



DATASHEET
AW3849-T0-F

Common Name- 12 Ports - 8P Mid Band & 4P 3500MHz CAN, 34", Concealment

1710-2170MHz	8	Fixed	7.5	360°
3400-3800MHz	4	Fixed	6.5	360°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

The Concealed Antenna Node (CAN) is designed to house both radio equipment and antennas in one integrated enclosure. The antennas are orientated in Psudo-Omni configuration. This particular design is 34" in height and 17" in diameter and was designed to enclose Ericsson 2203 and 2205 radios.

To facilitate ease of deployment, radio and auxiliary equipment is installed and tested before transfer to site. This pre-site configuration process can significantly reduce costs associated with site installations.

APPLICATION

The CAN is intended for small cell network densification. Frequency band and port options can be customised to suit different network applications. Typically the CAN is designed to meet the particular requirements of each network operator. Once the design is complete, the operator is then able to deploy efficiently on poles and rooftops.

While efficiencies are achieved in deployment, the CAN also offers an aesthetically pleasing solution as radios, cabling antennas and auxiliary equipment are enclosed in a single attractive housing.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

- 8 Midband Ports and 4 CBRS Ports
- Compact design for low visual impact.
- Radios and Antennas configured before going to site.
- Reduces deployment times by more than 50%.
- Rooftop deployment option.

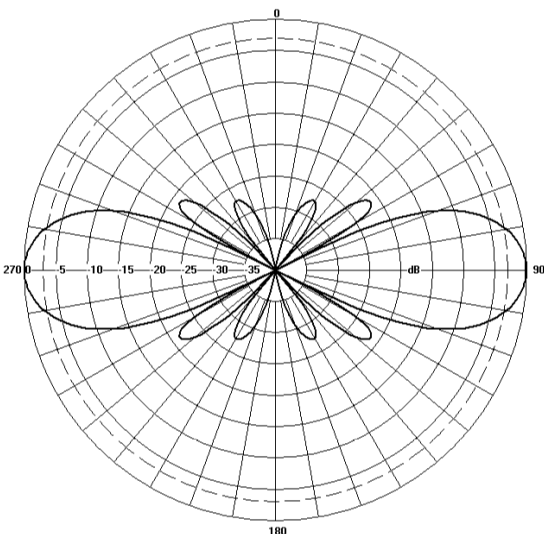
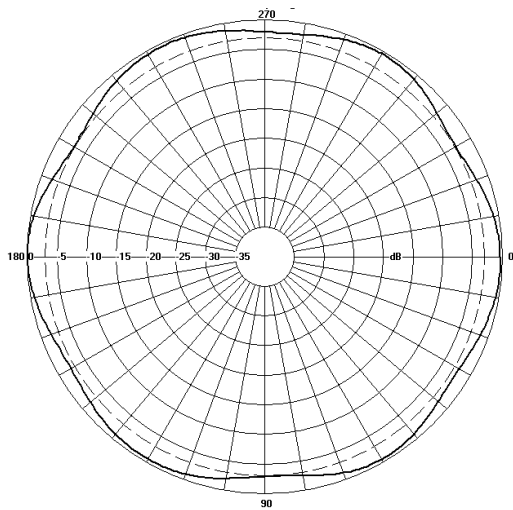
The parameters in this specification follow the definitions and recommendations per NGMN P-Basta, Release 9.6.



