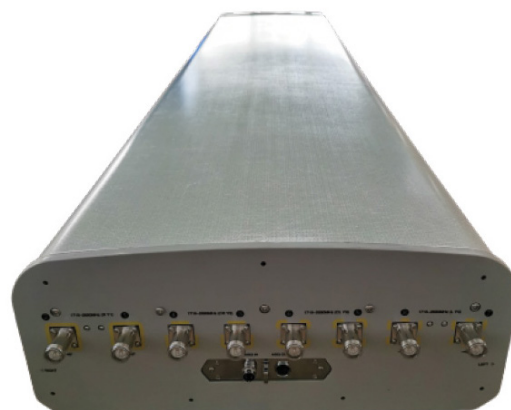


APXVLLLLL21B_43-C-I20

Features

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



PRODUCT OVERVIEW	Frequency Range (MHz)	(4x) 1710-2690			
	Array	■ Y1	■ Y2	■ Y3	■ Y4
	Connector	1-2	3-4	5-6	7-8
		8 PORTS			
	Polarization	XPOL			
	Azimuth Beamwidth (avg)	65°			
	Electrical Downtilt	0-6°			
	Dimensions	2085 x 499 x 199 mm (82.1 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
APXVLLLLL21B_43-C-I20	ACU-I20-B4 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	43.2 kg (95.2 lbs)



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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	17.9 ± 0.5	18.6 ± 0.5	19.6 ± 0.5	19.2 ± 0.5	18.9 ± 1.0
	Max Gain	dBi	18.4	19.1	20.1	19.7	19.9
Azimuth Beamwidth (3 dB)		degrees	65.6° ± 4.3°	62.0° ± 4.0°	62.6° ± 3.0°	62.5° ± 4.3°	60.2° ± 5.4°
Elevation Beamwidth (3 dB)		degrees	5.0° ± 0.1°	4.9° ± 0.5°	4.2° ± 0.5°	4.0° ± 0.1°	3.7° ± 0.5°
Electrical Downtilt		degrees	0-6°				
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	24.2	24.5	25	22	19
First Upper Side Lobe Suppression		dB	24.9	22.6	14.7	15.0	9.7
Cross Polar Discrimination Over Sector		dB	15	14.2	16	15.4	11
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	25.6	27.5	21.8	23.0	23.5
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

Specifications follow BASTA guidelines.

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	18.0 ± 1.0	18.7 ± 0.5	19.7 ± 0.5	19.5 ± 0.5	19.2 ± 0.5
	Max Gain	dBi	19.0	19.2	20.2	20.0	19.7
Azimuth Beamwidth (3 dB)		degrees	65.7° ± 7.3°	56.9° ± 4.8°	52.3° ± 4.9°	63.0° ± 3.2°	60.0° ± 5.3°
Elevation Beamwidth (3 dB)		degrees	5.0° ± 0.1°	4.5° ± 0.5°	4.0° ± 0.1°	3.9° ± 0.2°	3.4° ± 0.5°
Electrical Downtilt		degrees	0-6°				
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	25.6	26	22.6	21
First Upper Side Lobe Suppression		dB	22	22	18	16.8	14
Cross Polar Discrimination Over Sector		dB	18	18	16.8	15.7	9.9
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	24.9	26.0	22.2	20.8	18.4
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

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ELECTRICAL SPECIFICATIONS

Y3

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	18.1 ± 1.0	18.9 ± 0.5	19.7 ± 0.5	19.3 ± 0.5	18.9 ± 0.5
	Max Gain	dBi	19.1	19.4	20.2	19.8	19.4
Azimuth Beamwidth (3 dB)		degrees	65.1° ± 7.5°	56.6° ± 5.0°	52.9° ± 5.3°	62.3° ± 3.2°	60.4° ± 4.5°
Elevation Beamwidth (3 dB)		degrees	5.0° ± 0.1°	4.7° ± 0.5°	4.1° ± 0.5°	3.9° ± 0.2°	3.4° ± 0.5°
Electrical Downtilt		degrees	0-6°				
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	25.9	26	26	22.8	23
First Upper Side Lobe Suppression		dB	21.1	19.1	16.3	14.9	12.0
Cross Polar Discrimination Over Sector		dB	18.8	17.3	17	15	9
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	24	26.8	23	21	18
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

Y4

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	18.0 ± 0.8	18.7 ± 0.5	19.6 ± 0.5	19.3 ± 0.5	18.9 ± 0.5
	Max Gain	dBi	18.8	19.2	20.1	19.8	19.4
Azimuth Beamwidth (3 dB)		degrees	65.4° ± 4.1°	62.9° ± 4.0°	62.7° ± 3.4°	63.5° ± 3.4°	60.7° ± 6.0°
Elevation Beamwidth (3 dB)		degrees	5.1° ± 0.1°	4.9° ± 0.5°	4.2° ± 0.5°	4.0° ± 0.1°	3.8° ± 0.5°
Electrical Downtilt		degrees	0-6°				
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	24	25	25	24	22
First Upper Side Lobe Suppression		dB	22.5	22	14.5	13.9	10
Cross Polar Discrimination Over Sector		dB	16	15.7	15	15.1	12.2
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	25	25.7	23	25.7	21
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

Specifications follow BASTA guidelines.

