (pack of 10)
	SSH-158	Snap-In hanger kit for 1%" cable LDF7-50 (pack of 10)





Antenna Clamps	
	UNV Series
UNV	Lightweight right angle galvanised clamp. See the table below for mounting applications.
UNV2	Lightweight right angle stainless steel clamp. See the table below for mounting applications.



FP Series

The Flat Plate Series are lightweight galvanised clamps with stainless steel U-bolts for mounting in 90° or in-line applications. See the table below for mounting applications.



UB Series

The UB1 antenna clamps are simple U-Bolt assemblies with "teeth", around the inside of locating plates to prevent the antenna from slipping or shifting once mounted. Two separate clamps illustrated. See the table below for suggested mounting applications.

Stainless steel U-Bolt assemblies also available: UB2

CLAMPS	UB1	UB2	UNV	UNV2	FP-1	FP-2
Weight per clamp <i>kg</i>	0.21	0.19	0.41	0.48	1.5	1.5
Body Finish	Zinc plated	Stainless Steel	Galvanised	Stainless Steel	Galvanised	Galvanised
Fastener Finish	Zinc plated	Stainless Steel	Galvanised	Stainless Steel	Stainless Steel	Stainless Steel
Min. boom size <i>mm</i>	25	25	20	20	25	Min. sq boom size 19 Min. boom size 30
Max. boom size <i>mm</i>	52	52	52	52	50	50
Application	In-line mounting small collinear and ground plane antennas		Mount small antennas in 90° arrangement		Right angle mounting of antenna or tube	



Antonna	Clamps	2
Ащенна	Olamba	• 1





UC1

MUE Series

Straddle clamps, also referred to as "Mueller" clamps are hot dipped galvanised clamps suited for large tower angles. See the table below for suggested mounting applications.

UC1

The UC1 is a heavy duty antenna clamp designed to mount larger antennas. The clamp is constructed of 6mm stamped galvanised steel plates, nuts, bolts and locking washers and allow for a high degree of adjustment during mounting. See the table below for suggested mounting applications.

CLAMP	UC1	MUE1	MUE2	UCR1	UCR1-120	UCR2
Weight per clamp kg	t per clamp <i>kg</i> 1.9 2.3 3.0		3.0	1.9	2.0	3.8
Body Finish	Galvanised	Galvanised		Galvanised	Galvanised	Galvanised
Fastener Finish	Galvanised	Galvanised		Galvanised Galvanised Galvanised		Galvanised
Min. boom size <i>mm</i>	20 both planes	50	50	20 both planes	20 both planes	20 both planes
Max. boom size <i>mm</i>	75 both planes	50	50	52 both planes 75 both planes 75 both planes		75 both planes
Min. angle size mm	Net explicable	40	70	Niek zwylianie i		
Min. angle size <i>mm</i>		75	200	-	Νοτ αρριιςαριθ	
Application	In-line mounting of two tubular section. Mounts in 90° line	Designed to mount antennas and antenna structures onto a steel angle support tower		90° mounting with 75mm bolts	90° mounting with 120mm bolts for larger boom antennas	Heavy duty applications. Two members at 90°



Mounts and Brackets





			Mounting Accessories
Part No.	Description		
R1002	Wood Eye Screw 125mm x ⅔"		0
R1003	Eye Bolt 25mm x ³ ⁄8"	R1002	R1003
R1004	Guy Anchor Plate 270mm x 25mm x 25mm	2 2 2 3	
R1005	Hook & Turnbuckle ^{5/} 6" dia.	R1004	R1005
R1007	'D' Shackle ⁵ / ₁₆ " dia. Used as an interface between guy points and turnbuckles. Hot dip galvanised finish		
R1008	Guy Cleat 40mm x 125mm x 35mm	R1007	R1008
R1009	MST-4.5 Clamp Assembly Kit Suits 38mm masting	R	
R1010	Stay Bar Collar Used with Hocky Sticks or short masts to provide attachment points for Stay Bars up to 38mm dia.	R1009	R1010
R1014	Stay Bar Kit Used to stabilise HS Series mount or short masts. Screws down to roof surface		
R1017	Wire Rope Grip 4mm		
		R1014	R1017



Mounting Accessories

Part No.	Description			
R1021	Wood Screw - 1½" ¾" ww			
R2001	Galvanised Steel Guy Wire 180m 7 × 0.90mm G380 strand			
		R1021	R2001	

CPB Style - Nominal bore stainless steel braid tube. 10,14, 16, 21, 29 & 45mm dia. 1 metre lengths.