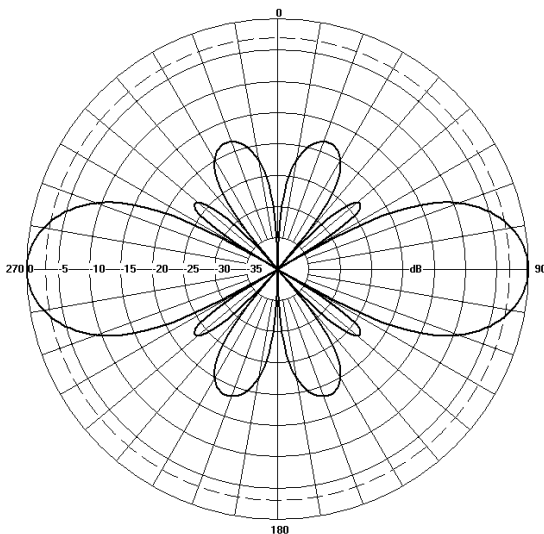
TECHNICAL SPECIFICATION

Electrical Specifications						
Frequency Range		MHz	1710-1880	1850-1990	1920-2170	3400-3800
Polarisation		Degree	+/- 45° Slant Linear			
Gain	Basta	dBi	7.1 ±0.5	7.3 ±0.5	7.5 ±0.5	6.5 ±0.5
	Max	dBi	7.6	7.8	8.0	7.0
Azimuth Beamwidth		Degree	360°	360°	360°	360°
Elevation Beamwidth		Degree	18°	17°	15°	22°
Electrical Downtilt		Degree	T0°	T0°	T0°	T0°
Electrical Downtilt Deviation		Degree<	1.5°	1.5°	1.5°	3°
Impedance		Ohms	50			
VSWR		<	1.5			
Return Loss		dB>	14			
Isolation		dB>	25	25	25	22
Passive Intermodulation		dBc<	-150	-150	-150	N/A
Cross-Polar Discrimination		dB>	8	8	8	8
Maximum Effective Power Per Port		W	250	250	250	50

Representative Pattern Files



1710 - 2170MHz



3400 - 3800MHz

Azimuth	Elevation
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For radiation pattern files, please login at www.alphawireless.com

TECHNICAL SPECIFICATION

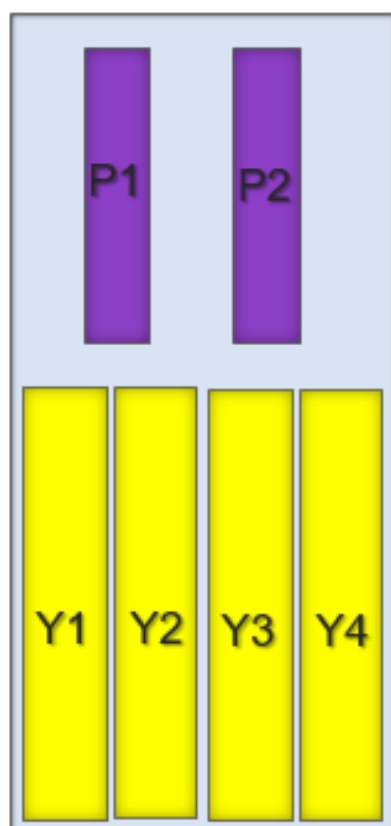
Mechanical Specifications

Dimensions (LxØ)	mm (in)	856 (33.7) x 443 (17.4)
Volume	ft ³ (l)	5.4 (153)
Packing Size (LxWxD)	mm (in)	1028 (40.5) x 527 (20.7) x 513 (20.2)
Net Weight (antenna)	kg (lb)	30.5 (67.2)
Shipping Weight	kg (lb)	32.5 (71.6)
Connector Type (Female)	-	4.3-10
Connector Quantity	-	12 (4 x 1900MHz, 4 x 2100MHz and 4 x 3500MHz)
Connector Position	-	Inside
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	345 (78)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	345 (78)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	ASA capped ABS
Radome Colour	RAL	7035
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	°C (°F)	-40 (-40)
Hot Temperature Survival	°C (°F)	70 (158)

Electrical Power Specification

Power Requirement	VAC/Amp	Based on Customer Requirements
Main Breaker	Amp	Based on Customer Requirements
Mini Macro Radio	Amp	Based on Customer Requirements
Access Equipment	Amp	Based on Customer Requirements
Surge Protection	VAC/Amp	Based on Customer Requirements

