





APXVRRMM15B_43-C-I20

Features

- 4 ports / 2 cross pol systems in high band (1710-2170 MHz)
- 4 ports / 2 cross pol systems in high band (2490-2690 MHz)
- Integrated and field replaceable SRET
- ACU HW version: 2.02
- Compliant with AISG v2.0 and 3GPP



PRODUCT OVERVIEW	Frequency Range (MHz)	(2x) 1710-2170		(2x) 2490-2690		
	Array	 B1	 B2	 Y1	 Y2	
	Connector	1-2	3-4	5-6	7-8	
		8 PORTS				
	Polarization	XPOL				
	Azimuth Beamwidth (avg)	65°				
	Electrical Downtilt	2-12°			2-12°	
	Dimensions	1495 x 350 x 200 mm (58.9 x 13.8 x 7.9 in)				

ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXVRRMM15B_43-C-I20	ACU-I20-B4 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	29.0 kg (63.9 lbs)



Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

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ELECTRICAL SPECIFICATIONS

B1

Frequency Range		MHz	1710-2170		
		MHz	1710-1880	1850-1990	1920-2170
Polarization		---	±45°		
Gain	Over all Tilts	dBi	16.9 ± 0.5	17.0 ± 0.1	16.8 ± 0.5
	Max Gain	dBi	17.4	17.1	17.3
Azimuth Beamwidth (3 dB)		degrees	67.4° ± 2.5°	68.2° ± 2.5°	68.0° ± 2.0°
Elevation Beamwidth (3 dB)		degrees	6.8 ± 0.5°	6.0 ± 0.1°	5.9 ± 0.5°
Electrical Downtilt		degrees	2-12°		
Impedance		Ohms	50Ω		
VSWR (Return Loss)		---	1.5:1 (-14 dB)		
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-150		
Front-to-Back Ratio, Total Power, ± 30°		dB	27.9	27	27
First Upper Side Lobe Suppression		dB	14	15	15
Cross Polar Discrimination Over Sector		dB	14	14	15
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	16	20	21
Maximum Effective Power Per Port		Watts	250 W		
Cross Polar Isolation		dB	28		
Interband Isolation		dB	28		

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

B2

Frequency Range		MHz	1710-2170		
		MHz	1710-1880	1850-1990	1920-2170
Polarization		---	±45°		
Gain	Over all Tilts	dBi	16.5 ± 0.5	17.0 ± 0.1	16.7 ± 0.5
	Max Gain	dBi	17.0	17.1	17.2
Azimuth Beamwidth (3 dB)		degrees	67.8° ± 3.0°	67.0° ± 3.0°	67.3° ± 2.5°
Elevation Beamwidth (3 dB)		degrees	6.6° ± 0.5°	6.0° ± 0.1°	5.8° ± 0.5°
Electrical Downtilt		degrees	2-12°		
Impedance		Ohms	50Ω		
VSWR (Return Loss)		---	1.5:1 (-14 dB)		
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-150		
Front-to-Back Ratio, Total Power, ± 30°		dB	25	26	26
First Upper Side Lobe Suppression		dB	15	15	15
Cross Polar Discrimination Over Sector		dB	12	11	11
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	17	18	19
Maximum Effective Power Per Port		Watts	250 W		
Cross Polar Isolation		dB	28		
Interband Isolation		dB	28		

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ELECTRICAL SPECIFICATIONS

Y1

Frequency Range		MHz	2490-2690
Polarization		---	±45°
Gain	Over all Tilts	dBi	17.5 ± 0.5
	Max Gain	dBi	18.0
Azimuth Beamwidth (3 dB)		degrees	58.6° ± 3.5°
Elevation Beamwidth (3 dB)		degrees	4.8° ± 0.5°
Electrical Downtilt		degrees	2-12°
Impedance		Ohms	50Ω
VSWR (Return Loss)		---	1.5:1 (-14 dB)
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-150
Front-to-Back Ratio, Total Power, ± 30°		dB	25
First Upper Side Lobe Suppression		dB	13
Cross Polar Discrimination Over Sector		dB	11
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	22
Maximum Effective Power Per Port		Watts	250 W
Cross Polar Isolation		dB	28
Interband Isolation		dB	28

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ELECTRICAL SPECIFICATIONS

Y2

Frequency Range		MHz	2490-2690
Polarization		---	±45°
Gain	Over all Tilts	dBi	17.3 ± 0.5
	Max Gain	dBi	17.8
Azimuth Beamwidth (3 dB)		degrees	58.3° ± 4.0°
Elevation Beamwidth (3 dB)		degrees	4.8° ± 0.5°
Electrical Downtilt		degrees	2-12°
Impedance		Ohms	50Ω
VSWR (Return Loss)		---	1.5:1 (-14 dB)
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-150
Front-to-Back Ratio, Total Power, ± 30°		dB	25
First Upper Side Lobe Suppression		dB	14
Cross Polar Discrimination Over Sector		dB	10
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	20
Maximum Effective Power Per Port		Watts	250 W
Cross Polar Isolation		dB	28
Interband Isolation		dB	28

