

APXVBLL15H_43-C-I20

APXVBLL15H_43-A-I20

Features

- 2 ports / 1 cross pol system in low band (694-960 MHz)
- 4 ports / 2 cross pol systems in high band (1695-2690 MHz)
- Integrated and field replaceable SRET
- ACU HW version -HRLS200608H1.00
- 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) 694-960	(2x) 1695-2690	
	Array	<div><div></div> R1</div>	<div><div></div> Y1</div>	<div><div></div> Y2</div>
	Connector	1-2	3-4	5-6
		6 PORTS		
	Polarization	XPOL		
	Azimuth Beamwidth (avg)	65°	65°	65°
	Electrical Downtilt	2-14°	2-12°	
	Dimensions	1498 x 398 x 158 mm (59 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	MOUNTING HARDWARE WEIGHT
APXVBLL15H_43-C-I20	ACU-I20-H13 Internal Field Replaceable RET Included	APM50-H1 Beam Tilt Kit Included	50-125 mm (2.0-4.9 in)	27.5 kg (60.6 lbs)	4.0 kg (8.8 lbs)
APXVBLL15H_43-A-I20	ACU-I20-H13 Internal Field Replaceable RET Included	APM50-H1N Direct Pipe No Tilt Mounting Kit Included	50-125 mm (2.0-4.9 in)	26.5 kg (58.4 lbs)	3.0 kg (6.6 lbs)

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ELECTRICAL SPECIFICATIONS

■ R1

Frequency Range		MHz	694-960		
		MHz	694-806	790-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	14.2 ± 0.5	14.8 ± 0.5	15.1 ± 0.5
	Max Gain	dBi	14.7	15.3	15.6
Azimuth Beamwidth (3 dB)		degrees	68.7° ± 2.0°	65.9° ± 2.5°	62.9° ± 1.3°
Elevation Beamwidth (3 dB)		degrees	15.1° ± 1.0°	13.4° ± 0.5°	12.6° ± 0.5°
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	26	25	24.3
First Upper Side Lobe Suppression		dB	17	17	18
Cross Polar Discrimination Over Sector		dB	8	8	7
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	20	21	24
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	16.8 ± 0.5	16.9 ± 1.0	17.5 ± 0.5	18.0 ± 0.1
	Max Gain	dBi	16.9	17.3	17.9	18.0	18.1
Azimuth Beamwidth (3 dB)		degrees	69.0° ± 5.5°	67.3° ± 4.0°	67.0° ± 5.0°	63.3° ± 2.5°	59.8° ± 5.1°
Elevation Beamwidth (3 dB)		degrees	6.3° ± 0.5°	6.0° ± 0.1°	5.5° ± 0.5°	5.0° ± 0.1°	4.7° ± 0.5°
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	28	26	23	20.2
First Upper Side Lobe Suppression		dB	18	21	21	22.9	19
Cross Polar Discrimination Over Sector		dB	13	10	10	13	7
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	25.4	23	23	26	20.9
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.

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ELECTRICAL SPECIFICATIONS

■ Y2

Frequency Range		MHz	1695-2690				
		MHz	1695-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	16.3 ± 0.5	16.7 ± 0.5	16.9 ± 0.5	17.1 ± 0.4	17.8 ± 0.5
	Max Gain	dBi	16.8	17.2	17.4	17.5	18.3
Azimuth Beamwidth (3 dB)		degrees	69.1° ± 4.0°	68.0° ± 4.0°	66.8° ± 5.5°	63.6° ± 2.6°	61.0° ± 4.5°
Elevation Beamwidth (3 dB)		degrees	6.3° ± 0.5°	6.0° ± 0.1°	5.5° ± 0.5°	5.0° ± 0.1°	4.7° ± 0.5°
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	23	25	24	22	20
First Upper Side Lobe Suppression		dB	17.4	19	20	19.3	19
Cross Polar Discrimination Over Sector		dB	8	9	8.4	9	3
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	21	21.6	24	24	27
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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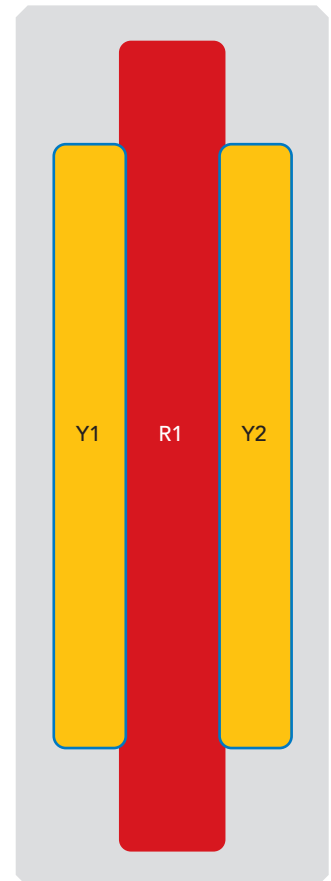
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BOTTOM VIEW - LABELING



