





APXVRRMM15H_43-C-I20

Features

- 4 ports / 2 cross pol systems in high band (1695-2170 MHz)
- 4 ports / 2 cross pol systems in high band (2490-2690 MHz)
- Integrated and field replaceable SRET
- ACU HW version -HRLS200608H1.00
- Compliant with AISG v2.0 and 3GPP



PRODUCT OVERVIEW	Frequency Range (MHz)	(2x) 1695-2170		(2x) 2490-2690		
	Array	 B1	 B2	 Y1	 Y2	
	Connector	1-2	3-4	5-6	7-8	
		8 PORTS				
	Polarization	XPOL				
	Azimuth Beamwidth (avg)	65°				
	Electrical Downtilt	2-12°			2-12°	
	Dimensions	1398 x 278 x 168 mm (55.0 x 10.9 x 6.6 in)				

ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXVRRMM15H_43-C-I20	ACU-I20-H12I Internal RET Included	APM50-H1 Beam Tilt Kit Included	50-125 mm (2.0-4.9 in)	22.1 kg (48.7 lbs)



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ELECTRICAL SPECIFICATIONS

■ B1

Frequency Range		MHz	1695-2170		
		MHz	1695-1880	1850-1990	1920-2170
Polarization		---	±45°		
Gain	Over all Tilts	dBi	16.4 ± 0.4	17.0 ± 0.3	17.0 ± 0.3
	Max Gain	dBi	16.8	17.3	17.3
Azimuth Beamwidth (3 dB)		degrees	67.0° ± 2.1°	64.8° ± 2.3°	64.2° ± 2.0°
Elevation Beamwidth (3 dB)		degrees	7.2° ± 0.4°	6.6° ± 0.3°	6.3° ± 0.4°
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	24.6	27.3	27.5
First Upper Side Lobe Suppression		dB	18.4	18.5	18.6
Cross Polar Discrimination Over Sector		dB	10.7	12.3	13.0
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	23.9	25.1	25.2
Maximum Effective Power Per Port		Watts	200 W		
Cross Polar Isolation		dB	28		
Interband Isolation		dB	28		

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ B2

Frequency Range		MHz	1695-2170		
		MHz	1695-1880	1850-1990	1920-2170
Polarization		---	±45°		
Gain	Over all Tilts	dBi	16.4 ± 0.5	16.9 ± 0.2	16.9 ± 0.3
	Max Gain	dBi	16.9	17.1	17.2
Azimuth Beamwidth (3 dB)		degrees	66.6° ± 2.3°	64.7° ± 1.7°	64.3° ± 2.0°
Elevation Beamwidth (3 dB)		degrees	7.1° ± 0.4°	6.6° ± 0.3°	6.3° ± 0.5°
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	24.1	26.4	26.4
First Upper Side Lobe Suppression		dB	17.9	16.9	17.7
Cross Polar Discrimination Over Sector		dB	11.2	13.1	13.8
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	26.0	28.7	29.3
Maximum Effective Power Per Port		Watts	200 W		
Cross Polar Isolation		dB	28		
Interband Isolation		dB	28		

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ELECTRICAL SPECIFICATIONS

Y1

Frequency Range		MHz	2490-2690
Polarization		---	±45°
Gain	Over all Tilts	dBi	17.2 ± 0.5
	Max Gain	dBi	17.7
Azimuth Beamwidth (3 dB)		degrees	58.8° ± 2.7°
Elevation Beamwidth (3 dB)		degrees	5.1° ± 0.2°
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	24
First Upper Side Lobe Suppression		dB	16.3
Cross Polar Discrimination Over Sector		dB	9.9
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	24.7
Maximum Effective Power Per Port		Watts	200 W
Cross Polar Isolation		dB	28
Interband Isolation		dB	28

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ELECTRICAL SPECIFICATIONS

Y2

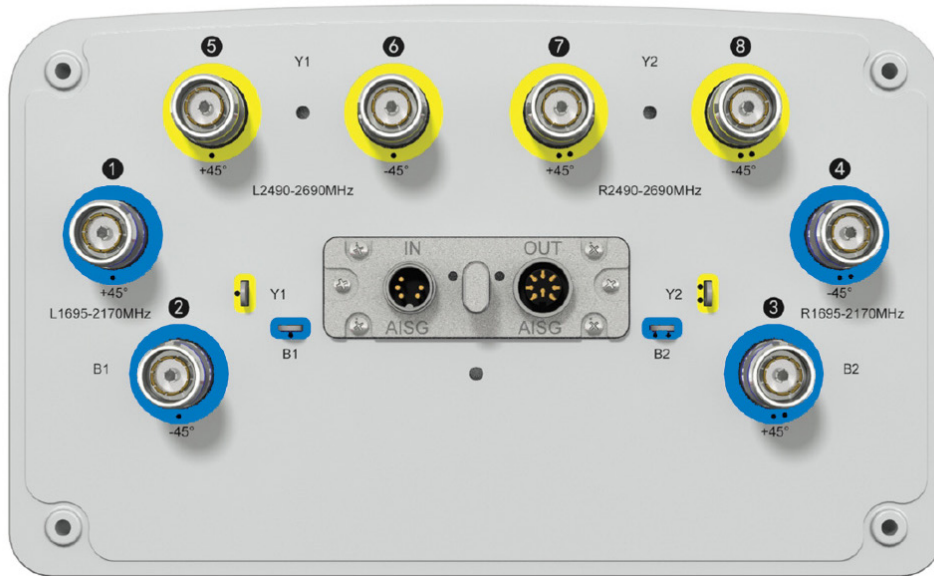
Frequency Range		MHz	2490-2690
Polarization		---	±45°
Gain	Over all Tilts	dBi	16.9 ± 0.5
	Max Gain	dBi	17.4
Azimuth Beamwidth (3 dB)		degrees	59.2° ± 3.2°
Elevation Beamwidth (3 dB)		degrees	5.1° ± 0.2°
Electrical Downtilt		degrees	2-12°
Impedance		Ohms	50Ω
VSWR (Return Loss)		---	1.5:1 (-14 dB)
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-153
Front-to-Back Ratio, Total Power, ± 30°		dB	22.3
First Upper Side Lobe Suppression		dB	18
Cross Polar Discrimination Over Sector		dB	9.1
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	25
Maximum Effective Power Per Port		Watts	200 W
Cross Polar Isolation		dB	28
Interband Isolation		dB	28

