

P1-BUU15-N0

P1-BUU15-N0N

Features

- 2 ports / 1 cross pol system in low band (694-960 MHz)
- 4 ports / 2 cross pol systems in high band (1427-2690 MHz)
- Supporting 4x4 MIMO in high band
- Integrated and field replaceable SRET
- Optional with Direct Pipe No Tilt mounting hardware (Model name suffix -N0N)
- Compliant with AISG v2.0 and 3GPP

PRODUCT OVERVIEW	Frequency Range (MHz)	(1x) 694-960	(2x) 1427-2690	
	Array	■ R1	■ Y1	■ Y12
	Connector	1-2	3-4	5-6
		6 PORTS		
	Polarization	XPOL		
	Azimuth Beamwidth (avg)	65°	65°	
	Electrical Downtilt	2-12°	2-12°	
	Dimensions	1498 x 378 x 158 mm (59.0 x 14.9 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
P1-BUU15-N0	ACU-I20-H12I Internal RET Included	APM50-H1 Beam Tilt Kit Included	50-125 mm (2.0-4.9 in)	24.5 kg (54 lbs)	4 kg (8.8 lbs)
P1-BUU15-N0N	ACU-I20-H12I Internal RET Included	APM50-H1N Direct Pipe No Tilt Mounting Kit Included	50-125 mm (2.0-4.9 in)	23.5 kg (51.8 lbs)	3 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	15 ± 0.4	15.1 ± 0.4	15.2 ± 0.5
	Max Gain	dBi	15.4	15.5	15.7
Azimuth Beamwidth (3 dB)		degrees	69.4° ± 2.7°	65.9° ± 3.3°	60.1° ± 2.8°
Elevation Beamwidth (3 dB)		degrees	14.6° ± 0.8°	13.4° ± 0.8°	12.5° ± 0.9°
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	24.3	24.6	23.1
First Upper Side Lobe Suppression		dB	14.1	15	19.2
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	14.4	16.5	19.6
Maximum Effective Power Per Port		Watts	250 W		
Cross Polar Isolation		dB	26		
Interband Isolation		dB	28		

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ Y1 ■ Y2

Frequency Range		MHz	1427-2690				
		MHz	1427-1518	1695-1880	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	16.8 ± 0.5	17.6 ± 0.6	18.1 ± 0.6	18 ± 0.7	17.7 ± 0.6
	Max Gain	dBi	17.3	18.2	18.7	18.7	18.3
Azimuth Beamwidth (3 dB)		degrees	61.8° ± 2.8°	62.5° ± 6.5°	59.7° ± 2.6°	62.7° ± 1.4°	65.3° ± 6.9°
Elevation Beamwidth (3 dB)		degrees	7.6° ± 0.4°	6.6° ± 0.5°	5.8° ± 0.4°	5.4° ± 0.3°	5.1° ± 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	26.8	23	22.7	22.5	23.1
First Upper Side Lobe Suppression		dB	14.6	14.6	15.5	17.7	15.8
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	28	23.2	23.6	23.3	24.3
Maximum Effective Power Per Port		Watts	200 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	28				

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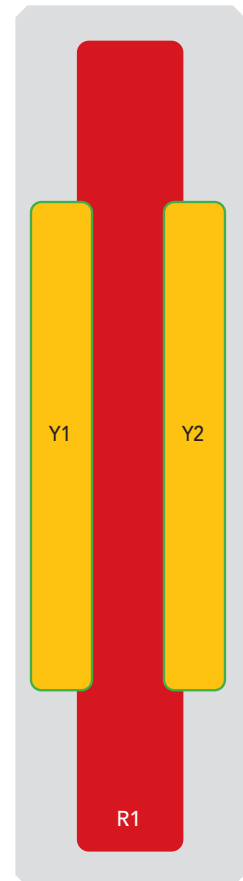
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BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ R1	694-960 MHz	1-2	(2x) 4.3-10 Female	R1	RFxxxxxxxxxx-R1
■ Y1	1427-2690 MHz	3-4	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
■ Y2	1427-2690 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 (59.0)
Width	mm (in)	378 (14.9)
Depth	mm (in)	158 (6.2)
Net Weight - Antenna Only	kg (lbs)	16.9 (37.2)
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	km/h (mph)	200 (124)
Connector Type	--	(6x) 4.3-10 Female, (2x) AISG Connectors (1 Male, 1 Female) at Bottom
Radome Color	---	Light Grey
Radome Material	---	Fiberglass
Lightning Protection	---	DC Ground
Shipping	Packing Size (Length x Width x Depth)	mm (in) 1678 x 473 x 278 (66.1 x 18.6 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 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 kg (6.6 lbs)

INSTALLATION

Please read all installation notes before installing product.

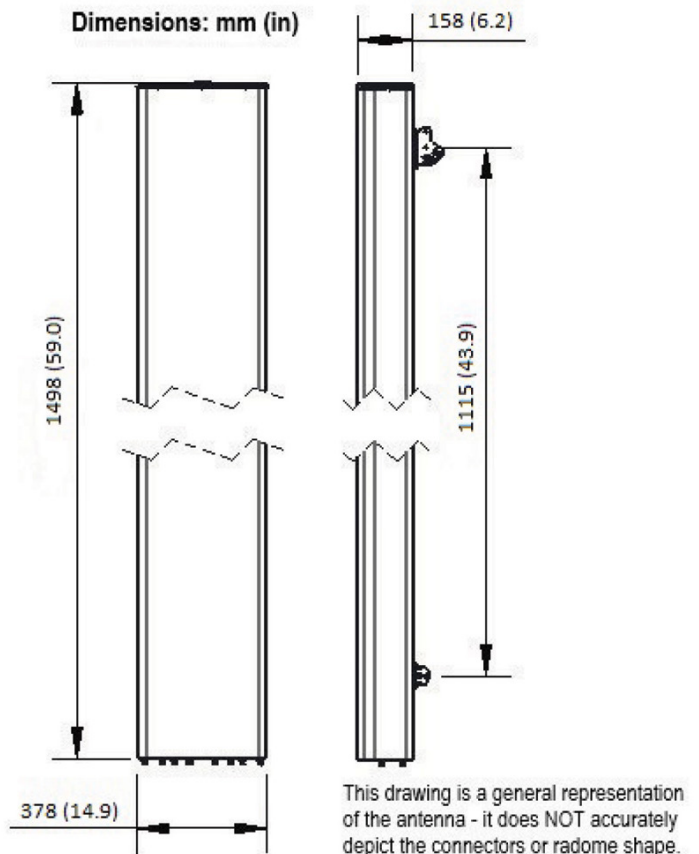


Always attach the antenna using all mounting points.

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](#)