

APXVBB26B_43-C-I20

Features

- 4 ports / 2 cross pol systems in low band (698-960 MHz)
- Supporting 4x4 MIMO
- Integrated and field replaceable SRET
- ACU HW version: 2.02
- Compliant with AISG v2.0 and 3GPP



PRODUCT OVERVIEW	Frequency Range (MHz)	698-960	
	Array	■ R1	■ R2
	Connector	1-2	3-4
		4 PORTS	
	Polarization	XPOL	
	Azimuth Beamwidth (avg)	65°	
	Electrical Downtilt	2-12°	
	Dimensions	2600 x 499 x 199 mm (102.4 x 19.6 x 7.8 in)	

ORDERING OPTIONS Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXVBB26B_43-C-I20	ACU-I20-B2 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	49 kg (108 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

■ R1

Frequency Range		MHz	698-960		
		MHz	698-806	790-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	15.6 ± 1.7	16.8 ± 0.3	16.9 ± 0.4
	Max Gain	dBi	17.3	17.1	17.3
Azimuth Beamwidth (3 dB)		degrees	65.3° ± 5.8°	59.4° ± 2.8°	59.7° ± 2.3°
Elevation Beamwidth (3 dB)		degrees	8.8° ± 0.7°	8.0° ± 0.5°	7.2° ± 0.4°
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	21.0	21.8	19.4
First Upper Side Lobe Suppression		dB	15.7	16.2	12.6
Cross Polar Discrimination Over Sector		dB	7.8	11.2	10.0
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	14.7	18.7	23.4
Maximum Effective Power Per Port		Watts	350 W		
Cross Polar Isolation		dB	27		
Interband Isolation		dB	27		

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ R2

Frequency Range		MHz	698-960		
		MHz	698-806	790-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	15.7 ± 1.4	16.8 ± 0.3	16.9 ± 0.4
	Max Gain	dBi	17.1	17.1	17.3
Azimuth Beamwidth (3 dB)		degrees	64.7° ± 5.3°	58.6° ± 3.5°	59.5° ± 3.2°
Elevation Beamwidth (3 dB)		degrees	8.7° ± 0.7°	7.9° ± 0.5°	7.1° ± 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	21.3	23.1	22.0
First Upper Side Lobe Suppression		dB	13.4	14.4	12.9
Cross Polar Discrimination Over Sector		dB	6.1	11.5	6.0
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	12.9	18.2	23.7
Maximum Effective Power Per Port		Watts	350 W		
Cross Polar Isolation		dB	27		
Interband Isolation		dB	27		

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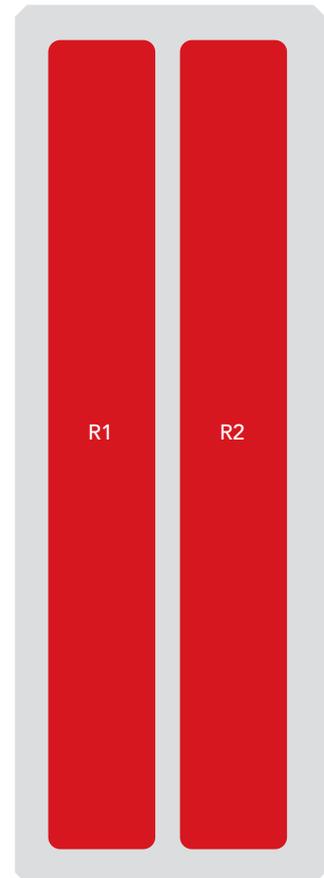
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BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ R1	698-960 MHz	1-2	(2x) 4.3-10 Female	R1	RFxxxxxxxxxx-R1
■ R2	698-960 MHz	3-4	(2x) 4.3-10 Female	R2	RFxxxxxxxxxx-R2



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

Length	mm (in)	2600 (102.4)
Width	mm (in)	499 (19.6)
Depth	mm (in)	199 (7.8)
Net Weight - Antenna Only	kg (lbs)	38 (83.8)
Net Weight - Mounting Hardware Only	kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 1515 (341)
	Side	N (lbf) 537 (121)
	Rear	N (lbf) 1704 (383)
Survival Wind Speed / Rated Wind Speed	km/h (mph)	200 (150)
Connector Type	--	(4x) 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) 2850 x 560 x 275 (112.2 x 22.0 x 10.8)
	Shipping Weight	kg (lbs) 49 (108)

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

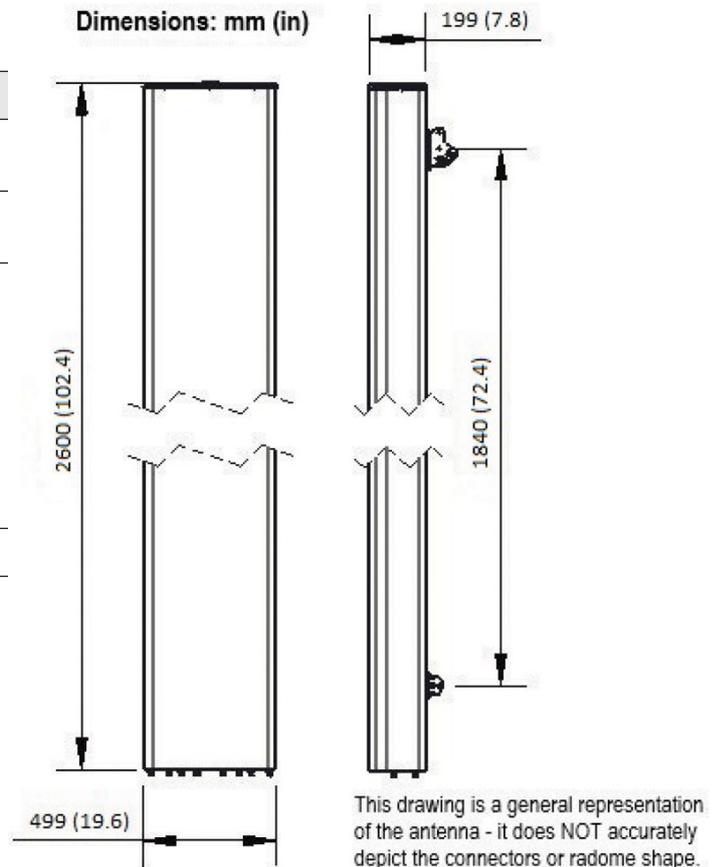
Please read all installation notes before installing product.



- 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](#)