Part No.	Description			
R3001	Stramit Roof Mount Specially designed mount to fit Stramit or Cliplock roof profiles with no penetrating holes. The cleats clamp to the roof profiles with pinch bolts. Will support masts up to 2.4m tall for yagis or small dipoles.			
R3002	Tile Roof Mount Distributes the weight of a guyed mast on a tile roof evenly over the ridge tile. Accepts up to 55mm tube and suits up to 50' Telo mast.			
R3003	Iron Roof Mount Shaped to fit the profile of standard steel roof ridge capping, can be located with roofing screws. Accepts up to 55mm tube and suits up to a 50' Telo mast.			
23 Tape	Self-Amalgamating Tape Scotch brand self fusing water proof tape can be stretched up to twice its original length to form a continuous water proof seal on connector joins.			
INS-BK	Insulation Tape Black insulation tape used to over wrap Scotch 23 tape. Also used to secure cables to masting.			



Typical Installation: Guyed Mast





Audio and Electrical Accessories

Fuses, Connectors and Insulators

	Part No.	Description	Illustration	
Insulated Lugs	SL2-4 SL2-6 SL2-8 SL5-4 SL5-6 SL5-8	Insulated lug, 4mm stud, blue for 3-4mm cable - Pack of 100 Insulated lug, 6mm stud, blue for 3-4mm cable - Pack of 100 Insulated lug, 8mm stud, blue for 3-4mm cable - Pack of 100 Insulated lug, 4mm stud, yellow for 4-6mm cable - Pack of 50 Insulated lug, 6mm stud, yellow for 4-6mm cable - Pack of 50 Insulated lug, 8mm stud, yellow for 4-6mm cable - Pack of 50	SL2-8 Insulated lug	
Insulated Spade Lugs	QC2 QC2I QC5 QC5I QCPB2 QCM2	Insulated spade lug, blue for 3-4mm cable - Pack of 100 Fully insulated spade lug, blue for 3-4mm cable - Pack of 50 Insulated spade lug, yellow for 5-6mm cable - Pack of 50 Fully insulated spade lug, yellow for 5-6mm cable - Pack of 100 Insulated piggyback spade lug, blue for 3-4mm cable - Pack of 100 Insulated miniature spade lug, blue for 3-4mm cable - Pack of 100	QC2I Fully insulated spade lug	
Insulated In-line Splices	IS-2 IS-5	Insulated in-line splice, blue for 3-4mm cable - Pack of 100 Insulated in-line splice, yellow for 4-6mm cable - Pack of 50	IS-2	
Bullet Connectors	BF2-7 BM2-7	Bullet female connector, blue for 3-4mm cable - Pack of 50 Bullet male connector, blue for 3-4mm cable - Pack of 100	BF2-7 BM2-7	
Glass Cartridge Fuses	20-1 20-2 20-10 3AG-1 3AG-5 3AG-10 3AG-15 3AG-20 3AG-25 3AG-30 3AG-35	20mm x 5mm glass fuse, 1A - Pack of 10 20mm x 5mm glass fuse, 2A - Pack of 10 20mm x 5mm glass fuse, 10A - Pack of 10 3AG (32×6.3) glass fuse, 1A - Pack of 10 3AG (32×6.3) glass fuse, 5A - Pack of 10 3AG (32×6.3) glass fuse, 10A - Pack of 10 3AG (32×6.3) glass fuse, 15A - Pack of 10 3AG (32×6.3) glass fuse, 20A - Pack of 10 3AG (32×6.3) glass fuse, 25A - Pack of 10 3AG (32×6.3) glass fuse, 30A - Pack of 10 3AG (32×6.3) glass fuse, 35A - Pack of 10 3AG (32×6.3) glass fuse, 35A - Pack of 10	20-0.5	
Blade Fuses	BF-5-50 BF-10-50 BF-15-50 BF-20-50 BF-30-50	5 Amp blade fuse - Pack of 50 10 Amp blade fuse - Pack of 50 15 Amp blade fuse - Pack of 50 20 Amp blade fuse - Pack of 50 30 Amp blade fuse - Pack of 50	BF-30	
Fuse Holders	FM BU-HFB BFH-003	Nylon In-line fuse holder (MSP compatible) - Pack of 10 Waterproof fuse holder, submersible. Water resistant fuse Holder for Blade Fuses - 30amp rating.	FM FM BU-HFB BFH-003	



