Amphenol ANTENNA SOLUTIONS

WITH INTERNAL SMART BIAS-T 45°

1936 mm

# OCT456KBW102L

### QUAD BAND | 8-PORT PANEL | WITH INTERNAL SMART BIAS-T | XPOL | 45° | 1936 MM (76.2 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

	Frequency Range (MHz)	698-798	824-896	1695-2180	1695-2180	
2	Array	<b>R</b> 1	<b>R</b> 2	<b>B</b> 1	<b>B</b> 2	
<b>WIEV</b>	Connector	1-2	3-4	5-6	7-8	
OVERVIEW	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	
PRODUCT	Polarization	XPOL	XPOL	XPOL	XPOL	
	Azimuth Beamwidth (avg)	45°	45°	45°	45°	
	Electrical Downtilt	0-12°	0-12°	2-10°	2-10°	
	Dimensions	1936 x 356 x 214 mm (76.2 x 14.0 x 8.4 in)				



ELECTR	ICAL SPECIFICATIONS Low E	Band	📕 R1	<b>R</b> 2	
Frequency Range		1Hz	698-798	824-896	
Frequency	y Sub-Range 🛛 🔊 🔊 🔊	1Hz	700	800	
Polarizatio	on		±45°	±45°	
	Low Tilt d	lBi	16.7	16.9	
Cata	Mid Tilt d	Bi	16.9	17.2	
Gain	High Tilt d	lBi	16.3	17.0	
	Over all Tilts d	Bi	16.6 ± 0.7	17.3 ± 0.3	
Azimuth B	Beamwidth (3 dB) d	legrees	47.9 ± 2.1	43.6 ± 1.1	
Elevation Beamwidth (3 dB)		legrees	11.5 ± 1.1	10.5 ± 0.6	
Electrical Downtilt		legrees	0-12	0-12	
Impedance		Dhms	50	50	
VSWR			1.5:1	1.5:1	
Passive Intermodulation 3rd Order for 2x20 W Carriers		lBm dBc)	< -110 (< -153)	< -110 (< -153)	
Front-to-Back Ratio ± 30° @ 180° from boresite		B	> 23.6	> 23.9	
Upper Sidelobe Rejection 20° Sector Above Main Beam		B	> 15.9	> 17.7	
Cross Polar Discrimination at Mechanical Boresight (0°)		B	> 21.7	> 24.0	
Maximum Power Per Port Wat		Vatts	500	500	
Interband/Intraband Isolation d		B	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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LECIKI	CAL SPECIFICATIONS	iviiu band		📕 B1, 📕 B2		
Frequency Range Frequency Sub-Range		MHz		1695-2180		
		MHz	1695-1850	1850-1990	1950-2180	
Polarizatio	n		±45°			
	Low Tilt	dBi	17.7	18.7	19.3	
Caia	Mid Tilt	dBi	17.5	18.3	19.0	
Gain	High Tilt	dBi	16.9	17.4	18.0	
	Over all Tilts	dBi	17.4 ± 0.8	18.2 ± 1.0	18.1 ± 1.5	
Azimuth B	Beamwidth (3 dB)	degrees	49.0 ± 9.6	42.6 ± 3.9	47.2 ± 11.9	
Elevation Beamwidth (3 dB)		degrees	6.0 ± 1.9	5.3 ± 1.0	5.3 ± 1.0	
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	> 24.1	> 26.0	> 27.0	
Upper Sidelobe Rejection 20° Sector Above Main Beam		dB	> 13.1	> 15.1	> 13.0	
Cross Polar Discrimination at Mechanical Boresight (0°)		dB	> 13.8 > 17.1		> 14.4	
Maximum Power Per Port Watts		Watts	300			
Interband/Intraband Isolation		dB	20/25	20/25	20/25	

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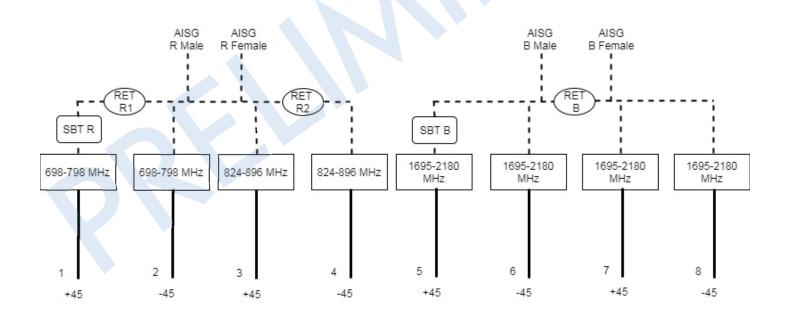
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#### **RET ACTUATOR**

