

QUAD456W0000x

Twin Band | Quad Port | Panel Antenna | (2x) X-Pol | 45° / 45° | 20.0 / 20.0 dBi | Variable Tilt

- Twin band, quad-port panel antenna with variable electrical tilt
- AWS-3 Ready
- 4x4 MIMO
- Patented internal RET actuator adds no additional length to the antenna




Ordering Options		Model Number	
When ordering, replace “x” in the model number with one of the options listed below.			
Manual Electrical Tilt		QUAD456W0000M	
Remote Electrical Tilt AISG v2.0 / 3GPP with an MDCU RET Actuator		QUAD456W0000G	
Remote Electrical Tilt AISG v2.0 / 3GPP with an MDDU RET Actuator		QUAD456W0000L	
Mounting bracket kits and other accessories are ordered separately.			
Electrical Characteristics		(2x) 1695-2180 MHz	
Frequency Bands		1695-1880 MHz	1850-1990 MHz 1900-2180 MHz
Polarization		(2x) ±45° (Quad-Pol)	
Horizontal Beamwidth		48°	44° 40°
Vertical Beamwidth		6.5°	6.0° 5.5°
Gain		19.0 dBi	19.0 dBi 20.0 dBi
Electrical Downtilt		0-8°	
Impedance		50Ω	
VSWR		< 1.5:1	
Upper Sidelobe Suppression		18 dB	
Front-to-Back Ratio (±15° from 180°)		> 30 dB	
Inter-port Isolation	at 0°	> 25 dB	
	all other tilts	> 28 dB	
IM3 (2x20W carrier)		< -153 dBc	
Input Power		(4x) 300 W	
Total Number of Connectors		Antennas has 4 connectors located at the bottom	
Connectors Per Band	1695-2180 MHz	(2x) 7/16-DIN Female	
	1695-2180 MHz	(2x) 7/16-DIN Female	
Diplexed		No	
Lightning Protection		Direct Ground	
Operating Temperature		-40° to +60° C (-40° to +140° F)	
Mechanical Characteristics			
Dimensions (Length x Width x Depth)		1687 x 407 x 98 mm	66.4 x 16.0 x 3.9 in
Weight without Mounting Brackets: MET		20.0 kg	44.1 lbs
Weight without Mounting Brackets: RET		20.3 kg	44.8 lbs
Survival Wind Speed		201 km/hr	125 mph
Wind Loads (160 km/hr or 100 mph)	Front	838 N	189 lbf
	Side	191 N	43 lbf



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Electrical Downtilt Control				
Electrical downtilt for each band can be controlled separately. Tilt indicator(s) are covered by removable transparent cap(s).				
Manual Electrical Tilt (MET) Control	A colored knob at the end of the tilt indicator allows change of the tilt without need of a tool. The knob color is identical to the corresponding connector ring color. To access the knob, remove the cap by turning it counter-clockwise. It is re-installed by opposite rotation. Do not remove the transparent cap(s) from the antenna.			
Remote Electrical Tilt (RET) Control	The remote control of the electrical tilt is managed by either a Multi-Device Control Unit (MDCU) or a Multi-Device Dual Unit (MDDU) inserted in the bottom of the antenna. A single actuator individually controls the tilt of each band (no need for daisy chain cables between the bands). This module does not add any additional length to the antenna. For RET control, the transparent caps must be in place and locked. The tilt angle indicators always remain visible and the antenna still has manual tilt control (manual override).			
RET Actuator	Select one of the following RET actuators when ordering this antenna.			
	Multi-Device Control Unit (MDCU)	The MDCU is an electronic module that allows the remote control of the electrical downtilt (RET) in Amphenol antennas with factory embedded motors. The MDCU is factory installed. Refer to ordering options.		
	Multi-Device Dual Unit (MDDU)	The MDDU allows two separate RET Controllers to independently drive the RETs in Amphenol antennas with factory installed motors (for antenna sharing). The MDDU is factory installed. Refer to ordering options.		
Important Installation Instructions		In order to operate RET control, the transparent caps covering the tilt adjustment indicators must be engaged and locked. Do not cut them from the antenna.		
		Do not install the antenna with the connectors facing upward.		
Mounting Options	Part Number	Image	Fits Pipe Diameter	Weight
All mounting bracket kits are ordered separately unless otherwise indicated. Select from the options listed below.				
3-Point Mounting Bracket Kit	MKS09P02		50-115 mm 2.0-4.5 in	4.1 kg 9.0 lbs
3-Point Mounting & Downtilt Bracket Kit	MKS09T02		50-115 mm 2.0-4.5 in	6.4 kg 14.0 lbs