Audio and Electrical Accessories

Audio and Electrical Accessories

	Part No.	Description	Illustration
Power Connectors (Gender of the connector refers to pin, not body)	PC-2F PC-3F PC-4F PC-2M PC-3M PC-4M	 2 Pin female with contact - Pack of 10 3 Pin female with contact - Pack of 10 4 Pin female with contact - Pack of 10 2 Pin male with contact - Pack of 10 3 Pin male with contact - Pack of 10 4 Pin male with contact - Pack of 10 	PC-2F
Cable Ties	RF523 RF524 RF525 RF526 RF527 RF528 TY533M TY534M TY535M LSY-4.6-200B LSY-4.6-360B LSY-7.9-360B	92mm (3.6") Black, Standard Head - Pack of 100 140mm (5.5") Black, Standard Head - Pack of 100 186mm (7.3") Black, Standard Head - Pack of 100 281mm (11") Black, Standard Head - Pack of 100 338mm (13.2") Black, Standard Head - Pack of 100 360mm (14.2") Black, Standard Head - Pack of 100 101mm (4") White, Standard Head - Pack of 100 152mm (6") White, Standard Head - Pack of 100 198mm (7.8") White, Standard Head - Pack of 100 4.6mm x 201mm Stainless steel - Pack of 100 4.6mm x 360mm Stainless steel - Pack of 100 7.9mm x 360mm Stainless steel - Pack of 100	Cable Ties
Cable Clips	TC5828 TC5344A 708 PC58 HC58 HC213	Screw on mounting plate for cable ties - Pack of 100 Stick on mounting plate cable ties - Pack of 100 Stick down cable clip to suit RG58 - Pack of 100 Nail down cable clip to suit RG58 - Pack of 100 Nail down cable clip ro suit RG213 - Pack of 100 Utilap connector, up to 4mm auto cable - Pack of 100	PC58 PC58 TC5828
Heat Shrink Tubing (Mil Spec polyolefin tubing. Flame retardant)	STB-1.2 STB-1.6 STB-2.4 STB-3 STB-4 STB-6 M-3614 M-3519	 1.2 (Before contraction) 0.6 (After contraction) 1.6 (Before contraction) 0.8 (After contraction) 2.4 (Before contraction) 1.2 (After contraction) 3.2 (Before contraction) 1.6 (After contraction) 4.8 (Before contraction) 2.4 (After contraction) 6.4 (Before contraction) 3.2 (After contraction) Heat shrink 12mm to 4mm hot melt glue lined Heat shrink 19mm to 6mm hot melt glue lines 	STB Series M-3614 M-3519
Sealing and Adhesive Tapes	INS-BK 4008-0.5 4008-1 23 Tape 33 Tape 15 Tape	Black PVC insulation tape, 19mm x 20m Scotch double sided foam tape, 12mm x Scotch double sided foam tape, 25mm x 32.9m Scotch self amalgamating tape, 19mm x 9.15m Scotch flame retardant electrical tape, 19mm x 20.1m Nitto self amalgamating tape, 20mm x10m	33 Tape Tape

