

APXVBL15H_43-C-I20

Features

- 2 ports / 1 cross pol system in low band (694-960 MHz)
- 2 ports / 1 cross pol system in high band (1695-2690 MHz)
- Integrated and field replaceable SRET
- ACU HW version -HRLS200608H1.00
- Compliant with AISG v2.0 and 3GPP



PRODUCT OVERVIEW	Frequency Range (MHz)	694-960	1695-2690
	Array	■ R1	■ Y1
	Connector	1-2	3-4
		4 PORTS	
	Polarization	XPOL	
	Azimuth Beamwidth (avg)	65°	65°
	Electrical Downtilt	2-14°	2-12°
	Dimensions	1498 x 398 x 158 mm (59.0 x 15.7 x 6.2 in)	

ORDERING OPTIONS Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXVBL15H_43-C-I20	ACU-I20-H12I Internal RET Included	APM50-H1 Beam Tilt Kit Included	50-125 mm (2.0-4.9 in)	25.2 kg (55.5 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.

APXVBL15H_43-C-I20

ELECTRICAL SPECIFICATIONS

■ R1

Frequency Range		MHz	694-960		
		MHz	694-806	790-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	14.5 ± 0.7	15.2 ± 0.4	15.7 ± 0.3
	Max Gain	dBi	15.2	15.6	16.0
Azimuth Beamwidth (3 dB)		degrees	65.7° ± 3.4°	62.4° ± 1.7°	59.7° ± 1.9°
Elevation Beamwidth (3 dB)		degrees	15.2° ± 1.4°	13.4° ± 0.7°	12.5° ± 0.7°
Electrical Downtilt		degrees	2-14°		
Impedance		Ohms	50Ω		
VSWR (Return Loss)		---	1.5:1 (-14 dB)		
Passive Intermodulation		dBc	-153 (3rd Order for 2x20 W Carriers)		
Front-to-Back Ratio, Total Power, ± 30°		dB	21.7	24.3	24.9
First Upper Side Lobe Suppression		dB	14.8	15	17.1
Cross Polar Discrimination Over Sector		dB	6.2	6.9	5
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	28	27.9	30.8
Maximum Effective Power Per Port		Watts	300 W		
Cross Polar Isolation		dB	28		
Interband Isolation		dB	28		

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ Y1

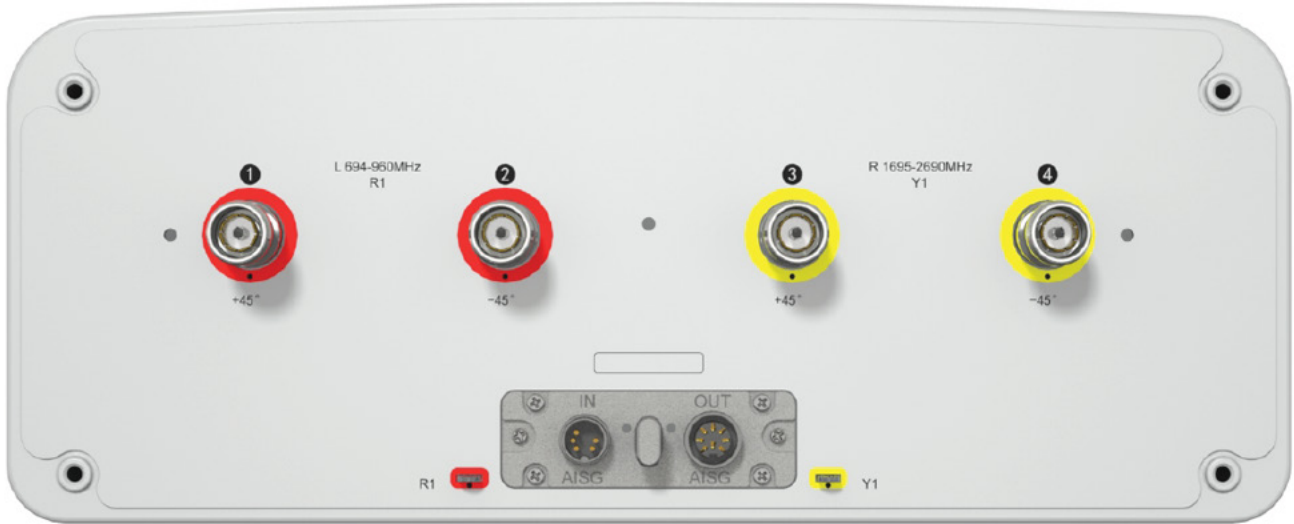
Frequency Range		MHz	1695-2690				
		MHz	1695-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	16.4 ± 0.5	17.1 ± 0.4	17.3 ± 0.4	17.8 ± 0.3	18.3 ± 0.7
	Max Gain	dBi	16.9	17.5	17.7	18.1	19.0
Azimuth Beamwidth (3 dB)		degrees	72.7° ± 5.3°	67.0° ± 3.7°	68.0° ± 3.8°	67.0° ± 4.4°	60.5° ± 5.5°
Elevation Beamwidth (3 dB)		degrees	6.3° ± 0.4°	5.8° ± 0.3°	5.5° ± 0.4°	4.9° ± 0.2°	4.5° ± 0.3°
Electrical Downtilt		degrees	2-12°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation		dBc	-153 (3rd Order for 2x20 W Carriers)				
Front-to-Back Ratio, Total Power, ± 30°		dB	24.2	26.4	26.1	26.0	22.2
First Upper Side Lobe Suppression		dB	17.3	19.1	18.9	20.3	19.9
Cross Polar Discrimination Over Sector		dB	9.9	9.1	8.9	14.6	9.4
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	28.1	29	26.9	24	23.8
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	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.

