8-Port Panel Antenna

(2x) 1710-2690 | (2x) 3300-3800 MHz

65° | 1495 mm | INTEGRATED RET

PH-LLYY15-N0

Features

- 4 ports / 2 cross pol systems in high band (1710-2690 MHz)
- 4 ports / 2 cross pol systems in high band (3300-3800 MHz)
- Integrated and field replaceable SRET
- ACU HW version: 2.02
- Compliant with AISG v2.0 and 3GPP

PRODUCT OVERVIEW					
	Frequency Range (MHz)	(2x) 1710-2690		(2x) 3300-3800	
	Array	Y1	Y2	P1	P2
	Connector	1-2	3-4	5-6	7-8
		4 PORTS		4 PORTS	
	Polarization	XPOL		XPOL	
	Azimuth Beamwidth (avg)	65°		65°	
	Electrical Downtilt	2-12°		2-12°	
	Dimensions	1495 x 448 x 188 mm (58.9 x 17.6 x 7.4 in)			

ORDERING OPTIONS Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
PH-LLYY15-N0	ACU-I20-B4 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	29.3 kg (65 lbs)

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ELECTRICAL SPECIFICATIONS — Y1

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	16.9 ± 0.4	17.4 ± 0.3	17.6 ± 0.4	18.3 ± 0.3	18.2 ± 0.6
	Max Gain	dBi	17.3	17.7	18.0	18.6	18.8
Azimuth Beamwidth (3 dB)		degrees	76.8° ± 5.3°	74.9° ± 7.1°	71.7° ± 8.3°	67.8° ± 2.9°	61.1° ± 5.7°
Elevation Beamwidth (3 dB)		degrees	6.4° ± 0.5°	5.9° ± 0.3°	5.5° ± 0.5°	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 3rd Order for 2x20 W Carriers		dBc	-150				
Front-to-Back Ratio, Total Power, ± 30°		dB	23.2	24.1	24.5	25.7	20.6
First Upper Side Lobe		dB	17.7	17.7	18.4	20.0	16.1
Cross-Pol Over Sector		dB	11.2	11.7	12.0	11.2	9.8
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	15.1	17.5	19.2	22.2	19.6
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26	26	26	26	26
Interband Isolation		dB	26	26	26	26	26

ELECTRICAL SPECIFICATIONS — Y2

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	17.1 ± 0.4	17.5 ± 0.3	17.7 ± 0.4	18.4 ± 0.3	18.2 ± 0.5
	Max Gain	dBi	17.5	17.8	18.1	18.7	18.7
Azimuth Beamwidth (3 dB)		degrees	75.2° ± 5.6°	75.2° ± 6.1°	73.4° ± 7.6°	69.0° ± 3.2°	61.5° ± 6.4°
Elevation Beamwidth (3 dB)		degrees	6.6° ± 0.4°	6.0° ± 0.2°	5.7° ± 0.5°	5.0° ± 0.2°	4.6° ± 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	-150				
Front-to-Back Ratio, Total Power, ± 30°		dB	23.6	25.0	25.5	25.6	20.4
First Upper Side Lobe		dB	19.1	19.5	21.0	20.1	17.0
Cross-Pol Over Sector		dB	11.3	11.3	11.4	11.4	9.2
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	15.3	18.4	19.1	20.9	18.4
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26	26	26	26	26
Interband Isolation		dB	26	26	26	26	26

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ELECTRICAL SPECIFICATIONS			■ P1	
Frequency Range		MHz	3300-3800	
		MHz	3300-3500	3500-3800
Polarization		---	±45°	
Gain	Over all Tilts	dBi	17.0 ± 0.3	17.3 ± 0.5
	Max Gain	dBi	17.3	17.8
Azimuth Beamwidth (3 dB)		degrees	66° ± 5.2°	61.9° ± 4.2°
Elevation Beamwidth (3 dB)		degrees	5.6° ± 0.3°	5.3° ± 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	-150	
Front-to-Back Ratio, Total Power, ± 30°		dB	18.5	20.2
First Upper Side Lobe		dB	18.4	19.1
Cross-Pol Over Sector		dB	10.1	10.3
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	19.2	17.6
Maximum Effective Power Per Port		Watts	200 W	
Cross Polar Isolation		dB	26	26
Interband Isolation		dB	26	26