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Bottom View of Antenna



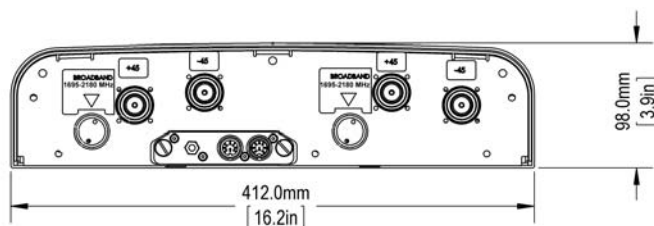
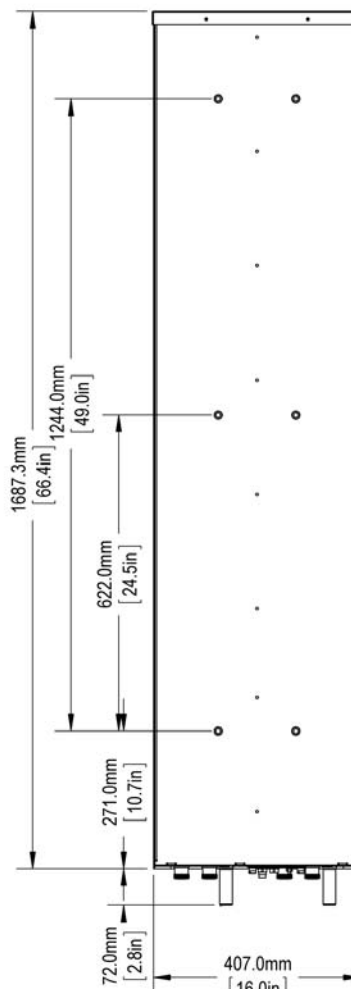
Location of the MDCU or MDDU for RET Control (MDCU shown)

Tilt indicators covered by transparent caps.
Manual adjustment is accessed by removing the caps.
Knob colors are the same as the connectors.



In order to operate RET control, the transparent caps covering the tilt adjustment indicators must be engaged and locked. Do not cut them from the antenna.

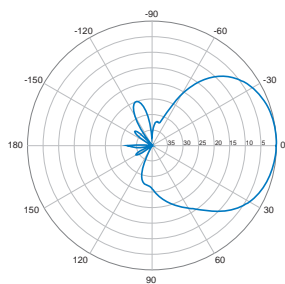
Dimensions



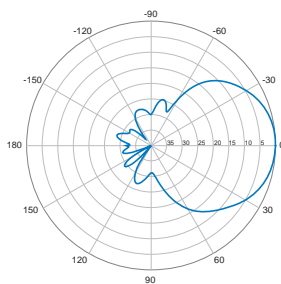
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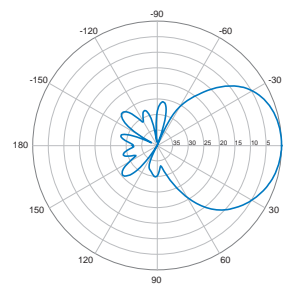
1695-2180 MHz



