

OCT454KBW102L

QUAD BAND | 8-PORT PANEL | WITH INTERNAL SMART BIAS-T | XPOL | 45° | 1358 MM (53.5 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	0-14°	0-14°	2-10°	2-10°
	Dimensions	1358 x 401 x 214 mm (53.5 x 15.8 x 8.4 in)			



ELECTRICAL SPECIFICATIONS Low Band

		■ R1	■ R2	
Frequency Range	MHz	698-798	824-896	
Frequency Sub-Range	MHz	700	800	
Polarization	---	±45°	±45°	
Gain	Low Tilt	dBi	15.9	16.9
	Mid Tilt	dBi	15.9	16.9
	High Tilt	dBi	15.7	16.9
	Over all Tilts	dBi	15.8 ± 0.8	16.8 ± 0.3
Azimuth Beamwidth (3 dB)	degrees	48.9 ± 2.7	42.9 ± 2.3	
Elevation Beamwidth (3 dB)	degrees	17.1 ± 1.1	14.8 ± 0.7	
Electrical Downtilt	degrees	0-14	0-14	
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	> 23.2	> 23.7	
Upper Sidelobe Rejection 20° Sector Above Main Beam	dB	> 21.5	> 19.1	
Cross Polar Discrimination at Mechanical Boresight (0°)	dB	> 21.1	> 20.3	
Maximum Power Per Port	Watts	500	500	
Interband/Intraband Isolation	dB	TBD	TBD	

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

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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°		
Gain	Low Tilt	dBi	17.2	17.9	18.6
	Mid Tilt	dBi	17.3	17.2	18.7
	High Tilt	dBi	17.3	18.3	18.4
	Over all Tilts	dBi	17.4 ± 0.6	18.2 ± 0.6	17.9 ± 1.3
Azimuth Beamwidth (3 dB)		degrees	49.9 ± 7.6	43.5 ± 4.4	48.0 ± 9.4
Elevation Beamwidth (3 dB)		degrees	7.6 ± 0.5	7.1 ± 0.5	7.1 ± 1.2
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	> 25.8	> 25.5	> 26.5
Upper Sidelobe Rejection 20° Sector Above Main Beam		dB	> 13.8	> 15.6	> 13.1
Cross Polar Discrimination at Mechanical Boresight (0°)		dB	> 13.3	> 17.9	> 14.3
Maximum Power Per Port		Watts	300		
Interband/Intraband Isolation		dB	TBD	TBD	TBD

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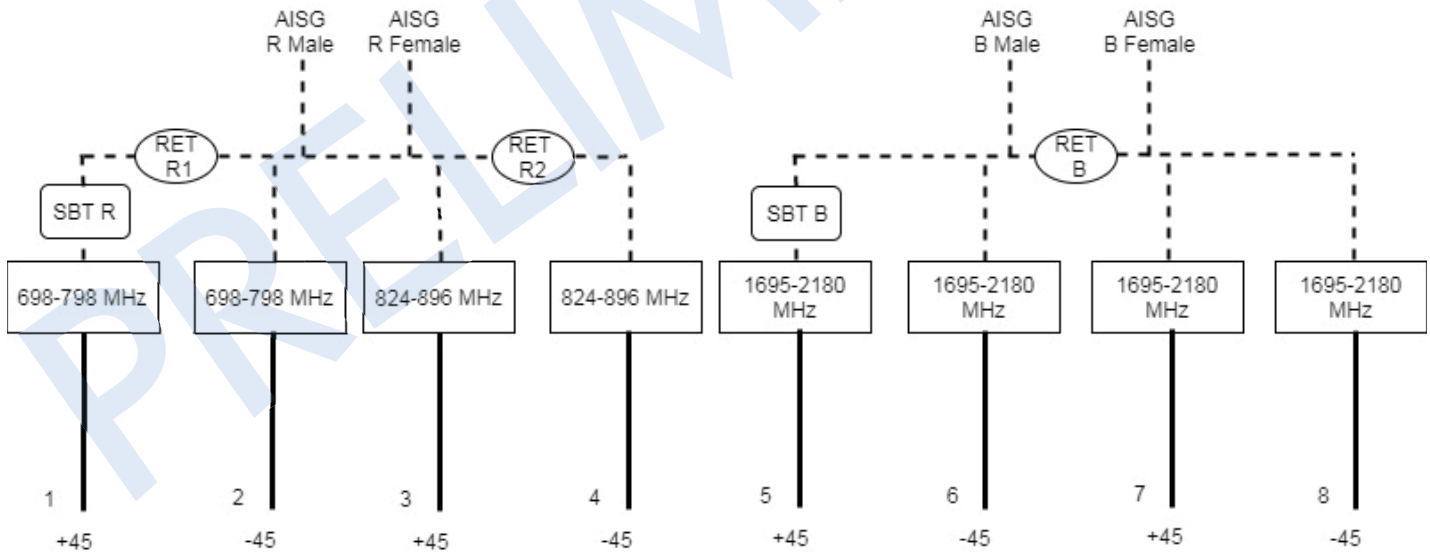
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RET ACTUATOR

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.

