SP-LLYYZ06-F0

Features

- 4 ports / 2 cross pol systems in mid band (1695-2690 MHz)
- 4 ports / 2 cross pol systems in high band (3300-4200 MHz)
- 2 ports / 1 cross pol system in high band (5150-5925 MHz)
- Fixed tilt

PRODUCT OVERVIEW						
Frequency Range (MHz)	(2x) 1695-2690		(2x) 3300-4200		(1x) 5150-5925
Array	Y1	Y2	P1	P2	O1
Connector	1-2	3-4	5-6	7-8	9-10
	4 PORTS		4 PORTS		2 PORTS
Polarization	XPOL		XPOL		XPOL
Azimuth Beamwidth (avg)	65°		65°		65°
Electrical Downtilt	5°		5°		0°
Dimensions	609 x 283 x 181 mm (24.0 x 11.1 x 7.1 in)				

ORDERING OPTIONS Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
SP-LLYYZ06-F0	Fixed Tilt Panel Antenna	APM40-6	50-120 mm (2.0-4.7 in)	12.2 kg (26.9 lbs)

SP-LLYYZ06-F0

ELECTRICAL SPECIFICATIONS

■ Y1 ■ Y2

Frequency Range		MHz	1695-2690				
		MHz	1695-1880	1850-1990	1920-2200	2300-2496	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	12.9 ± 0.3	13.3 ± 0.5	13.9 ± 0.3	14.2 ± 0.2	14.7 ± 0.2
	Max Gain	dBi	13.2	13.8	14.2	14.4	14.9
Azimuth Beamwidth (3 dB)		degrees	70° ± 5°	65° ± 5°	63° ± 2°	67° ± 4°	63° ± 3°
Elevation Beamwidth (3 dB)		degrees	20° ± 1°	19° ± 1°	17° ± 1°	15° ± 1°	13.4° ± 0.3°
Electrical Downtilt		degrees	5°				
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	21	22	22	24	23
Front-to-Back at 180° Copolar		dB	30	29	32	33	29
First Upper Side Lobe Suppression		dB	13	13	13	13	13
Upper Side Lobe Peak to +20°		dB	22	22	22	16	14
Cross-Pol at Boresight		dB	24	27	25	25	24
Cross-Pol Over Sector		dB	13	6	6	10	10
Maximum Effective Power Per Port		Watts	50 W				
Cross Polar Isolation		dB	25				

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ P1 ■ P2

Frequency Range		MHz	3300-4200			
		MHz	3300-3400	3400-3700	3700-4000	4000-4200
Polarization		---	±45°			
Gain	Over all Tilts	dBi	10.2 ± 0.2	10.4 ± 0.5	11.1 ± 0.5	11.3 ± 0.4
	Max Gain	dBi	10.4	10.9	11.6	11.7
Azimuth Beamwidth (3 dB)		degrees	69° ± 2°	65° ± 7°	64° ± 9°	55° ± 11°
Elevation Beamwidth (3 dB)		degrees	37° ± 3°	34° ± 4°	30° ± 5°	28° ± 3°
Electrical Downtilt		degrees	5°			
Impedance		Ohms	50Ω			
VSWR (Return Loss)		---	1.5:1 (-14 dB)			
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	N/A	-153	N/A	N/A
Front-to-Back Ratio, Total Power, ± 30°		dB	21	21	21	20
Front-to-Back at 180° Copolar		dB	29	32	29	29
First Upper Side Lobe Suppression		dB	16	16	12	12
Upper Side Lobe Peak to +20°		dB	22	22	22	22
Cross-Pol at Boresight		dB	23	22	18	19
Cross-Pol Over Sector		dB	6	8	9	9
Maximum Effective Power Per Port		Watts	50 W			
Cross Polar Isolation		dB	25			

Specifications follow BASTA guidelines.

