

O-BBLLYYZ06-01

Features

This antenna provides a 14-port omni-directional platform for advanced use in encompassing low band 700 MHz and 800 MHz deployment scenarios and high band AWS, PCS, BRS, CBRS, C-BAND and LAA in a high quality package design built to withstand harsh environments.

- Expanded 3.3-4.2 GHz range to cover CBRS and full C-BAND
- x4 MIMO on 700/800/900
- x4 MIMO on AWS/PCS/BRS
- x4 MIMO on CBRS/C-BAND
- x2 MIMO on LAA
- Clover omni pattern performance
- Quick and easy installation



PRODUCT OVERVIEW	Frequency Range (MHz)	(2x) 694-960		(2x) 1695-2690		(2x) 3300-4200		(1x) 5150-5925
	Array	<div></div> R1	<div></div> R2	<div></div> Y1	<div></div> Y2	<div></div> P1	<div></div> P2	<div></div> O1
	Connector	1-2	3-4	5-6	7-8	9-10	11-12	13-14
		4 PORTS		4 PORTS		4 PORTS		2 PORTS
	Polarization	XPOL		XPOL		XPOL		XPOL
	Azimuth Beamwidth (avg)	360°		360°		360°		360°
	Electrical Downtilt	0°		0°		0°		0°
	Dimensions	609 x Ø355 mm (24.0 x Ø14 in)						

ORDERING OPTIONS Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
O-BBLLYYZ06-01	Fixed Tilt Omni-Directional Canister	Pole Top Bracket (Quantity 1 Included)	60-120 mm (2.4-4.7 in)	21 kg (46.3 lbs)

360°

609 mm

FIXED TILT

O-BBLLYYZ06-01

ELECTRICAL SPECIFICATIONS

■ R1 ■ R2

Frequency Range		MHz	694-960		
		MHz	694-806	806-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	2.5 ± 0.7	2.8 ± 0.6	2.9 ± 0.9
	Max Gain	dBi	3.2	3.4	3.8
Azimuth Beamwidth (3 dB)		degrees	360°	360°	360°
Elevation Beamwidth (3 dB)		degrees	85° ± 30°	81° ± 30°	82° ± 16°
Electrical Downtilt		degrees	0°		
Impedance		Ohms	50Ω		
VSWR (Return Loss)		---	1.5:1 (-14 dB)		
Passive Intermodulation		dBc	-153 (3rd Order for 2x20 W Carriers)		
Maximum Effective Power Per Port		Watts	100 W		
Cross Polar Isolation Between Ports		dB	25	25	25

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ Y1 ■ Y2

Frequency Range		MHz	1695-2690				
		MHz	1695-1880	1850-1990	1920-2200	2300-2496	2496-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	7.3 ± 0.4	7.5 ± 0.5	8 ± 0.5	8.1 ± 0.7	9.1 ± 0.9
	Max Gain	dBi	7.7	8	8.5	8.8	10
Azimuth Beamwidth (3 dB)		degrees	360°	360°	360°	360°	360°
Elevation Beamwidth (3 dB)		degrees	20° ± 3°	18° ± 1°	17° ± 2°	15° ± 2°	14° ± 1°
Electrical Downtilt		degrees	0°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation		dBc	-153 (3rd Order for 2x20 W Carriers)				
Maximum Effective Power Per Port		Watts	100 W				
Cross Polar Isolation Between Ports		dB	25	25	25	25	25

Specifications follow BASTA guidelines.

360°

609 mm

FIXED TILT

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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	6.2 ± 0.7	6.3 ± 0.9	6 ± 0.7	6.1 ± 0.6
	Max Gain	dBi	6.9	7.2	6.7	6.7
Azimuth Beamwidth (3 dB)		degrees	360°	360°	360°	360°
Elevation Beamwidth (3 dB)		degrees	34° ± 4°	33° ± 4°	30° ± 4°	27° ± 4°
Electrical Downtilt		degrees	0°			
Impedance		Ohms	50Ω			
VSWR		---	1.5:1	1.4:1	1.5:1	1.5:1
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	N/A	-153	N/A	N/A
Maximum Effective Power Per Port		Watts	75 W			
Cross Polar Isolation Between Ports		dB	25	25	25	25

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ O1

Frequency Range		MHz	5150-5925			
Polarization		---	±45°			
Gain	Over all Tilts	dBi	4.6 ± 1.3			
	Max Gain	dBi	5.9			
Azimuth Beamwidth (3 dB)		degrees	360°			
Elevation Beamwidth (3 dB)		degrees	24° ± 4°			
Electrical Downtilt		degrees	0°			
Impedance		Ohms	50Ω			
VSWR		---	1.4:1			
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	N/A			
Maximum Effective Power Per Port		Watts	5 W			
Cross Polar Isolation Between Ports		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	0.5 W	0.125 W	0.125 W	0.5 W

Specifications follow BASTA guidelines.

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.

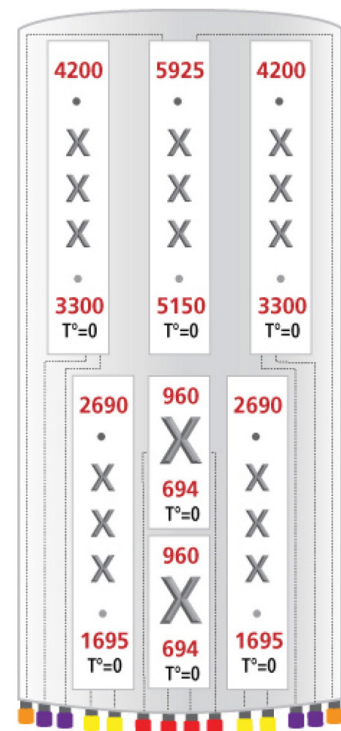
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BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
R1	694-960 MHz	1-2	(2x) 4.3-10 Long Neck Female
R2	694-960 MHz	3-4	(2x) 4.3-10 Long Neck Female
Y1	1695-2690 MHz	5-6	(2x) 4.3-10 Long Neck Female
Y2	1695-2690 MHz	7-8	(2x) 4.3-10 Long Neck Female
P1	3300-4200 MHz	9-10	(2x) 4.3-10 Long Neck Female
P2	3300-4200 MHz	11-12	(2x) 4.3-10 Long Neck Female
O1	5150-5925 MHz	13-14	(2x) 4.3-10 Long Neck Female



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

Length		mm (in)	609 (24.0)
Diameter		mm (in)	Ø355 (Ø14.0)
Net Weight - Antenna Only		kg (lbs)	11.3 (24.9)
Net Weight - Mounting Hardware Only		kg (lbs)	6 (13.2)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	170 (38)
	Side	N (lbf)	170 (38)
	Rear	N (lbf)	170 (38)
Survival Wind Speed / Rated Wind Speed		km/h (mph)	240 (150)
Connector Type		--	(14x) 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)	900 x 475 x 460 (35.4 x 18.7 x 18.1)
	Shipping Weight	kg (lbs)	21 (46.3)

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	WEIGHT
Pole Top Bracket 60-120 mm (2.4-4.7 in) <i>Shipped with antenna</i>	21 kg (46.3 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

[Omni Series Installation Instructions](#)

NOTES

Specifications follow BASTA guidelines.
For additional mounting information, please check External Document Links .
For Radiating Patterns: Request pattern files