

APXVBLL26B_43-C-I20 APXVBLL26B_43-A-I20

Features

- 2 ports / 1 cross pol system in low band (698-960 MHz)
- 4 ports / 2 cross pol systems in high band (1710-2690 MHz)
- Integrated and field replaceable SRET
- ACU HW version: 2.02
- Optional with Direct Pipe No Tilt mounting hardware (Model name suffix -A-I20)
- Compliant with AISG v2.0 and 3GPP



PRODUCT OVERVIEW	Frequency Range (MHz)	(1x) 698-960	(2x) 1710-2690	
	Array	■ R1	■ Y1	■ Y2
	Connector	1-2	3-4	5-6
		6 PORTS		
	Polarization	XPOL		
	Azimuth Beamwidth (avg)	65°	65°	65°
	Electrical Downtilt	2-11°	2-11°	
	Dimensions	2690 x 350 x 200 mm (105.9 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	MOUNTING HARDWARE WEIGHT
APXVBLL26B_43-C-I20	ACU-I20-B3 Internal Field Replaceable RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	45.0 kg (99.2 lbs)	4.5 kg (9.9 lbs)
APXVBLL26B_43-A-I20	ACU-I20-B3 Internal Field Replaceable RET Included	APM50-B1N Direct Pipe No Tilt Mounting Kit Included	50-110 mm (2.0-4.3 in)	43.9 kg (96.8 lbs)	3.4 kg (7.5 lbs)



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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	16.3 ± 0.5	17.0 ± 1.0	17.2 ± 0.5
	Max Gain	dBi	16.8	18.0	17.7
Azimuth Beamwidth (3 dB)	degrees	66.6° ± 1.8°	63.8° ± 2.5°	61.9° ± 1.0°	
Elevation Beamwidth (3 dB)	degrees	8.7° ± 0.5°	7.7° ± 1.0°	7.0° ± 0.1°	
Electrical Downtilt	degrees	2-11°			
Impedance	Ohms	50Ω			
VSWR (Return Loss)	---	1.5:1 (-14 dB)			
Passive Intermodulation	dBc	-150 (3rd Order for 2x20 W Carriers)			
Front-to-Back Ratio, Total Power, ± 30°	dB	24	25.7	25	
First Upper Side Lobe	dB	16	14	14	
Cross-Pol Over Sector	dB	13	11	12	
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)	dB	27	26	22	
Maximum Effective Power Per Port	Watts	350 W			
Cross Polar Isolation	dB	26			
Interband Isolation	dB	26			

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ Y1

Frequency Range	MHz	1710-2690					
	MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690	
Polarization	---	±45°					
Gain	Over all Tilts	dBi	16.4 ± 1.0	16.9 ± 0.5	17.6 ± 0.5	16.8 ± 0.5	16.5 ± 0.5
	Max Gain	dBi	17.4	17.4	18.1	17.3	17.0
Azimuth Beamwidth (3 dB)	degrees	66.9° ± 6.0°	67° ± 5°	66.3° ± 4.6°	70.6° ± 2°	65.8° ± 4.9°	
Elevation Beamwidth (3 dB)	degrees	6.5° ± 0.5°	6.2° ± 0.5°	5.8° ± 0.5°	5.1° ± 0.1°	4.8° ± 0.5°	
Electrical Downtilt	degrees	2-11°					
Impedance	Ohms	50Ω					
VSWR (Return Loss)	---	1.5:1 (-14 dB)					
Passive Intermodulation	dBc	-150 (3rd Order for 2x20 W Carriers)					
Front-to-Back Ratio, Total Power, ± 30°	dB	21	21	22	24.7	23	
First Upper Side Lobe	dB	18.9	18	18	18.3	15	
Cross-Pol Over Sector	dB	9	8	8	7.8	5	
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)	dB	21	24	19.9	14.6	15	
Maximum Effective Power Per Port	Watts	250 W					
Cross Polar Isolation	dB	26					
Interband Isolation	dB	26					

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ELECTRICAL SPECIFICATIONS

■ Y2

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	16.3 ± 1.0	16.9 ± 0.5	17.5 ± 0.5	16.6 ± 0.5	16.3 ± 0.5
	Max Gain	dBi	17.3	17.4	18.0	17.1	16.8
Azimuth Beamwidth (3 dB)		degrees	66.8° ± 5.1°	66.5° ± 4°	65.4° ± 5°	70.6° ± 2.5°	64.4° ± 5.4°
Elevation Beamwidth (3 dB)		degrees	6.5° ± 0.5°	6.1° ± 0.5°	5.7° ± 0.5°	5° ± 0.5°	4.7° ± 0.5°
Electrical Downtilt		degrees	2-11°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation		dBc	-150 (3rd Order for 2x20 W Carriers)				
Front-to-Back Ratio, Total Power, ± 30°		dB	19	21	23	24	22
First Upper Side Lobe		dB	16	16	16.3	15	15
Cross-Pol Over Sector		dB	7	7	8	5	7
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	18	19	19.3	14	15
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