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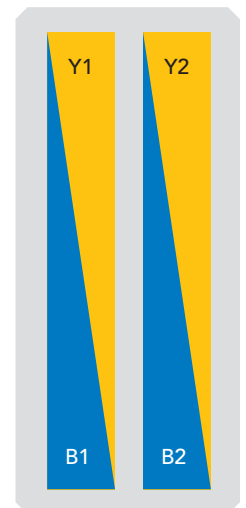
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BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ B1	1695-2170 MHz	1-2	(2x) 4.3-10 Female	B1	RFxxxxxxxxxx-B1
■ B2	1695-2170 MHz	3-4	(2x) 4.3-10 Female	B2	RFxxxxxxxxxx-B2
■ Y1	2490-2690 MHz	5-6	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
■ Y2	2490-2690 MHz	7-8	(2x) 4.3-10 Female	Y2	RFxxxxxxxxxx-Y2



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

Length		mm (in)	1398 (55.0)
Width		mm (in)	278 (10.9)
Depth		mm (in)	168 (6.6)
Net Weight - Antenna Only		kg (lbs)	16 (35.3)
Net Weight - Mounting Hardware Only		kg (lbs)	4 (8.8)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	360 (81)
	Side	N (lbf)	280 (63)
	Rear	N (lbf)	400 (90)
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		---	UPVC
Lightning Protection		---	Direct Ground
Shipping	Packing Size (Length x Width x Depth)	mm (in)	1578 x 373 x 278 (62.1 x 14.7 x 10.9)
	Shipping Weight	kg (lbs)	22.1 (48.7)

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

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ACCESSORIES Accessories may be ordered separately unless otherwise indicated.

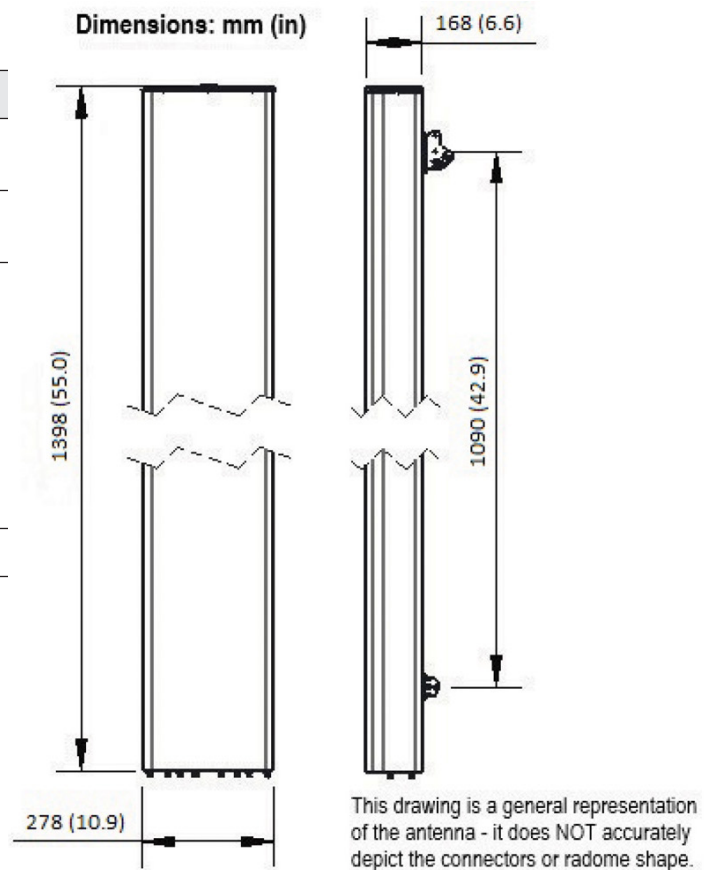
ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 50-125 mm (2.0-4.9 in) <i>Shipped with antenna</i>	APM50-H1	4.0 kg (8.8 lbs)

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](#)