SP-LLYYZ06-F0

ELECTRICAL SPECIFICATIONS			O1
Frequency Range		MHz	5150-5925
Polarization		---	±45°
Gain	Over all Tilts	dBi	4.6 ± 1
	Max Gain	dBi	5.6
Azimuth Beamwidth (3 dB)		degrees	68° ± 9°
Elevation Beamwidth (3 dB)		degrees	26° ± 3°
Electrical Downtilt		degrees	0°
Impedance		Ohms	50Ω
VSWR (Return Loss)		---	1.4:1 (-15.5 dB)
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	N/A
Front-to-Back Ratio, Total Power, ± 30°		dB	18
Front-to-Back at 180° Copolar		dB	26
First Upper Side Lobe Suppression		dB	15
Upper Side Lobe Peak to +20°		dB	22
Cross-Pol at Boresight		dB	13
Cross-Pol Over Sector		dB	2
Maximum Effective Power Per Port		Watts	5 W
Cross Polar Isolation		dB	25

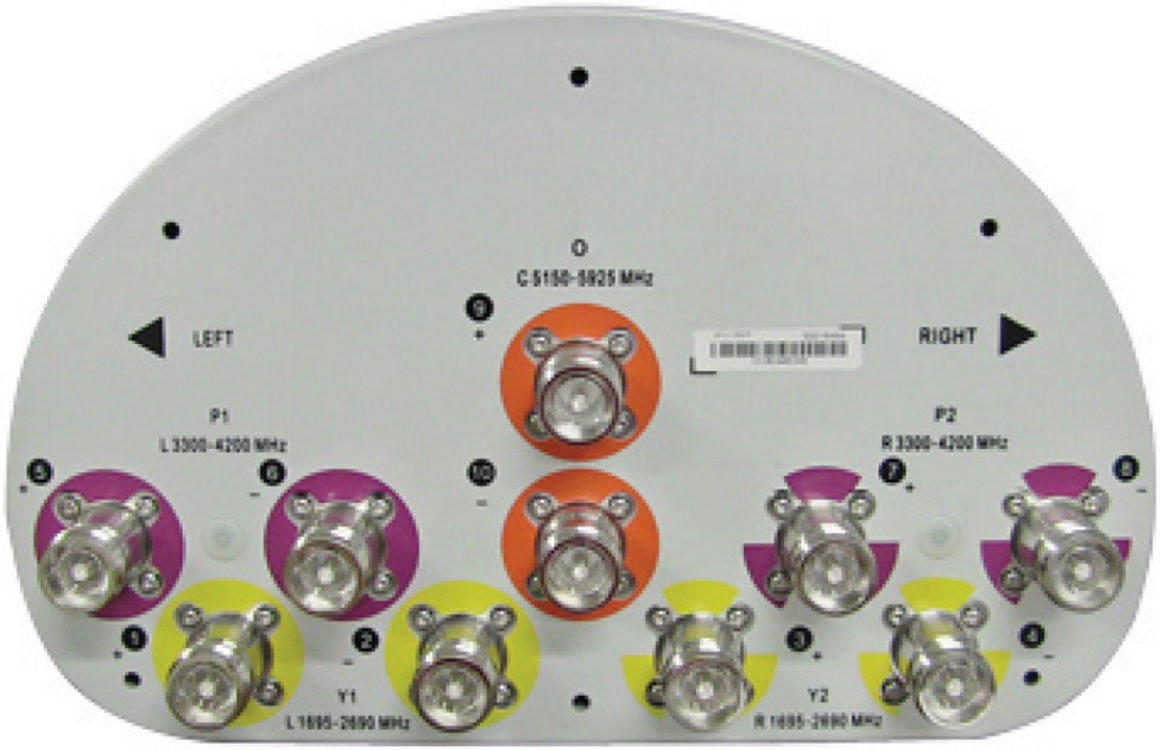
Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS		5 GHz FCC Power Requirements			
U-NII Band	---	U-NII 1	U-NII 2A	U-NII 2C	U-NII 3
Frequency	MHz	5150-5250	5250-5350	5470-5725	5725-5850
Max Input Power Per Port to Align with FCC Title 47 Part 15	Watts	1.0 W	0.5 W	0.5 W	0.5 W

Specifications follow BASTA guidelines.

