

APXVLL15B_43-C-I20

Features

- 4 ports / 2 cross pol system 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)	(2x) 1710-2690	
	Array	■ Y1	■ Y2
	Connector	1-2	3-4
		4 PORTS	
	Polarization	XPOL	
	Azimuth Beamwidth (avg)	65°	
	Electrical Downtilt	2-12°	
Dimensions	1495 x 320 x 123 mm (58.9 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
APXVLL15B_43-C-I20	ACU-I20-B2 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	22.7 kg (50 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.

APXVLL15B_43-C-I20

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	16.9 ± 0.4	17.3 ± 0.3	17.5 ± 0.3	17.7 ± 0.4	18.0 ± 0.5
	Max Gain	dBi	17.3	17.6	17.8	18.1	18.5
Azimuth Beamwidth (3 dB)		degrees	69.2° ± 3.5°	70.5° ± 4.1°	70.6° ± 2.7°	67.7° ± 1.9°	61.9° ± 4.3°
Elevation Beamwidth (3 dB)		degrees	6.8° ± 0.4°	6.2° ± 0.3°	5.9° ± 0.4°	5.3° ± 0.2°	4.8° ± 0.3°
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	-153				
Front-to-Back Ratio, Total Power, ± 30°		dB	22.4	22.8	23.1	23.3	21.4
First Upper Side Lobe Suppression		dB	18.6	18.7	18.7	18.2	15.9
Cross Polar Discrimination Over Sector		dB	9.3	11.1	11.9	12.4	9.8
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	16.5	18.5	19.1	22.1	24.0
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28	28	28	28	28
Interband Isolation		dB	28	28	28	28	28

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ Y2

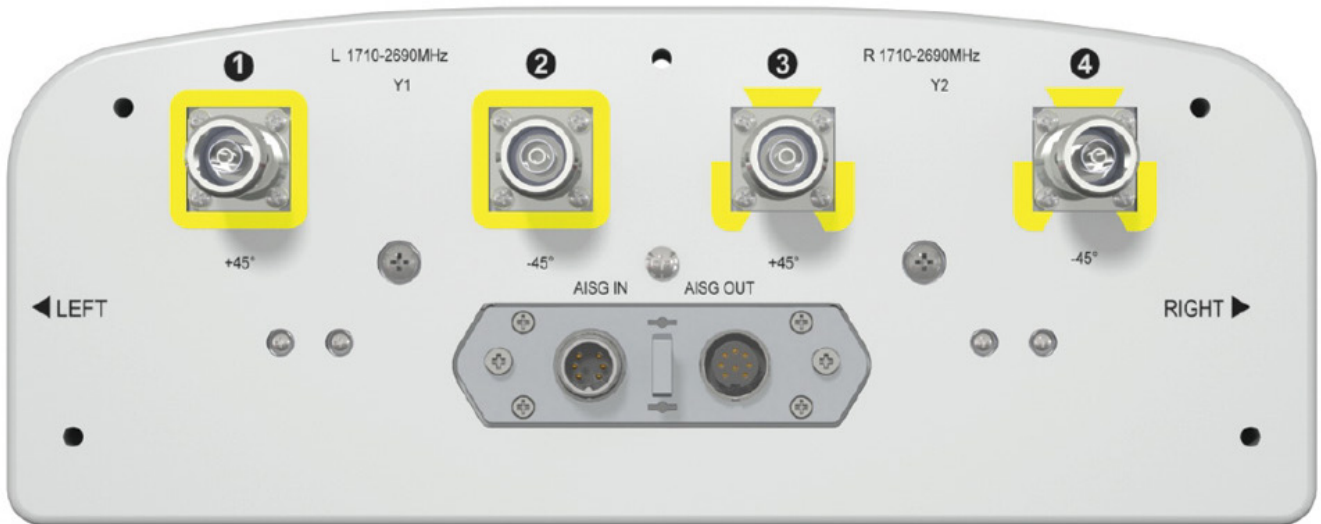
Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	16.9 ± 0.4	17.3 ± 0.3	17.5 ± 0.3	17.7 ± 0.4	18.1 ± 0.4
	Max Gain	dBi	17.3	17.6	17.8	18.1	18.5
Azimuth Beamwidth (3 dB)		degrees	69.1° ± 2.8°	70.2° ± 3.7°	70.4° ± 2.5°	67.9° ± 1.6°	61.3° ± 4.1°
Elevation Beamwidth (3 dB)		degrees	6.8° ± 0.4°	6.2° ± 0.3°	5.9° ± 0.4°	5.2° ± 0.2°	4.8° ± 0.3°
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	-153				
Front-to-Back Ratio, Total Power, ± 30°		dB	22.9	22.6	22.7	23.0	20.2
First Upper Side Lobe Suppression		dB	18.4	18.8	19.0	19.4	17.1
Cross Polar Discrimination Over Sector		dB	10.5	11.2	12.1	12.0	10.5
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	15.6	17.0	17.6	19.7	22.2
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28	28	28	28	28
Interband Isolation		dB	28	28	28	28	28

