

45°

2433 mm

OCT458KBW102L

QUAD BAND | 8-PORT PANEL | WITH INTERNAL SMART BIAS-T | XPOL | 45° | 2433 MM (95.8 IN)

- Quad band, 8-port panel with variable electrical tilt
- Features two internal Smart Bias-T units
- 4x4 MIMO high band compatible
- Combined mid band (B1 & B2) tilt

PRODUCT OVERVIEW	Frequency Range (MHz)	698-798	824-896	1695-2180	1695-2180		
	Array	■ R1	■ R2	■ B1	■ B2		
	Connector	1-2	3-4	5-6	7-8		
	Connector Type	4.3-10 Female Long Neck	4.3-10 Female Long Neck	4.3-10 Female Long Neck	4.3-10 Female Long Neck		
	Polarization	XPOL	XPOL	XPOL	XPOL		
	Azimuth Beamwidth (avg)	45°	45°	45°	45°		
	Electrical Downtilt	0-10°	0-10°	2-10°	2-10°		
	Dimensions	2433 × 401 × 214 mm (95.8 × 15.8 × 8.4 in)					

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ELECTR	ICAL SPECIFICATIONS	Low Band	■ R1	■ R2
Frequency	Frequency Range		698-798	824-896
Frequency	y Sub-Range	MHz	700	800
Polarizatio	on		±45°	±45°
	Low Tilt	dBi	18.0	18.6
Carr	Mid Tilt	dBi	18.1	18.8
Gain	High Tilt	dBi	17.8	18.6
	Over all Tilts	dBi	17.9 ± 0.6	18.7 ± 0.3
Azimuth E	Beamwidth (3 dB)	degrees	47.8 ± 2.4	43.0 ± 0.9
Elevation Beamwidth (3 dB)		degrees	9.1 ± 0.7	7.9 ± 0.4
Electrical Downtilt		degrees	0-10	0-10
Impedance		Ohms	50	50
VSWR			1.5:1	1.5:1
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBm (dBc)	< -110 (< -153)	< -110 (< -153)
Front-to-Back Ratio ± 30° @ 180° from boresite		dB	> 25.7	> 24.1
Upper Sidelobe Rejection 20° Sector Above Main Beam		dB	> 15.3	> 12.9
Cross Polar Discrimination at Mechanical Boresight (0°)		dB	17.7	20.8
Maximum Power Per Port		Watts	500	500
Interband/Intraband Isolation		dB	25/23	20/23

Standard values based on NGMN-P-BASTA version 9.6 recommendation.

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 Mid Band B1, B2						
Frequency	, Range	MHz		1695-2180		
Frequency Sub-Range		MHz	1695-1850	1850-1990	1950-2180	
Polarization			±45°			
	Low Tilt	dBi	18.6	19.1	18.8	
	Mid Tilt	dBi	18.7	18.7	18.9	
Gain	High Tilt	dBi	18.0	18.1	18.5	
	Over all Tilts	dBi	17.9 ± 1.2	18.9 ± 1.0	18.4 ± 1.7	
Azimuth B	eamwidth (3 dB)	degrees	49.5 ± 8.4	44.8 ± 2.8	48.6 ± 9.7	
Elevation Beamwidth (3 dB)		degrees	5.7 ± 0.8	5.4 ± 0.8	5.2 ± 1.1	
Electrical Downtilt		degrees	2-10			
Impedance		Ohms	50			
VSWR			1.5:1			
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBm (dBc)		< -110 (< -153)		
Front-to-Back Ratio ± 30° @ 180° from boresite		dB	> 24.5	> 26.5	> 25.7	
Upper Sidelobe Rejection 20° Sector Above Main Beam		dB	> 12.7	> 13.9	> 12.4	
Cross Polar Discrimination at Mechanical Boresight (0°)		dB	14.3 19.3		14.2	
Maximum Power Per Port		Watts	300			
Interband/Intraband Isolation		dB	20/25	20/25	20/25	

Standard values based on NGMN-P-BASTA version 9.6 recommendation.



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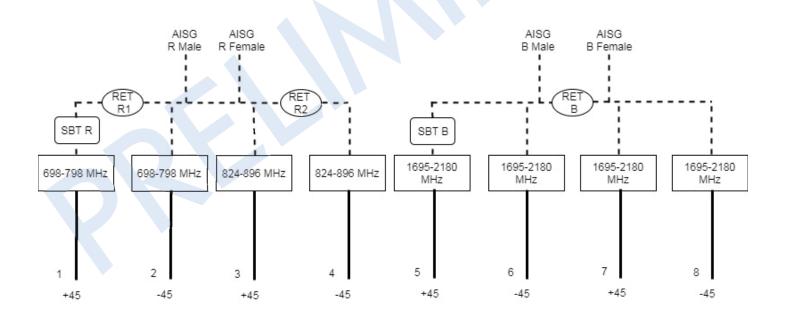
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RET ACTUATOR

Amphenol's **RET-READY** antennas are delivered with the RET Actuator already installed and pre-commissioned with all antenna parameters. Every RET device is factory configured and calibrated so the antenna is ready to be used once delivered to the site which means that there is no need for further installation of RET devices or for programming their configuration or for running a calibration process.