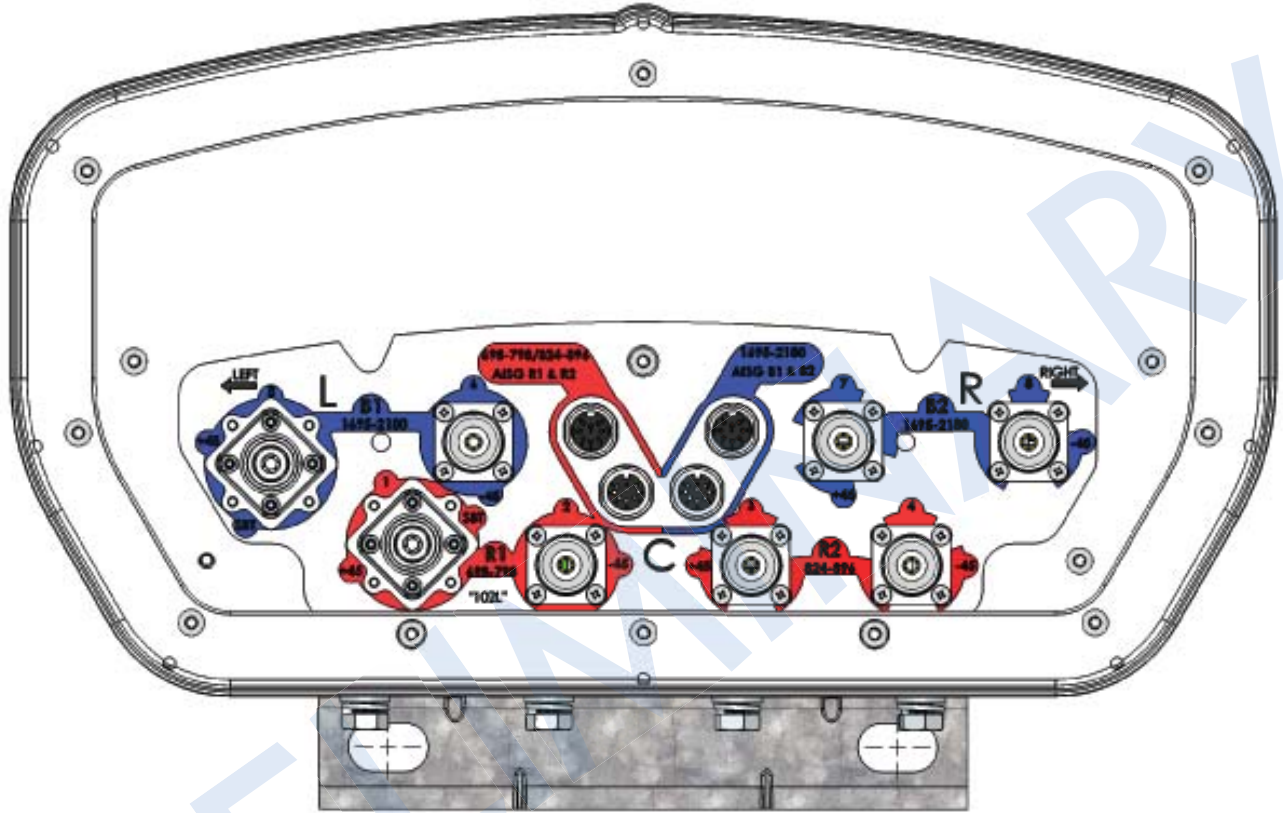
Input Voltage	Vdc	10-30
Power Consumption	Idle State, maximum	Watts 0.5
	Normal Conditions, maximum	Watts 10.0
Protocol	---	3GPP/AISG v2.0 (Single RET)
RET Interface	---	(2x) DIN Male and (2x) DIN Female or, (2x) Smart Bias-T (one per band)
Field Replaceable Unit	---	No