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.

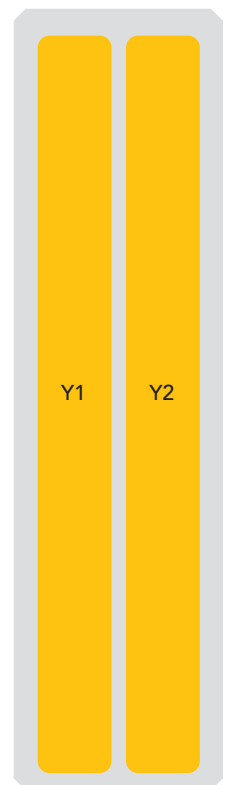
APXVLL15B_43-C-I20

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-2Y1
■ Y2	1710-2690 MHz	3-4	(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.

APXVLL15B_43-C-I20

MECHANICAL SPECIFICATIONS

Length		mm (in)	1495 (58.9)
Width		mm (in)	320 (12.6)
Depth		mm (in)	123 (4.8)
Net Weight - Antenna Only		kg (lbs)	15.3 (33.7)
Net Weight - Mounting Hardware Only		kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	588 (132)
	Side	N (lbf)	226 (51)
	Rear	N (lbf)	700 (157)
Survival Wind Speed		km/h (mph)	200 (124)
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)	1766 x 445 x 210 (69.5 x 17.5 x 8.3)
	Shipping Weight	kg (lbs)	22.7 (50)

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

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.

APXVLL15B_43-C-I20

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)

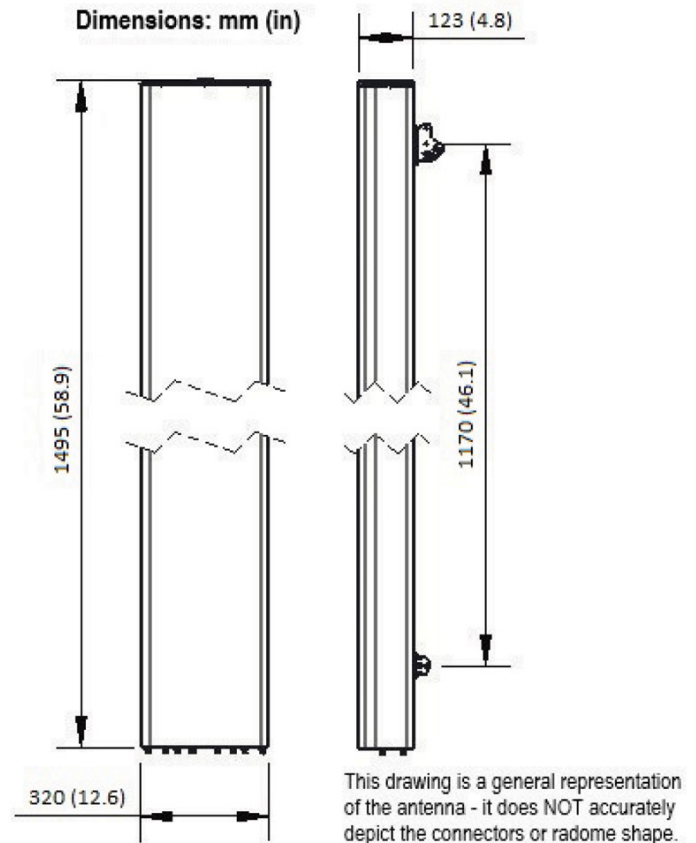
INSTALLATION Please read all installation notes before installing product.



- 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](#)

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.