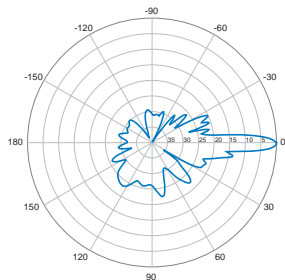
Horizontal | 1800 MHz



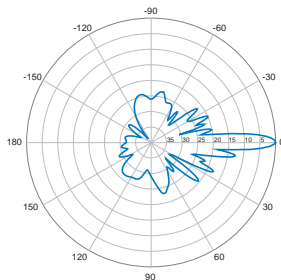
Horizontal | 1900 MHz



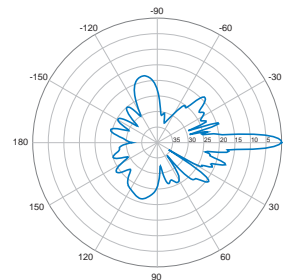
Horizontal | 2100 MHz



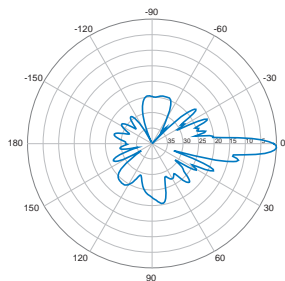
0° | Vertical | 1800 MHz



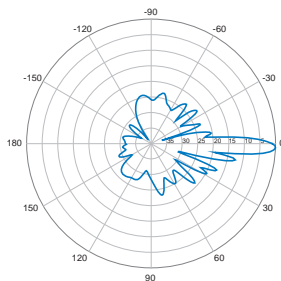
0° | Vertical | 1900 MHz



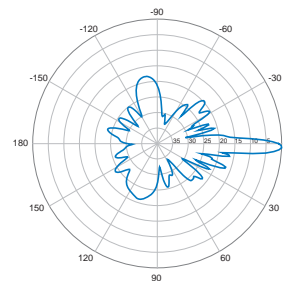
0° | Vertical | 2100 MHz



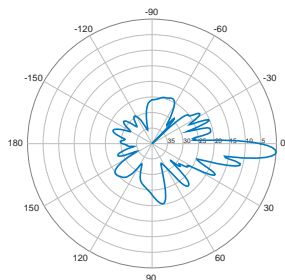
2° | Vertical | 1800 MHz



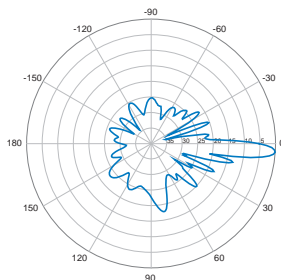
2° | Vertical | 1900 MHz



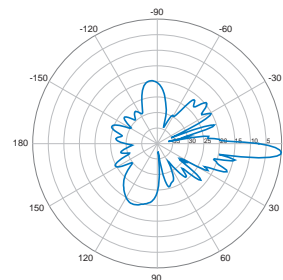
2° | Vertical | 2100 MHz



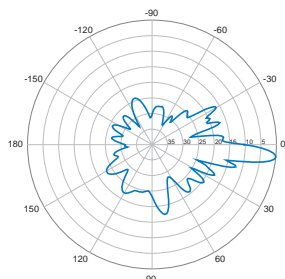
4° | Vertical | 1800 MHz



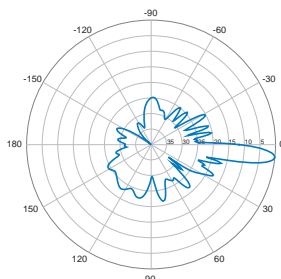
4° | Vertical | 1900 MHz



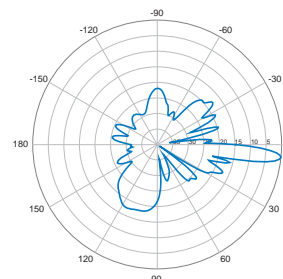
4° | Vertical | 2100 MHz



6° | Vertical | 1800 MHz



6° | Vertical | 1900 MHz

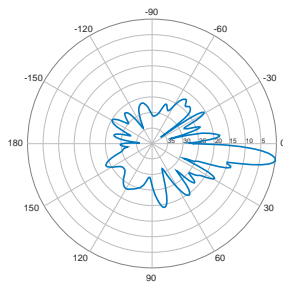


6° | Vertical | 2100 MHz

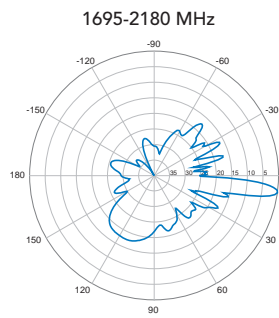
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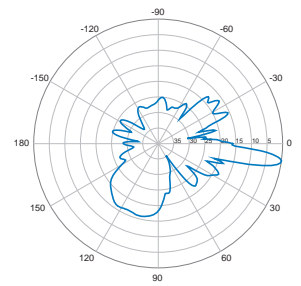
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8° | Vertical | 1800 MHz



8° | Vertical | 1900 MHz



8° | Vertical | 2100 MHz