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			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	





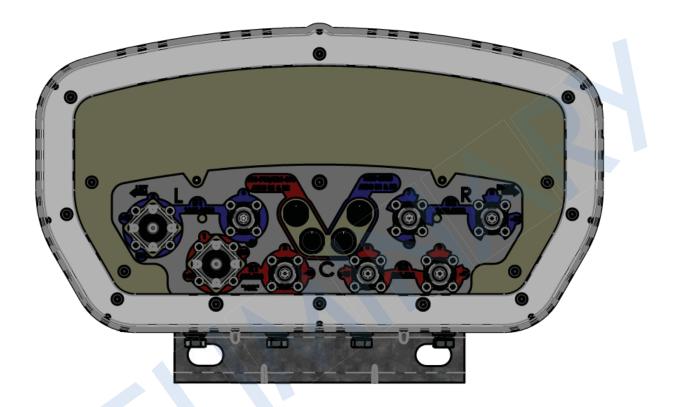
# 8-Port Antenna

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

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	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	
ARRAY LAYOUT	<b>R</b> 1	696-798	1-2	4.3-10 Female Long Neck	
	<b>R</b> 2	824-900	3-4	4.3-10 Female Long Neck	
	<b>B</b> 1	1695-2180	5-6	4.3-10 Female Long Neck	
	<b>B</b> 2	1695-2180	7-8	4.3-10 Female Long Neck	



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#### **MECHANICAL SPECIFICATIONS**

Ja	Length		mm (in)	1936 (76.2)		
Antenna	Width		mm (in)	410.2 (16.2)		
Ā	Depth		mm (in)	223.2 (8.8)		
Net W	/eight - Antenna Only		kg (lbs)	36.3 (80)		
Calculation			km/h (mph)	161 (100)		
Windl	Windload Frontal		N (lbf)	TBD		
		Lateral	N (lbf)	ТВД		
Surviv	al Wind Speed	·	km/h (mph)	241 (150)		
		Туре		4.3-10 Female		
Conne	Connector Quantity Position			8		
				Bottom		
Rador	Radome Color			Gray, RAL 7035		
Rador	Radome Material			Outdoor Fiberglass		
Lightr	ing Protection (Ground	ding Type)		Direct Ground		
	Length		mm (in)	2146 (84.5)		
D	Width		mm (in)	489 (19.3)		
Shipping	Depth		mm (in)	355.6 (14)		
Ч	Shipping Weight		kg (lbs)	52.2 (115)		
	Shipping Volume		m <sup>3</sup> (ft <sup>3</sup> )	0.37 (13.1)		



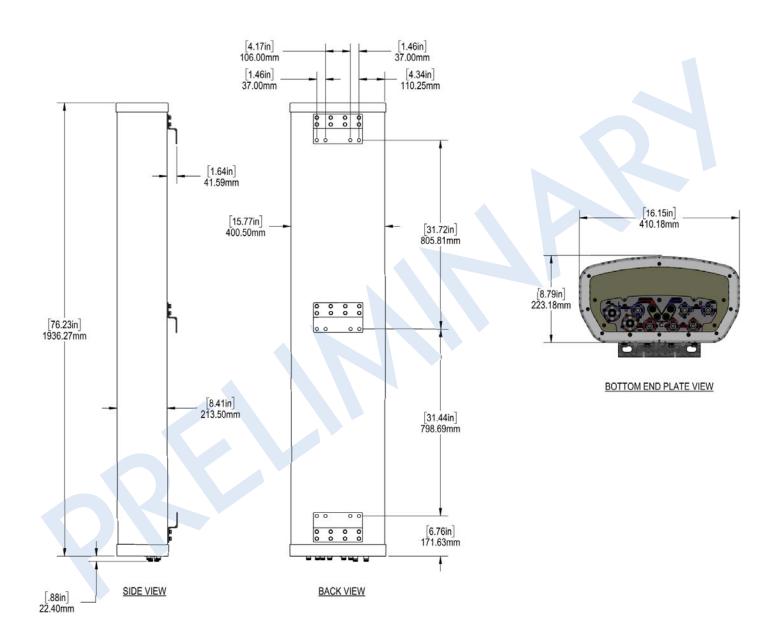
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#### ACCESSORIES All accessories are ordered separately unless otherwise indicated

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 <b>(Ø2.0 to</b> Ø4.5 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.