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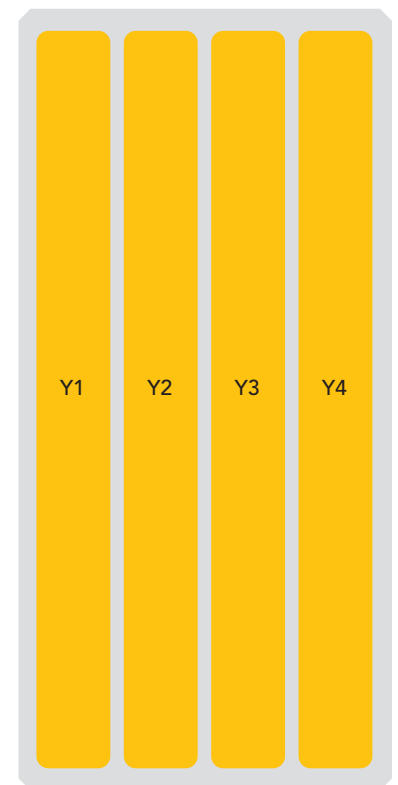
APXVLLLLL21B_43-C-I20

BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ Y1	1710-2690 MHz	1-2	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
■ Y2	1710-2690 MHz	3-4	(2x) 4.3-10 Female	Y2	RFxxxxxxxxxx-Y2
■ Y3	1710-2690 MHz	5-6	(2x) 4.3-10 Female	Y3	RFxxxxxxxxxx-Y3
■ Y4	1710-2690 MHz	7-8	(2x) 4.3-10 Female	Y4	RFxxxxxxxxxx-Y4



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

Length		mm (in)	2085 (82.1)
Width		mm (in)	499 (19.6)
Depth		mm (in)	199 (7.8)
Net Weight - Antenna Only		kg (lbs)	35 (77.2)
Net Weight - Mounting Hardware Only		kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	1281 (288)
	Side	N (lbf)	438 (98)
	Rear	N (lbf)	1352 (304)
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)	2330 x 595 x 295 (91.7 x 23.4 x 11.6)
	Shipping Weight	kg (lbs)	43.2 (95.2)

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.

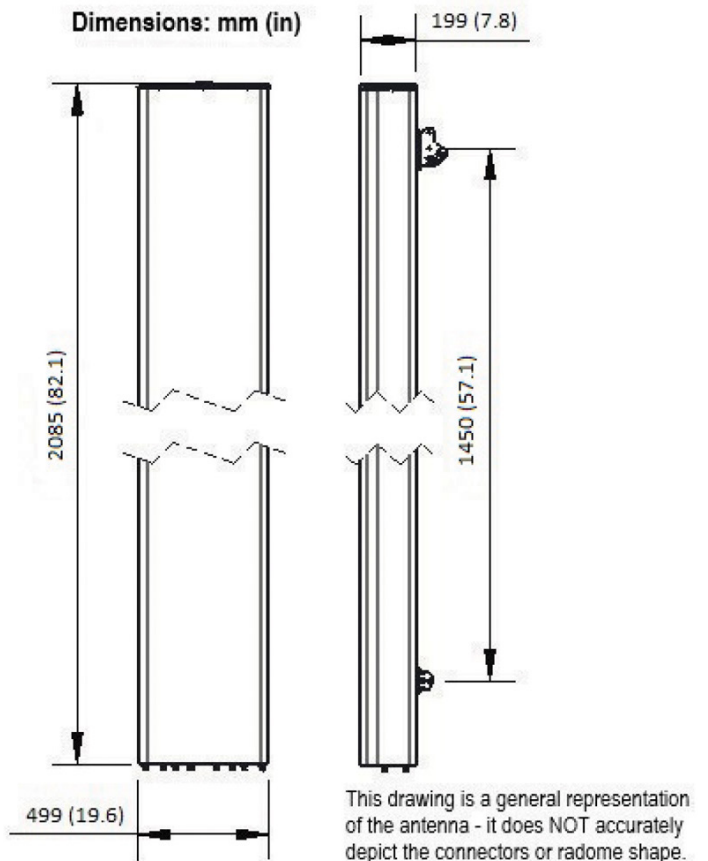


Always attach the antenna using all mounting points.

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](#)