

P1-B4L15-NB

Features

- 2 ports / 1 cross pol system in low band (694-960 MHz)
- 8 ports / 4 cross pol systems in high band (1695-2690 MHz)
- Integrated and field replaceable SRET
- Compliant with AISG v2.0 and 3GPP

PRODUCT OVERVIEW	Frequency Range (MHz)	(1x) 694-960	(4x) 1695-2690			
	Array	■ R1	■ Y1	■ Y2	■ Y3	■ Y4
	Connector	1-2	3-4	5-6	7-8	9-10
		10 PORTS				
	Polarization	XPOL				
	Azimuth Beamwidth (avg)	65°	65°			
	Electrical Downtilt	2-15°	2-12°			
Dimensions	1490 x 499 x 215 mm (58.7 x 19.6 x 8.5 in)					

ORDERING OPTIONS Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT	MOUNTING HARDWARE WEIGHT
P1-B4L15-NB	ACU-I20-B5 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	36.9 kg (81.3 lbs)	4.5 kg (9.9 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.

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ELECTRICAL SPECIFICATIONS

■ R1

Frequency Range		MHz	694-960		
		MHz	694-806	790-896	870-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	14.8 ± 0.4	15.0 ± 0.4	15.1 ± 0.5
	Max Gain	dBi	15.2	15.4	15.6
Azimuth Beamwidth (3 dB)		degrees	63.9° ± 3.2°	66.5° ± 2.7°	67.2° ± 2.9°
Elevation Beamwidth (3 dB)		degrees	16.0° ± 0.9°	14.8° ± 0.8°	13.4° ± 0.8°
Electrical Downtilt		degrees	2-15°		
Impedance		Ohms	50Ω		
VSWR (Return Loss)		---	1.5:1 (-14 dB)		
Passive Intermodulation 3rd Order, 2 x 43dBm		dBc	-153		
Front-to-Back Ratio, Total Power, ± 30°		dB	19.9	23.3	25.1
First Upper Side Lobe Suppression		dB	18.9	23.6	21.2
Cross Polar Discrimination at Boresight		dB	13.3	19.9	25.1
Maximum Effective Power Per Port		Watts	300 W		
Cross Polar Isolation		dB	25		
Interband Isolation		dB	25		

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ Y1 ■ Y2 ■ Y3 ■ Y4

Frequency Range		MHz	1695-2690				
		MHz	1695-1880	1850-1990	1920-2200	2300-2490	2500-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	17.4 ± 0.5	17.4 ± 0.5	17.5 ± 0.6	17.4 ± 0.6	17.7 ± 0.6
	Max Gain	dBi	17.9	17.9	18.1	18.0	18.3
Azimuth Beamwidth (3 dB)		degrees	72.0° ± 5.0°	68.7° ± 4.2°	66.6° ± 4.7°	63.4° ± 4.1°	56.9° ± 5.9°
Elevation Beamwidth (3 dB)		degrees	6.6° ± 0.4°	6.2° ± 0.3°	5.9° ± 0.5°	5.3° ± 0.3°	4.9° ± 0.3°
Electrical Downtilt		degrees	2-12°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation 3rd Order, 2 x 43dBm		dBc	-153				
Front-to-Back Ratio, Total Power, ± 30°		dB	23.9	23.6	23.5	22.3	24.0
First Upper Side Lobe Suppression		dB	16.7	18.0	19.9	19.0	15.4
Cross Polar Discrimination at Boresight		dB	21.4	21.7	21.5	24.4	18.0
Maximum Effective Power Per Port		Watts	200 W				
Cross Polar Isolation		dB	25				
Interband Isolation		dB	25				