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
■ Y2	1695-2690 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)	1498 (59)
Width		mm (in)	398 (15.7)
Depth		mm (in)	158 (6.2)
Net Weight - Antenna Only		kg (lbs)	20.2 (44.5)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	381 (86)
	Side	N (lbf)	317 (71)
	Rear	N (lbf)	452 (102)
Survival Wind Speed / Rated Wind Speed		km/h (mph)	200 (150)
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)	1698 x 493 x 278 (66.8 x 19.4 x 10.9)

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 50-125 mm (2.0-4.9 in) <i>Refer to ordering options</i>	APM50-H1	4.0 kg (8.8 lbs)
Direct Pipe No Tilt Bracket Kit for Pole Diameter 50-125 mm (2.0-4.9 in) <i>Refer to ordering options</i>	APM50-H1N	3.0 kg (6.6 lbs)

INSTALLATION Please read all installation notes before installing product.

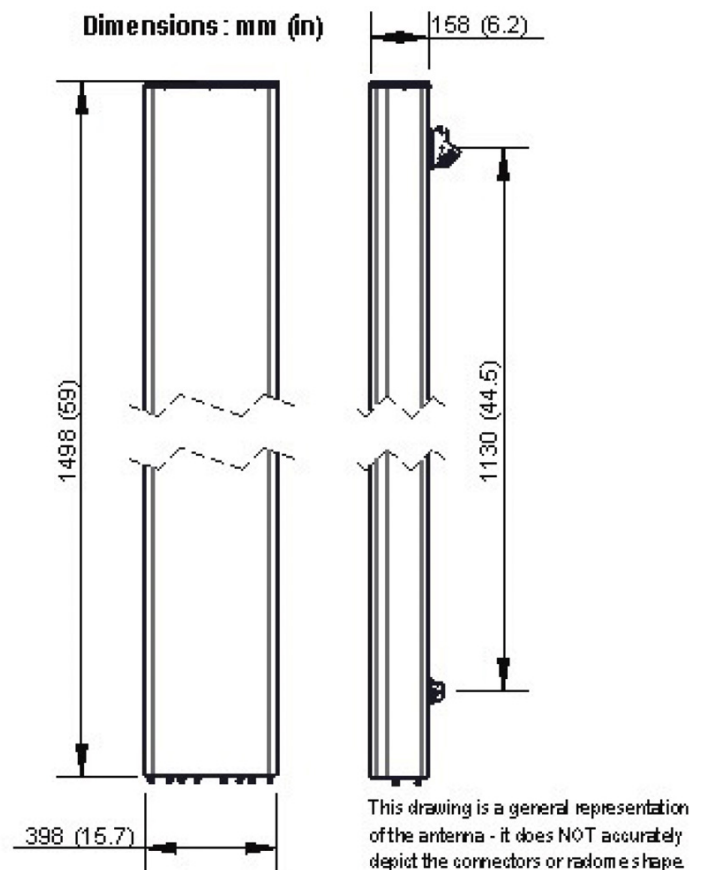


Always attach the antenna using all mounting points.

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](#)