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	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
ARRAY LAYOUT	R1	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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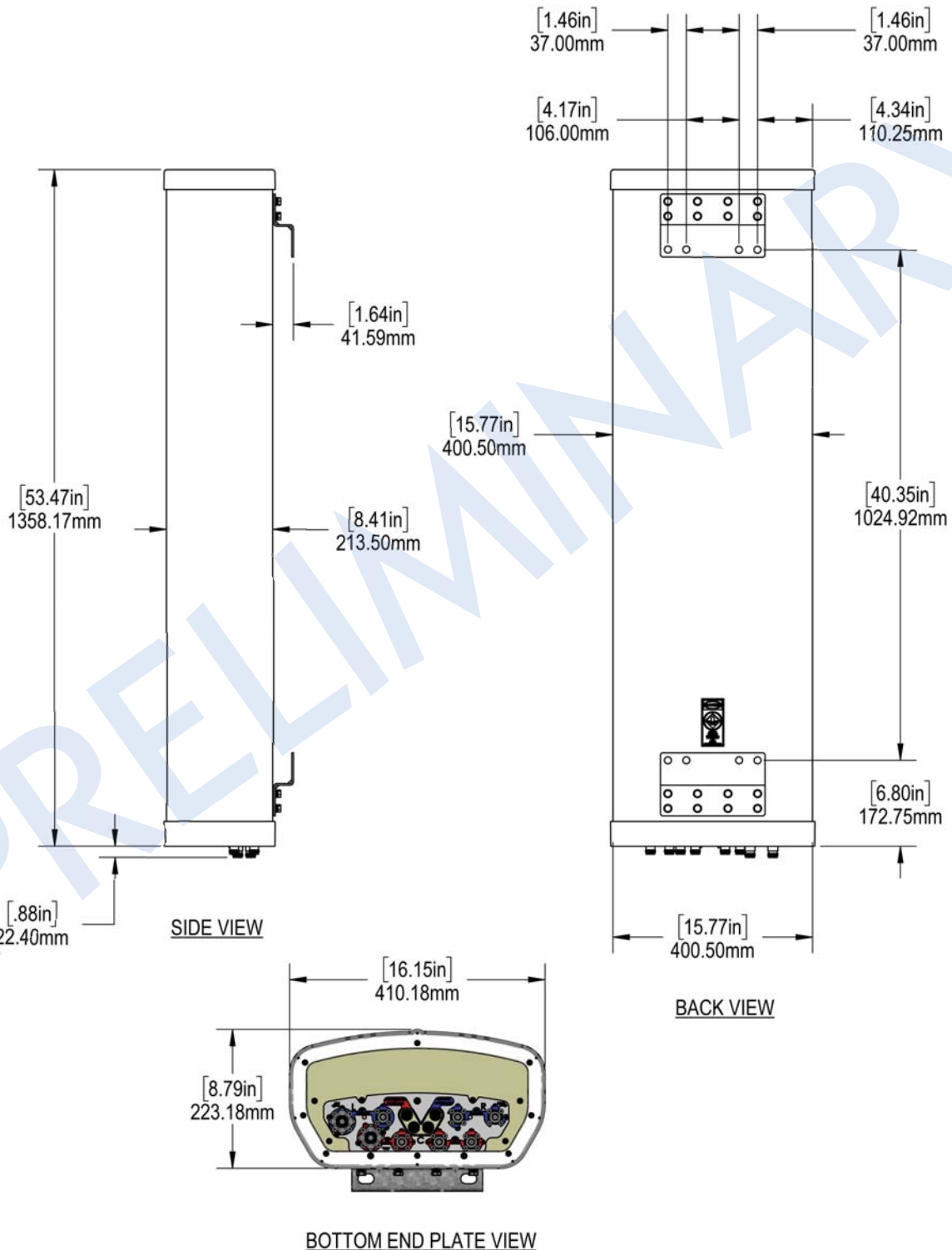
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MECHANICAL SPECIFICATIONS

Antenna	Length	mm (in)	1358 (53.5)
	Width	mm (in)	401 (15.8)
	Depth	mm (in)	214 (8.4)
Net Weight - Antenna Only		kg (lbs)	29 (64)
Windload	Calculation	km/h (mph)	161 (100)
	Frontal	N (lbf)	441 (99)
	Lateral	N (lbf)	133 (30)
Survival Wind Speed		km/h (mph)	241 (150)
Connector	Type	---	4.3-10 Female
	Quantity	---	8
	Position	---	Bottom
Radome Color		---	Gray, RAL 7035
Radome Material		---	Outdoor Fiberglass
Lightning Protection (Grounding Type)		---	Direct Ground
Shipping	Length	mm (in)	TBD
	Width	mm (in)	TBD
	Depth	mm (in)	TBD
	Shipping Weight	kg (lbs)	TBD
	Shipping Volume	m ³ (ft ³)	TBD

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ACCESSORIES All accessories are ordered separately unless otherwise indicated

MODEL NUMBER	DESCRIPTION	FITS PIPE DIAMETER	WEIGHT
MKS10P01	3-point pole mounting bracket kit	Ø40 to Ø115 mm (Ø1.57 to Ø4.5 in)	4.76 kg (14 lbs)
MKS10T01	3-point pole mounting and downtilt bracket kit	Ø50 to Ø115 mm (Ø2.0 to Ø4.5 in)	7.17 kg (15.8 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.