Array Layout and RET Information



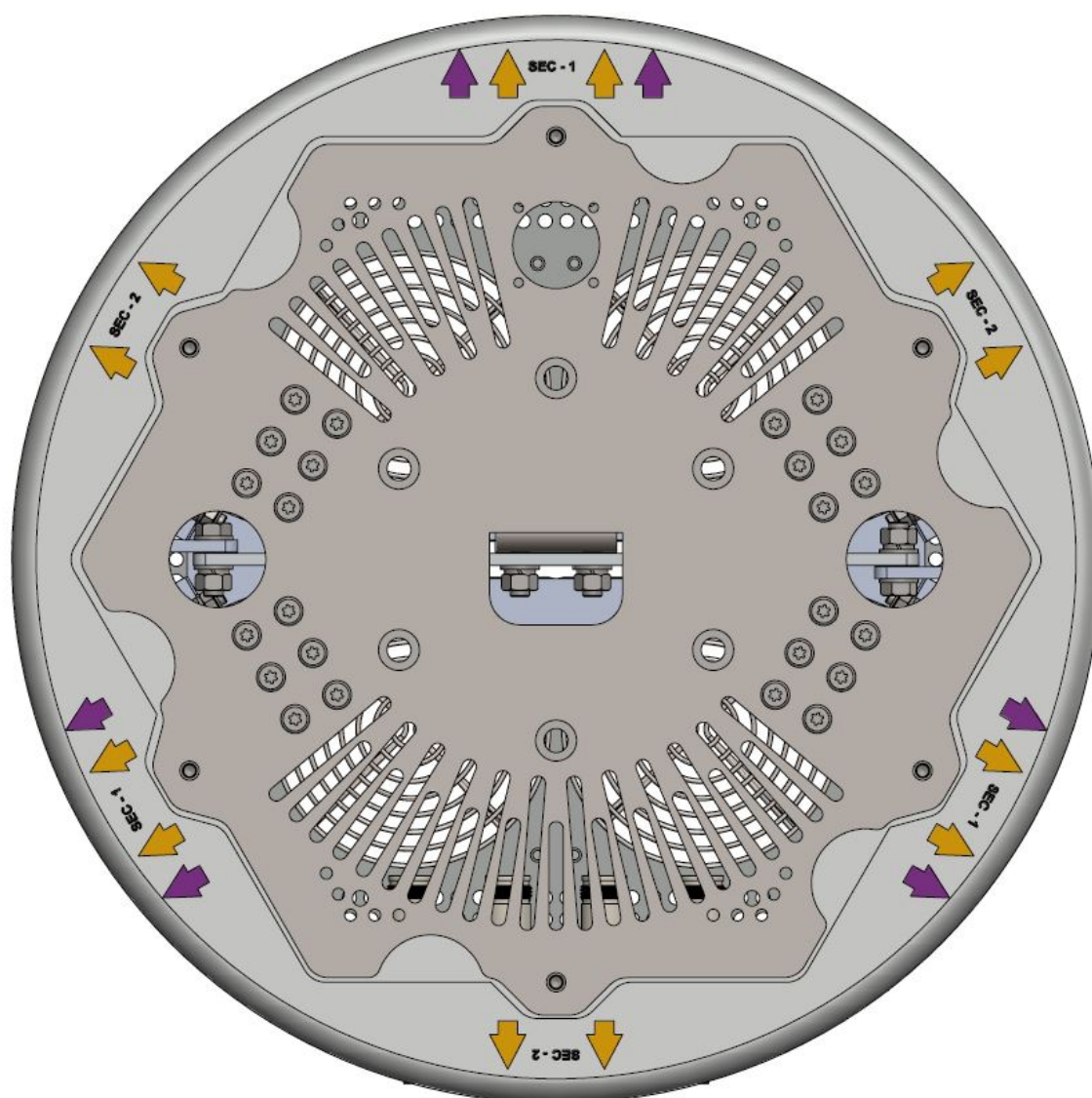
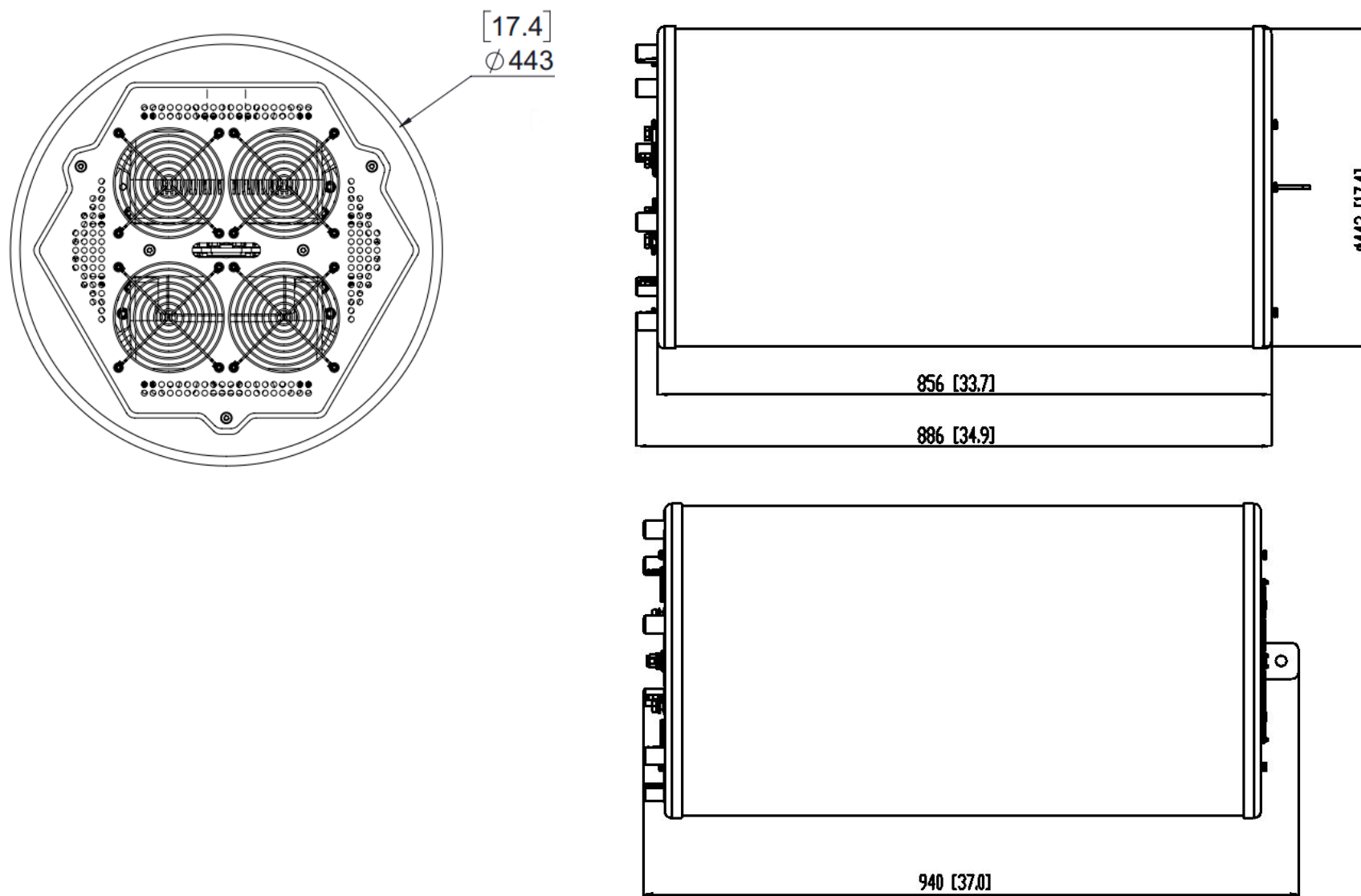
Array	Frequency MHz	Ports
Y1	1710 – 2170	1 – 2
Y2	1710 – 2170	3 – 4
Y3	1710 – 2170	5 – 6
Y4	1710 – 2170	7 – 8
P1	3400 – 3800	9 – 10
P2	3400 – 3800	11 – 12

Note: Colored box sizes do not represent antenna sizes.