ELECTRICAL SPECIFICATIONS			■ P2	
Frequency Range		MHz	3300-3800	
		MHz	3300-3500	3500-3800
Polarization		---	±45°	
Gain	Over all Tilts	dBi	16.8 ± 0.4	17.2 ± 0.5
	Max Gain	dBi	17.2	17.7
Azimuth Beamwidth (3 dB)		degrees	68.9° ± 5.4°	63.1° ± 4.9°
Elevation Beamwidth (3 dB)		degrees	5.6° ± 0.3°	5.3° ± 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	-150	
Front-to-Back Ratio, Total Power, ± 30°		dB	17.7	19.9
First Upper Side Lobe		dB	17.7	16.9
Cross-Pol Over Sector		dB	14.2	8.9
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	20.1	16.2
Maximum Effective Power Per Port		Watts	200 W	
Cross Polar Isolation		dB	26	26
Interband Isolation		dB	26	26

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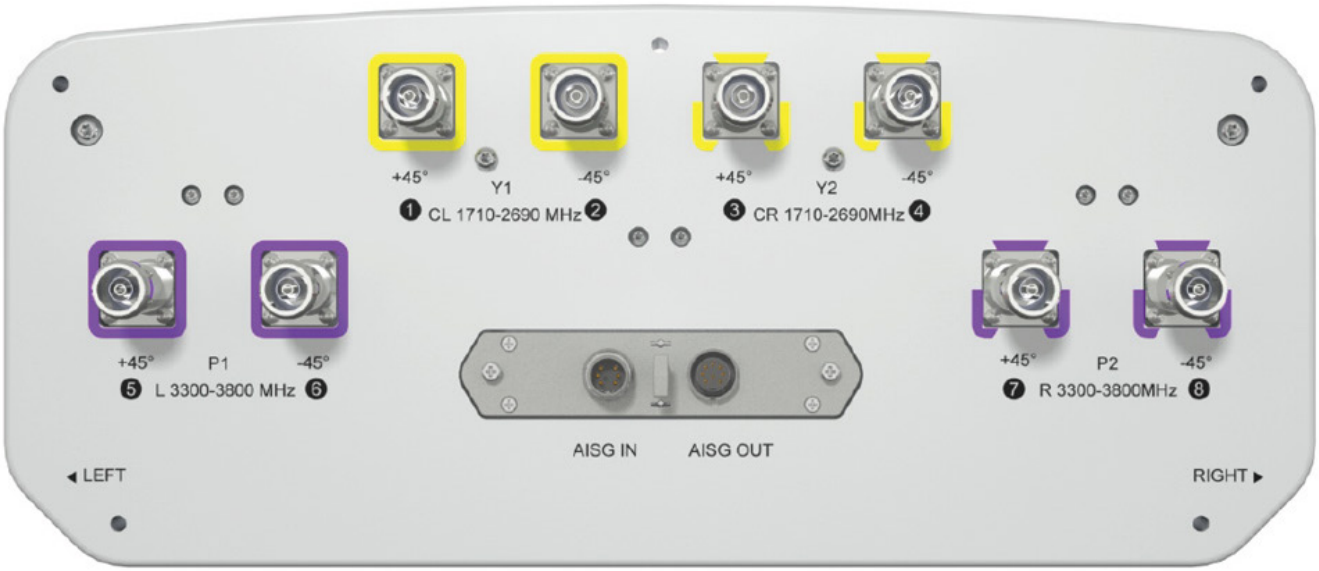
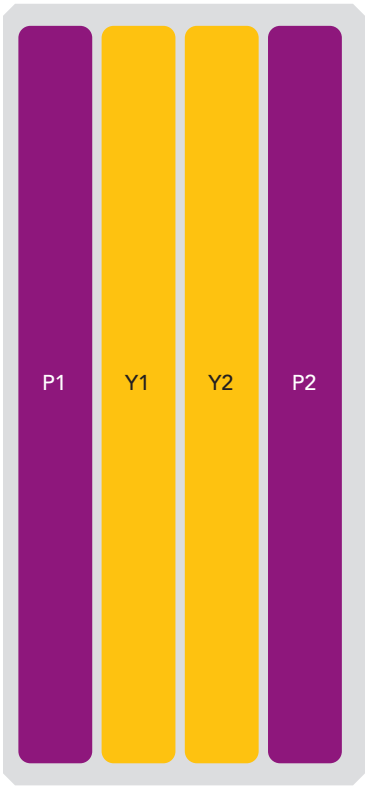
BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
Y1	1710-2690 MHz	1-2	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-2Y1
Y2	1710-2690 MHz	3-4	(2x) 4.3-10 Female		
P1	3300-3800 MHz	5-6	(2x) 4.3-10 Female	P1	RFxxxxxxxxxx-2P1
P2	3300-3800 MHz	7-8	(2x) 4.3-10 Female		