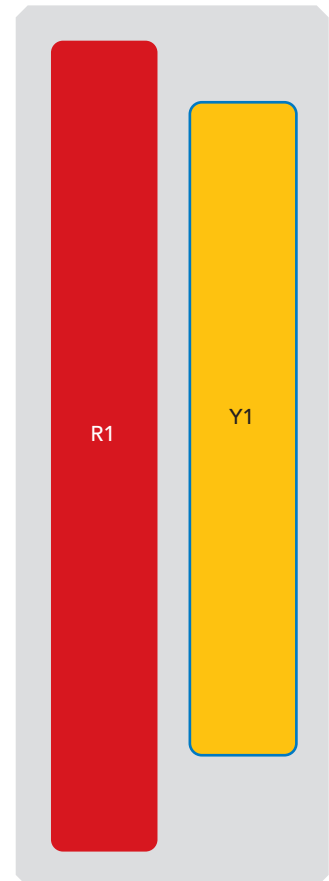
APXVBL15H_43-C-I20

BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ R1	694-960 MHz	1-2	(2x) 4.3-10 Female	R1	RFxxxxxxxxxx-R1
■ Y1	1695-2690 MHz	3-4	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1



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.

APXVBL15H_43-C-I20

MECHANICAL SPECIFICATIONS

Length	mm (in)	1498 (59.0)
Width	mm (in)	398 (15.7)
Depth	mm (in)	158 (6.2)
Net Weight - Antenna Only	kg (lbs)	18 (39.7)
Net Weight - Mounting Hardware Only	kg (lbs)	4 (8.8)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 399 (90)
	Side	N (lbf) 345 (78)
	Rear	N (lbf) 463 (104)
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	---	DC Ground
Shipping	Packing Size (Length x Width x Depth)	mm (in) 1678 x 493 x 278 (66.1 x 19.4 x 10.9)
	Shipping Weight	kg (lbs) 25.2 (55.5)

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

APXVBL15H_43-C-I20


ACCESSORIES

Accessories may be ordered separately unless otherwise indicated.

ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 50-125 mm (2.0-4.9 in) <i>Shipped with antenna</i>	APM50-H1	4 kg (8.8 lbs)

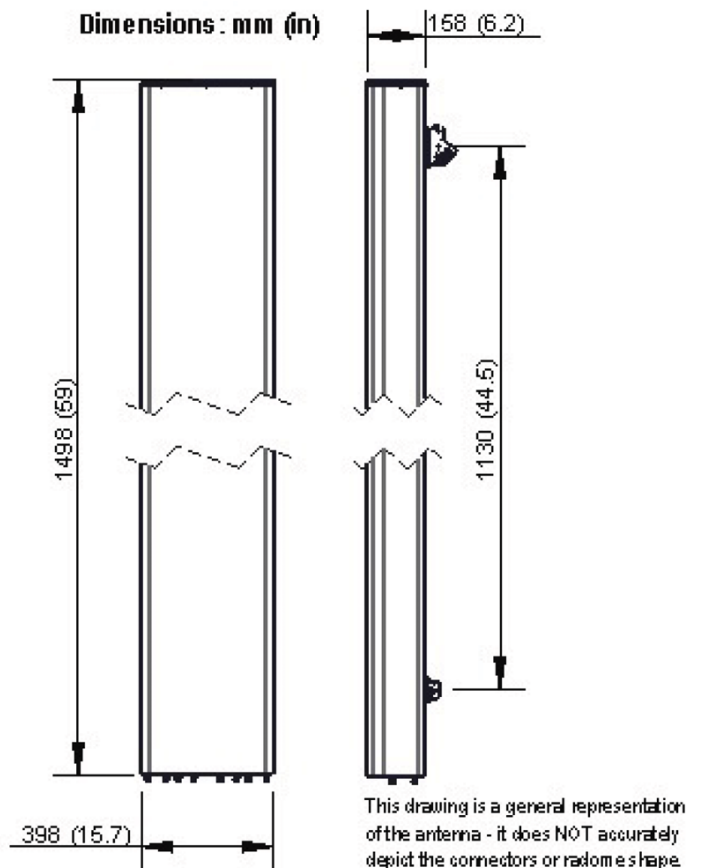
INSTALLATION

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](#)