TECHNICAL SPECIFICATION

Mechanical Illustration

All measurements are in mm (in)

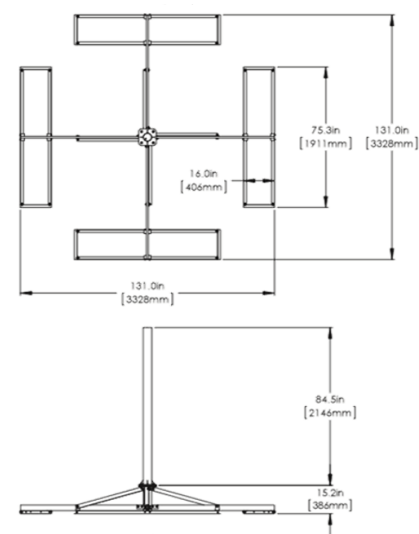
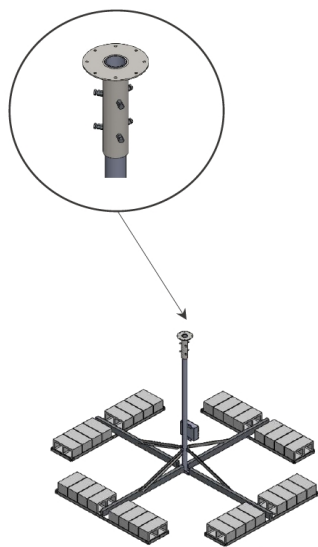




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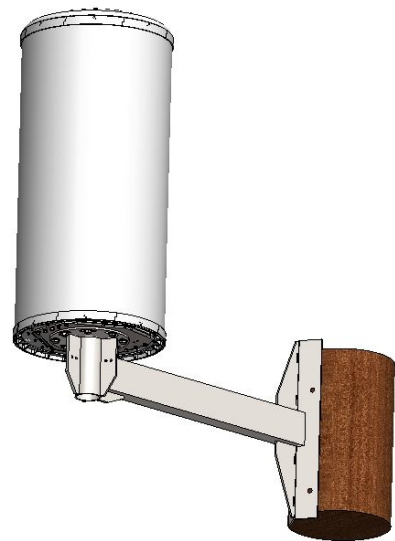
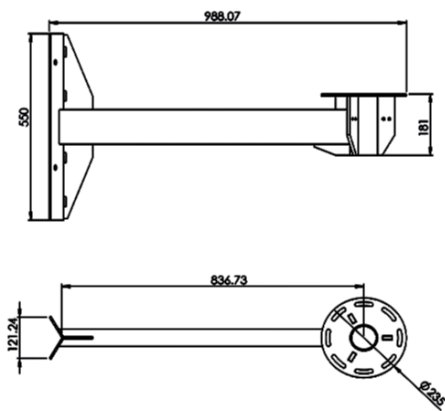
Mounting Bracket Kit

CL-V-133 – rCAN Full size SKID (Optional)



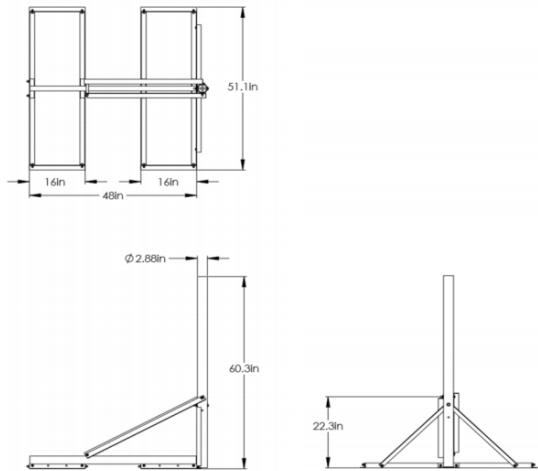
Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0°	Galvanised Steel	50mm-115mm (2" to 4.5")