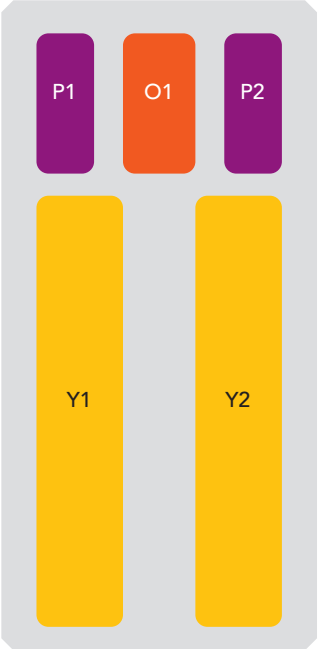
SP-LLYYZ06-F0

BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
Y1	1695-2690 MHz	1-2	(2x) 4.3-10 Long Neck Female
Y2	1695-2690 MHz	3-4	(2x) 4.3-10 Long Neck Female
P1	3300-4200 MHz	5-6	(2x) 4.3-10 Long Neck Female
P2	3300-4200 MHz	7-8	(2x) 4.3-10 Long Neck Female
O1	5150-5925 MHz	9-10	(2x) 4.3-10 Long Neck Female



The illustration is not shown to scale.

SP-LLYYZ06-F0

MECHANICAL SPECIFICATIONS

Length		mm (in)	609 (24.0)
Width		mm (in)	283 (11.1)
Depth		mm (in)	181 (7.1)
Net Weight - Antenna Only		kg (lbs)	5.2 (11.5)
Net Weight - Mounting Hardware Only		kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	85 (19)
	Side	N (lbf)	63 (14)
	Rear	N (lbf)	124 (28)
Survival Wind Speed / Rated Wind Speed		km/h (mph)	240 (160)
Connector Type		--	(10x) 4.3-10 Long Neck Female at Bottom
Radome Color		---	Light Grey RAL7035
Radome Material		---	ASA
Lightning Protection		---	Direct Ground
Shipping	Packing Size (Length x Width x Depth)	mm (in)	730 x 370 x 330 (28.7 x 14.6 x 13)
	Shipping Weight	kg (lbs)	12.2 (26.9)

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

SP-LLYYZ06-F0

ACCESSORIES

Accessories may be ordered separately unless otherwise indicated.

ITEM	WEIGHT
Mounting Hardware APM40-6 fits pipe diameter 50-120 mm (2.0-4.7 in)	4.5 kg (9.9 lbs)

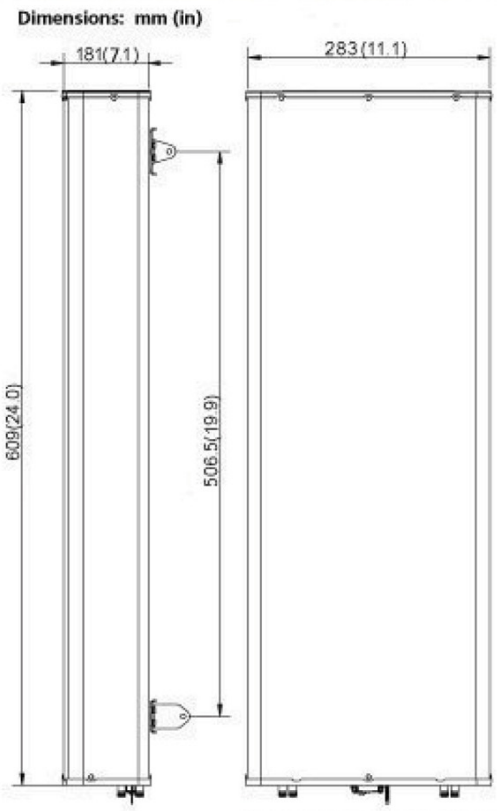
INSTALLATION

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

APM40 Series Installation Instructions



This drawing is a general representation of the antenna – it does NOT accurately depict the connectors or radome shape.

NOTES

Specifications follow BASTA guidelines.

For additional mounting information, please check **External Document Links**.

For Radiating Patterns: Request pattern files