

APXVLLL08B_43-C-A20

Features

- 6 ports / 3 cross pol systems in high band (1710-2690 MHz)
- External RET
- Compliant with AISG v2.0 and 3GPP



PRODUCT OVERVIEW	Frequency Range (MHz)	(3x) 1710-2690		
	Array	■ Y1	■ Y2	■ Y3
	Connector	1-2	3-4	5-6
		6 PORTS		
	Polarization	XPOL		
	Azimuth Beamwidth (avg)	65°		
	Electrical Downtilt	2-14°		
	Dimensions	750 x 320 x 123 mm (29.5 x 12.6 x 4.8 in)		

ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXVLLL08B_43-C-A20	ACU-A20-J External RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	15.3 kg (33.7 lbs)

APXVLLL08B_43-C-A20

ELECTRICAL SPECIFICATIONS

Y1

Frequency Range		MHz	1710-2690			
		MHz	1710-1880	1920-2170	2300-2400	2500-2690
Polarization		---	±45°			
Gain	Over all Tilts	dBi	11 ± 1	11.8 ± 0.5	11.8 ± 0.5	12.2 ± 1
	Max Gain	dBi	12	12.3	12.3	13.2
Azimuth Beamwidth (3 dB)		degrees	69.7° ± 7.3°	67.1° ± 3.4°	64.4° ± 5.5°	57.1° ± 7.4°
Elevation Beamwidth (3 dB)		degrees	31.2° ± 3.2°	25.5° ± 3.6°	21.6° ± 2.7°	19.1° ± 2.7°
Electrical Downtilt		degrees	2-14°			
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	20	20	17.7	17.3
First Upper Side Lobe Suppression		dB	17	12.5	11.9	10
Cross Polar Discrimination Over Sector		dB	14	12.4	11	8.5
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	21.3	19	16.7	18
Maximum Effective Power Per Port		Watts	250 W			
Cross Polar Isolation		dB	26			
Interband Isolation		dB	26			

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

Y2

Frequency Range		MHz	1710-2690			
		MHz	1710-1880	1920-2170	2300-2400	2500-2690
Polarization		---	±45°			
Gain	Over all Tilts	dBi	10.3 ± 0.9	11.4 ± 0.8	11.4 ± 0.5	12 ± 1
	Max Gain	dBi	11.2	12.2	11.9	13
Azimuth Beamwidth (3 dB)		degrees	75.1° ± 6°	67.8° ± 6.8°	66.1° ± 4°	58.1° ± 6.8°
Elevation Beamwidth (3 dB)		degrees	30.1° ± 3°	26.1° ± 2.8°	21.9° ± 1.9°	19.4° ± 1.5°
Electrical Downtilt		degrees	2-14°			
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	18.8	20	17.9	16
First Upper Side Lobe Suppression		dB	17.5	12.6	14.7	9.5
Cross Polar Discrimination Over Sector		dB	9.4	7	9	9.8
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	20.5	20	21.7	19
Maximum Effective Power Per Port		Watts	250 W			
Cross Polar Isolation		dB	26			
Interband Isolation		dB	26			

Specifications follow BASTA guidelines.

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.