CL-V-135 - rCAN Standoff Mounting Bracket (Optional)



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0°	Galvanised Steel	N/A

CL-V-138 - rCAN reduced size SKID (Optional)

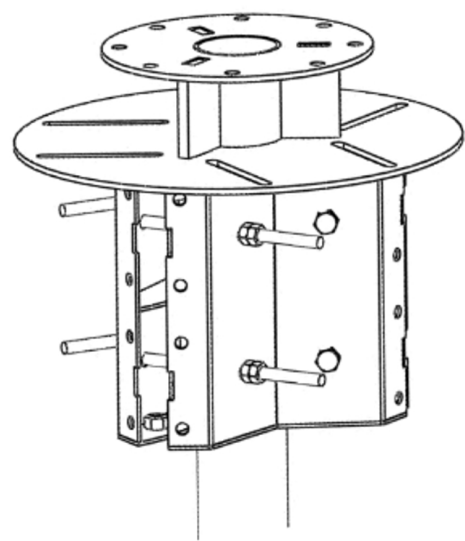


Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0°	Galvanised Steel	50mm-115mm (2" to 4.5")



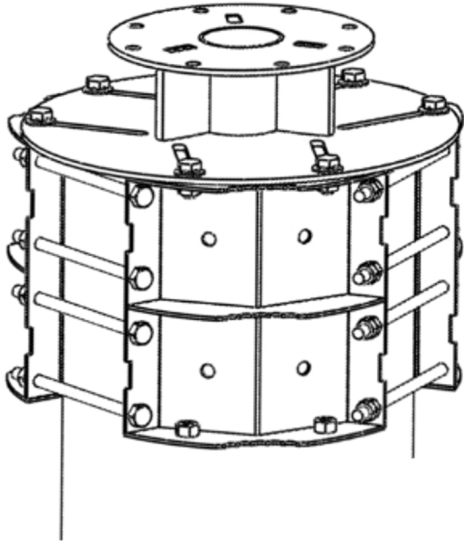
Mounting Bracket Kit

CL-V-128 Universal Mount Kit (included with antenna unless other Mount Kit is ordered)



Mounting Kit Tilt Range

0°



Mounting Kit Material

Galvanised Steel

Mounting Kit Pole Diameter

3" - 12"

Ordering Info

Order Code - Antenna

AW3849-T0-F

Order Code - Mount Kits

CL-V-133

CL-V-135

CL-V-138

Order Code - Radio Brackets

CL-V-128

Order Code - Accessories

AW1012-2-FM-FM

AW1012-2-FM-NM

AW1014-2-FM-TM

PADC 1000

SADC 2000

AW0326-3-PM-PF

AW0326-10-PM-PF

AW0326-25-PM-PF

AW0326-50-PM-PF

Description

Mechanical Electrical Tilt (MET) with 4.3-10 connectors.

Description

Full size SKID (Optional)

Standoff Mounting Bracket (Optional)

rCAN reduced size SKID (Optional)

Description

Universal Mount Kit (included with antenna unless other Mount Kit is ordered)

Description

RF Jumper Cable, connector types 4.3-10 (m) / 4.3-10 (m), length 2 metres (6'6")

RF Jumper Cable, connector types 4.3-10 (m) / N-Type (m), length 2 metres (6'6")

RF Jumper Cable, connector types 4.3-10 (m) / Nex10 (m), length 2 metres (6'6")

Portable AISG Controller

Site AISG Controller

AISG Jumper Cable Lengths 3 metres (9' 10")

AISG Jumper Cable Lengths 10 metres (32' 9")

AISG Jumper Cable Lengths 25 metres (82')

AISG Jumper Cable Lengths 50 metres (164')

Enquiries

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