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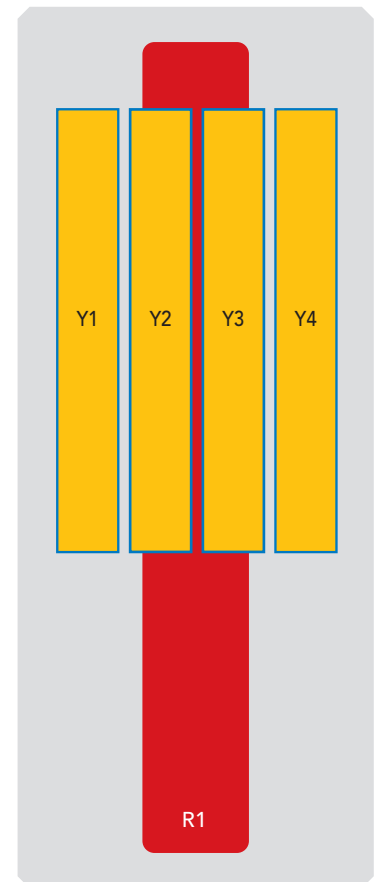
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BOTTOM VIEW



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
■ Y3	1695-2690 MHz	7-8	(2x) 4.3-10 Female	Y3	RFxxxxxxxxxx-Y3
■ Y4	1695-2690 MHz	9-10	(2x) 4.3-10 Female	Y4	RFxxxxxxxxxx-Y4



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

Length	mm (in)	1490 (58.7)
Width	mm (in)	499 (19.6)
Depth	mm (in)	215 (8.5)
Net Weight - Antenna Only	kg (lbs)	26.4 (58.2)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 500 (112)
	Side	N (lbf) 429 (96)
	Rear	N (lbf) 594 (134)
Survival Wind Speed	km/h (mph)	200 (124)
Connector Type	--	(10x) 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) 1775 x 570 x 295 (69.9 x 22.4 x 11.6)

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>Refer to ordering options</i>	APM50-B1	4.5 kg (9.9 lbs)

INSTALLATION

Please read all installation notes before installing product.

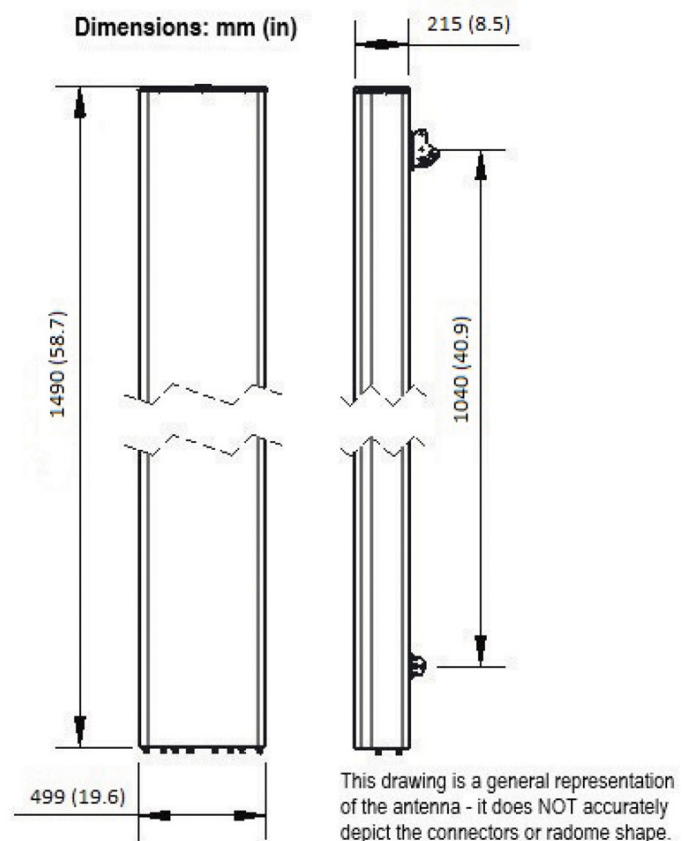


Always attach the antenna using all mounting points.

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](#)