APXVLLL08B_43-C-A20

ELECTRICAL SPECIFICATIONS

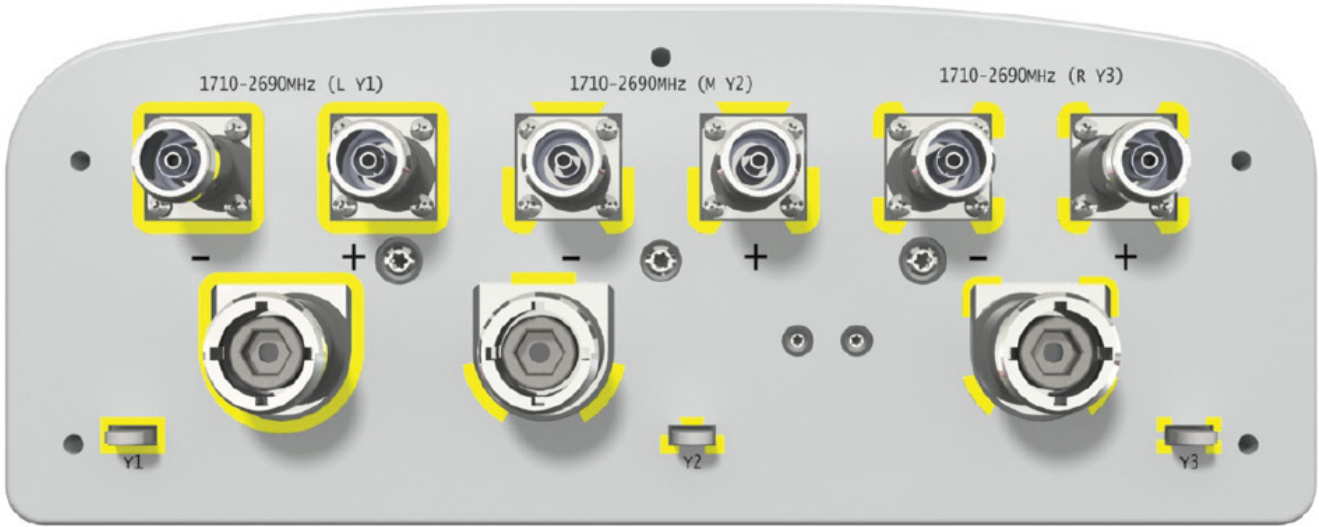
■ Y3

Frequency Range		MHz	1710-2690			
		MHz	1710-1880	1920-2170	2300-2400	2500-2690
Polarization		---	±45°			
Gain	Over all Tilts	dBi	10.9 ± 0.5	11.3 ± 0.5	11.6 ± 0.8	11.9 ± 1
	Max Gain	dBi	11.4	11.8	12.4	12.9
Azimuth Beamwidth (3 dB)		degrees	66.4° ± 5.6°	67.4° ± 4.2°	66.6° ± 4.8°	58.5° ± 4.5°
Elevation Beamwidth (3 dB)		degrees	29.8° ± 2°	26.4° ± 3.6°	22.1° ± 3.4°	19.7° ± 2°
Electrical Downtilt		degrees	2-14°			
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	18.8	19.1	17	17
First Upper Side Lobe Suppression		dB	17	13.5	13	10
Cross Polar Discrimination Over Sector		dB	13	11.6	7.7	9.7
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	19	20.9	17.4	17
Maximum Effective Power Per Port		Watts	250 W			
Cross Polar Isolation		dB	26			
Interband Isolation		dB	26			

Specifications follow BASTA guidelines.

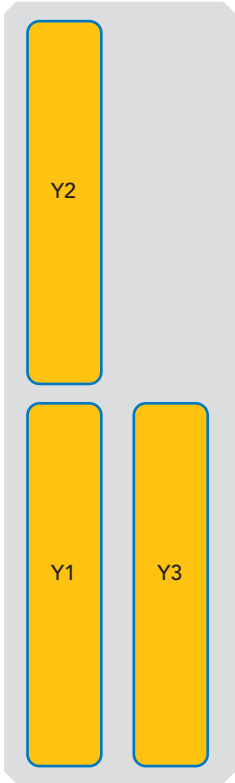
APXVLLL08B_43-C-A20

BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
■ Y1	1710-2690 MHz	1-2	(2x) 4.3-10 Female
■ Y2	1710-2690 MHz	3-4	(2x) 4.3-10 Female
■ Y3	1710-2690 MHz	5-6	(2x) 4.3-10 Female



The illustration is not shown to scale.

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.

APXVLLL08B_43-C-A20

MECHANICAL SPECIFICATIONS

Length		mm (in)	750 (29.5)
Width		mm (in)	320 (12.6)
Depth		mm (in)	123 (4.8)
Net Weight - Antenna Only		kg (lbs)	8.1 (17.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	415 (93)
	Side	N (lbf)	141 (32)
	Rear	N (lbf)	451 (101)
Survival Wind Speed / Rated Wind Speed		km/h (mph)	200 (150)
Connector Type		--	(6x) 4.3-10 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)	1000 x 445 x 245 (39.4 x 17.5 x 9.6)
	Shipping Weight	kg (lbs)	15.3 (33.7)

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

APXVLLL08B_43-C-A20


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)

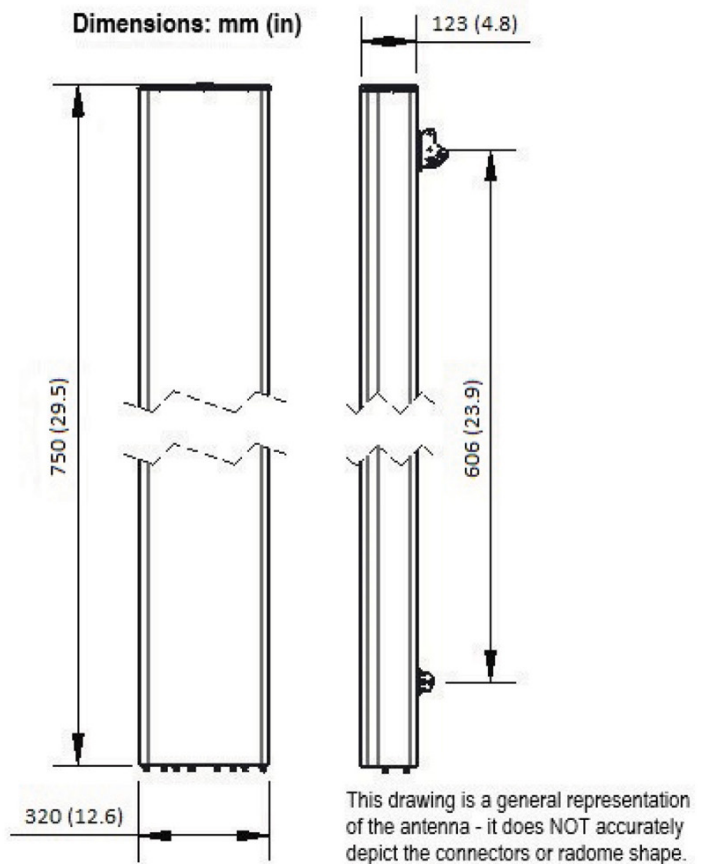
INSTALLATION

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](#)