Input Voltage		Vdc	10-30
Power	Idle State, maximum	Watts	0.5
Consumption	Normal Conditions, maximum	Watts	10.0
Protocol			3GPP/AISG v2.0 (Single RET)
RET Interface			(2x) DIN Male and (2x) DIN Female or, (2x) Smart Bias-T (one per band)
Field Replaceable Unit			No



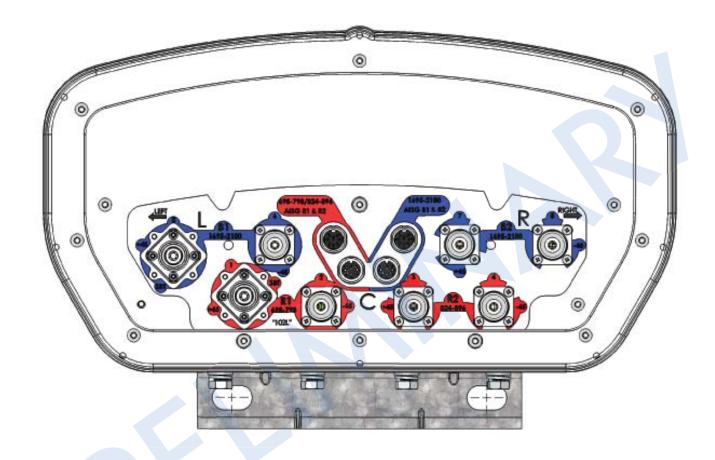


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	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
ARRAY LAYOUT	R 1	696-798	1-2	4.3-10 Female Long Neck
	■ R2	824-900	3-4	4.3-10 Female Long Neck
	■ B1	1695-2180	5-6	4.3-10 Female Long Neck
	■ B2	1695-2180	7-8	4.3-10 Female Long Neck



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MECHANICAL SPECIFICATIONS

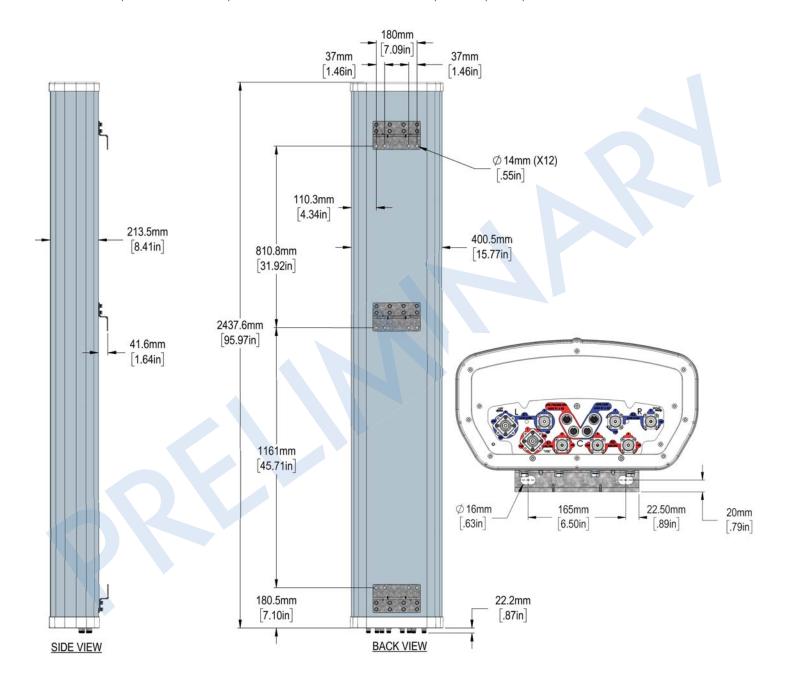
р	Length		mm (in)	2433 (95.8)		
Antenna	Width		mm (in)	401 (15.8)		
₹	Depth		mm (in)	214 (8.4)		
Net W	/eight - Antenna Only		kg (lbs)	42.2 (93)		
		Calculation	km/h (mph)	161 (100)		
Windl	oad	Frontal	N (lbf)	829 (187)		
		Lateral	N (lbf)	239 (54)		
Surviv	al Wind Speed		km/h (mph)	241 (150)		
	Type Connector Quantity Position			4.3-10 Female		
Conne				8		
				Bottom		
Rador	Radome Color			Gray, RAL 7035		
Rador	ne Material			Outdoor Fiberglass		
Lightn	ing Protection (Ground	ding Type)	- 1	Direct Ground		
	Length		mm (in)	TBD		
<u>p</u>	Width		mm (in)	TBD		
Shipping	Depth		mm (in)	TBD		
Ϋ́	Shipping Weight		kg (lbs)	TBD		
	Shipping Volume		m³ (ft³)	TBD		

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698-798 | 824-896 | 1695-2180 | 1695-2180 MHz

WITH INTERNAL SMART BIAS-T

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ACCESSORIES All accessories are ordered separately unless otherwise indicated

MODEL NUMBER	DESCRIPTION	FITS PIPE DIAMETER	WEIGHT
MKS10P02	3-point pole mounting bracket kit	Ø40 to Ø115 mm (Ø1.57 to Ø4.5 in)	6.4 kg (14.0 lbs)
MKS10T02	3-point pole mounting and downtilt bracket kit	Ø50 to Ø115 mm (Ø2.0 to Ø 4.5 in)	9.3 kg (20.6 lbs)

INSTALLATION Please read all installation notes before installing this product.



Always attach the antenna using all mounting points.

Do not install the antenna with the connectors facing upwards.