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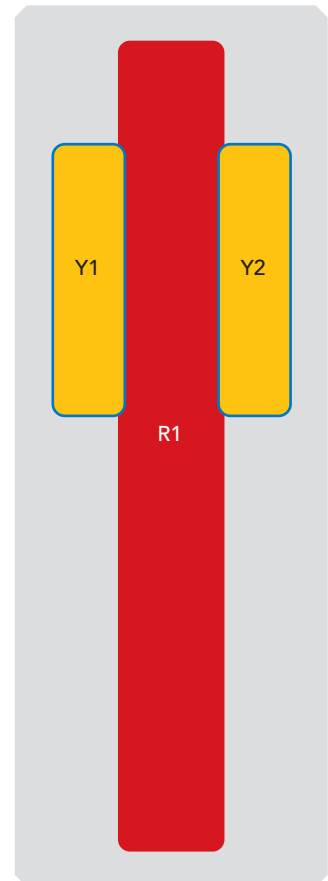
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BOTTOM VIEW - LABELING



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
■ Y1	1710-2690 MHz	3-4	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
■ Y2	1710-2690 MHz	5-6	(2x) 4.3-10 Female	Y2	RFxxxxxxxxxx-Y2



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

Length	mm (in)	2690 (105.9)
Width	mm (in)	350 (13.8)
Depth	mm (in)	200 (7.9)
Net Weight - Antenna Only	kg (lbs)	31.5 (69.4)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 1207 (271)
	Side	N (lbf) 593 (133)
	Rear	N (lbf) 692 (156)
Survival Wind Speed	km/h (mph)	200 (124)
Connector Type	--	(6x) 4.3-10 Female, (2x) AISG Connectors (1 Male, 1 Female) at Bottom
Radome Color	---	Light Grey RAL7035
Radome Material	---	Fiberglass
Lightning Protection	---	DC Ground
Shipping	Packing Size (Length x Width x Depth)	mm (in) 2940 x 445 x 295 (115.7 x 17.5 x 11.6)

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>Refer to ordering options</i>	APM50-B1	4.5 kg (9.9 lbs)
Direct Pipe No Tilt Bracket Kit for Pole Diameter 50-110 mm (2.0-4.3 in) <i>Refer to ordering options</i>	APM50-B1N	3.4 kg (7.5 lbs)

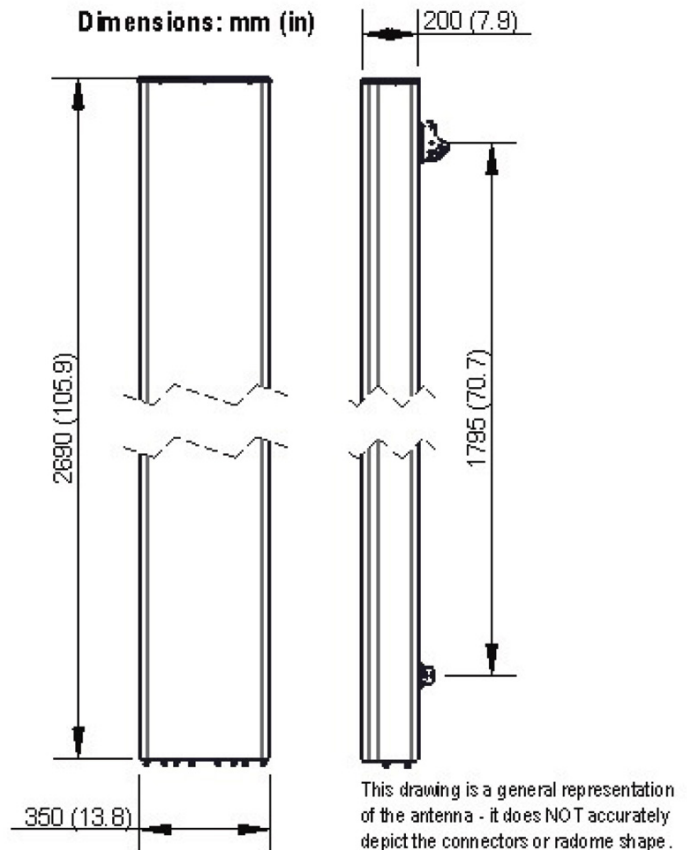
INSTALLATION Please read all installation notes before installing product.



- 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](#)

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