

### Twin Band | Quad Port | Panel Antenna | (2x) X-Pol | 65° / 65° | 17.2 / 17.2 dBi | Variable Tilt | Extended Tilt Range

- Twin band, quad-port panel antenna with extended 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	QUAD654W0100M			
Remote Electrical Tilt AISG v2.0 / 3GPP with an MDCU RET Actuator	QUAD654W0100G			
Remote Electrical Tilt AISG v2.0 / 3GPP with an MDDU RET Actuator	QUAD654W0100L			
Maunting brookst kits and other accessories are ordered constraint				

Mounting bracket kits and other accessories are ordered separately.										
Electrical Characteristics				(2x) 1695-2180 MHz						
Frequency Bands			1695-1880 MHz	1850-19	990 MHz	1900-21	80 MHz			
Polarizatio	n			(2x) ±45° (Quad-Pol)						
Horizonta	l Beamwidth	า		70°	6	7°	6	6°		
Vertical Be	eamwidth			8.3°	7.	5°	7.	0°		
Gain				16.2 dBi	17.0	) dBi	17.2	dBi		
Electrical	Downtilt			5-15°						
Impedanc	е			50Ω						
VSWR				< 1.5:1						
Upper Sid	elobe Supp	ression		> 18 dB Typical						
Front-to-Back Ratio			> 28 dB							
In-Band Isolation			> 28 dB							
Isolation Between Ports			> 30 dB							
IM3 (2x20W carrier)			< -153 dBc							
Input Power			(4x) 250 W							
Total Number of Connectors			Antenna has 4 connectors located at the bottom							
		1695-2180 MHz		(2x) 7/16-DIN Female						
Connector	s Per Band	1695-2180 MHz		(2x) 7/16-DIN Female						
Diplexed				No						
Lightning Protection			Direct Ground							
Operating Temperature			-40° to +60° C (-40° to +140° F)							
Mechanic	Mechanical Characteristics									
Dimensions (Length x Width x Depth)		epth)	1298 x 305 x 180	mm	51.1	x 12.0 x 7.1	in			
	Antenna Only		11.7	kg		25.7	lbs			
Weight	Antenna with Mounting Bracket Kit MKS09P01		14.4	kg		31.7	lbs			
	Antenna with Mounting Bracket Kit MKS09T01		16.2	kg		35.7	lbs			
Survival Wind Speed			241	km/hr		150	mph			
Wind Load	ds	ds		480	N		108	lbf		
(160 km/hr or 100 mph)		oh)	Side	284	N		64	lbf		



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Electrical Downtilt Control							
Electrical downtilt for each band can be co	ntrolled separately. Tilt indicator(	s) are covered by	removable t	ransparent 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 counterclockwise. 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 R	Select one of the following RET actuators when ordering this antenna.					
	Multi-Device Control Unit (MDCU) ele		electrical d	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	lmag	je	Fits Pipe Diameter	Weight		
All mounting bracket kits are ordered sepa	rately unless otherwise indicated.	Select from the	options listed	d below.			
2-Point Mounting Bracket Kit	MKS09P01			50-115 mm 2.0-4.5 in	2.7 kg 6 lbs		
2-Point Mounting & Downtilt Bracket Kit	MKS09T01			50-115 mm 2.0-4.5 in	4.5 kg 10 lbs		

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**Dimensions** 



## QUAD654W0100x

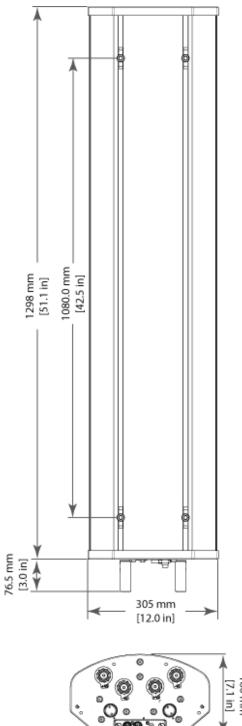
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# **Bottom View of Antenna** Location of the MDCU or MDDU for RET Control (MDCU shown)

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.

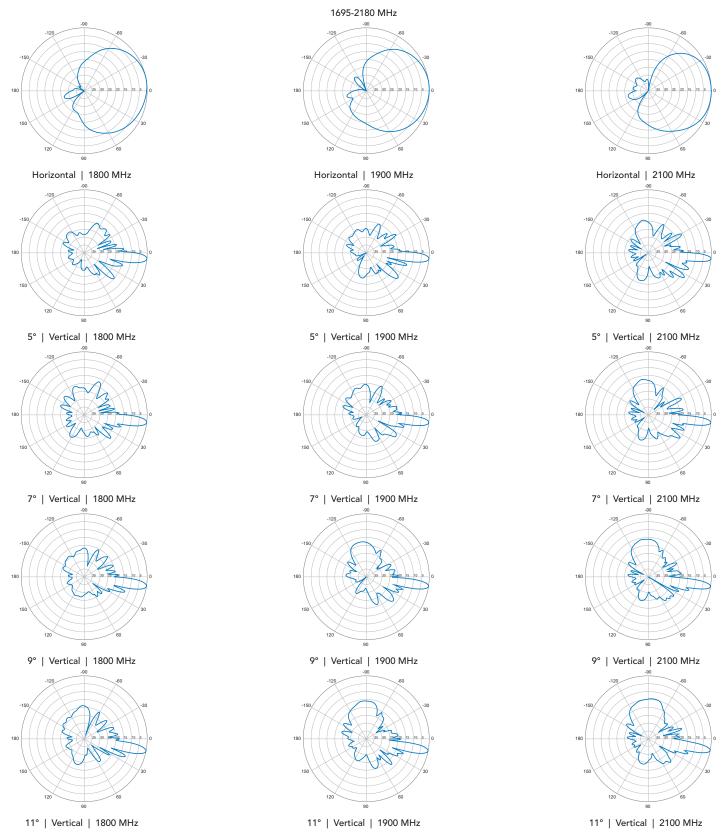




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