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

Length		mm (in)	1495 (58.9)
Width		mm (in)	448 (17.6)
Depth		mm (in)	188 (7.4)
Net Weight - Antenna Only		kg (lbs)	20 (44.1)
Net Weight - Mounting Hardware Only		kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	824 (185)
	Side	N (lbf)	296 (67)
	Rear	N (lbf)	836 (188)
Survival Wind Speed		km/h (mph)	200 (124)
Connector Type		--	(8x) 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)	1775 x 575 x 305 (69.9 x 22.6 x 12.0)
	Shipping Weight	kg (lbs)	29.3 (64.6)

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.

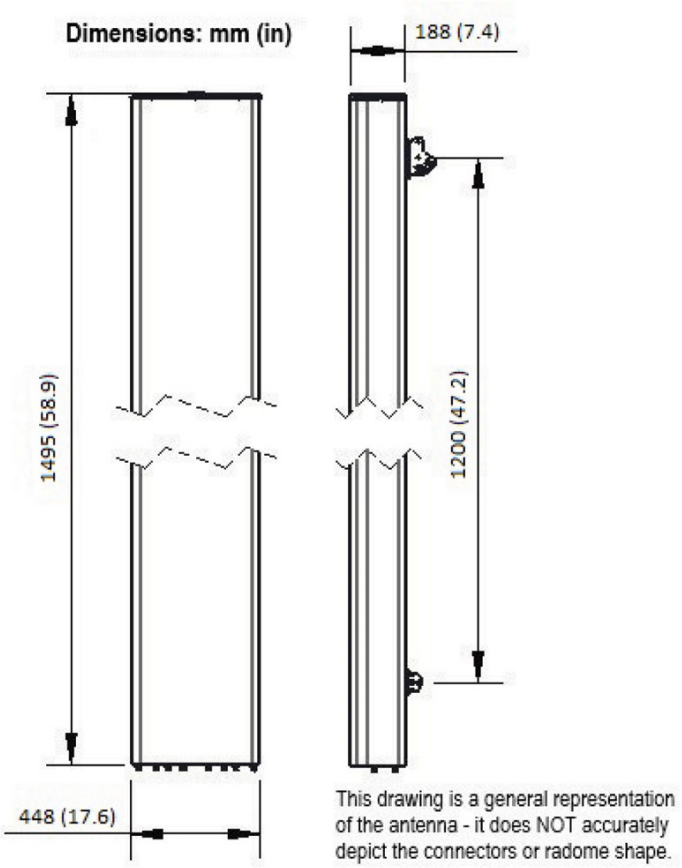
ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 50-110 mm (2.0-4.3 in) *Shipped with antenna*	APM50-B1	4.5 kg (9.9 lbs)

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

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