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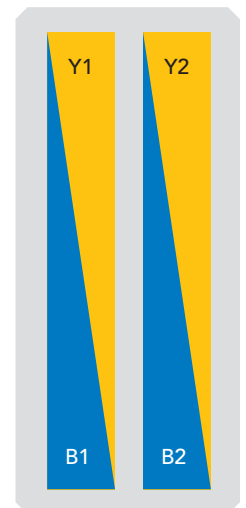
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BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ B1	1710-2170 MHz	1-2	(2x) 4.3-10 Female	B1	RFxxxxxxxxxx-B1
■ B2	1710-2170 MHz	3-4	(2x) 4.3-10 Female	B2	RFxxxxxxxxxx-B2
■ Y1	2490-2690 MHz	5-6	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
■ Y2	2490-2690 MHz	7-8	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y2



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

Length		mm (in)	1495 (58.9)
Width		mm (in)	350 (13.8)
Depth		mm (in)	200 (7.9)
Net Weight - Antenna Only		kg (lbs)	20.3 (44.8)
Net Weight - Mounting Hardware Only		kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	659 (148)
	Side	N (lbf)	342 (77)
	Rear	N (lbf)	373 (84)
Survival Wind Speed / Rated Wind Speed		km/h (mph)	200 (150)
Connector Type		--	(8x) 4.3-10 Female, (2x) AISG Connectors (1 Male, 1 Female) at Bottom
Radome Color		---	Light Grey RAL7035
Radome Material		---	Fiberglass
Lightning Protection		---	Direct Ground
Shipping	Packing Size (Length x Width x Depth)	mm (in)	1750 x 445 x 295 (68.9 x 17.5 x 11.6)
	Shipping Weight	kg (lbs)	29 (63.9)

ENVIRONMENTAL SPECIFICATIONS


Environmental Standard	---	ETS 300 019
Operating Temperature	degrees	-40° to +60° C (-40° to +140° F)
Product Environmental Compliance	---	Product is RoHS Compliant

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ACCESSORIES Accessories may be ordered separately unless otherwise indicated.

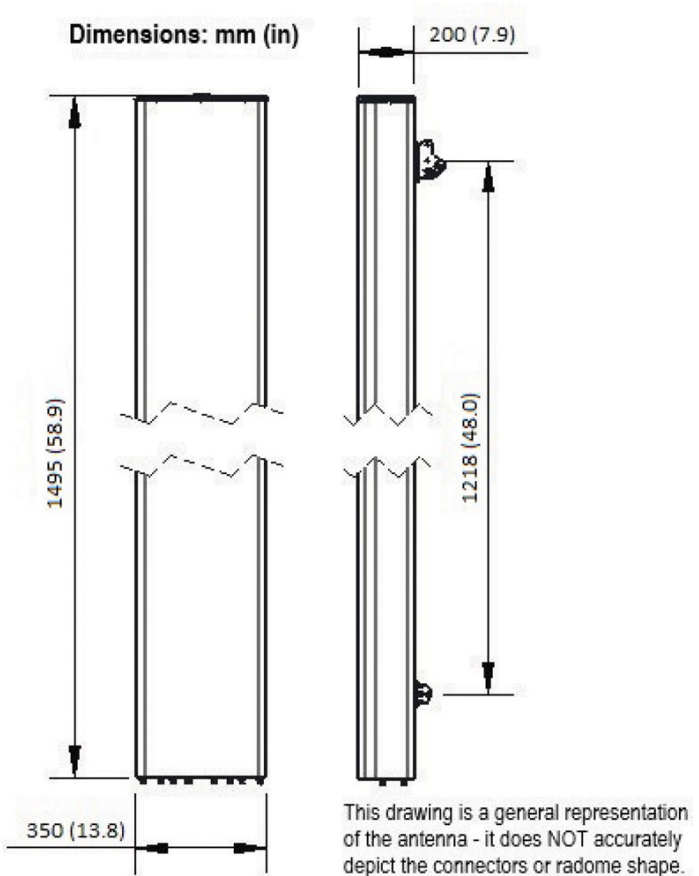
ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 50-110 mm (2.0-4.3 in) <i>Shipped with antenna</i>	APM50-B1	4.5 kg (9.9 lbs)

INSTALLATION Please read all installation notes before installing product.

	Always attach the antenna using all mounting points.
	Do not install antenna with the connectors facing upwards.

EXTERNAL DOCUMENT LINKS

[APM50 Mounting Kit Series Installation Instructions](#)



NOTES

Specifications follow BASTA guidelines.

For additional mounting information, please check **External Document Links**.

For Radiating Patterns: [Request pattern files](#)