

TRI BAND | HEX PORT | PANEL ANTENNA | XXX-POL | 33° / 33° / 33° | 16.7 / 18.8 / 18.8 DBI | VARIABLE TILT

Features

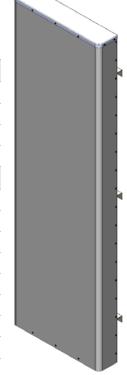
- AWS-3 Ready
- 4x4 MIMO high band compatible
- Patented internal RET actuator adds no additional length to the antenna
- · Can be ordered with a Multi-Device Dual Unit (MDDU) with two separate inputs for independent control of each band

Connector Description	
The antenna has six (6) connectors located at the botton	n, each marked with a colored ring.

Low Band	696-960 MHz	Red Rings	(2x) 7/16-DIN Female
High Band #1	1695-2180 MHz	Blue Rings	(2x) 7/16-DIN Female
High Band #2	1695-2180 MHz	White Rings	(2x) 7/16-DIN Female

Electrical Characteristics	Low	Band	High Band #1 and #2			
Forman Book (MIL)	696-960 MHz		(2x) 1695-2180 MHz			
Frequency Bands (MHz)	696-806 806-960		1695-1850	1850-1990	2100-2180	
Polarization	±4	15°	(2x) ±45°			
Horizontal Beamwidth	35°	30°	38°	35°	30°	
Vertical Beamwidth	9.9°	8.3°	6.0°	5.0°	4.8°	
Gain	16.8 dBi	17.7 dBi	17.9 dBi	18.5 dBi	18.8 dBi	
Electrical Downtilt	0-	10°	0-10°			
Impedance	50Ω			50Ω		
VSWR	< 1.5:1			< 1.5:1		
Upper Sidelobe Suppression	> 18 dE	3 Typical	> 17 dB Typical			
Front-to-Back Ratio	> 2	7 dB	> 28 dB			
In-Band Isolation	> 2!	5 dB	> 28 dB			
Isolation Between Ports	> 30	0 dB	> 30 dB			
IM3 (2x20W carrier)	< -153 dBc < -153 dBc					
Input Power	(2x) 500 W		(4x) 250 W			
Diplexed	No					
Lightning Protection	Direct Ground					
Operating Temperature	-40° to +60° C (-40° to +140° F)					

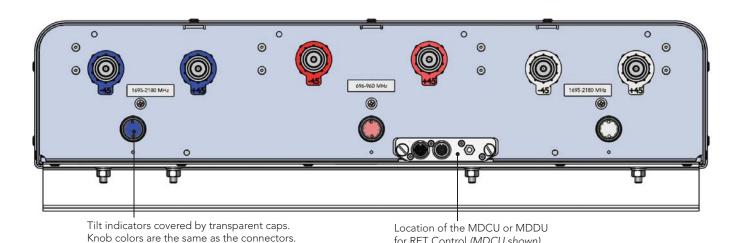
-			,				
Mecha	anical Characte	ristics					
Dimensions (Length x Width x Depth)		2410 x 724 x 153	mm	94.9 x 28.5 x 6.0	in		
Antenna Only Antenna with Mounting Bracket Kit MKS09P04		49.3	kg	108.7	lbs		
		9	63.8	kg	140.7	lbs	
	Antenna with Mounting Bracket Kit MKS09T04		58.5	kg	129.0	lbs	
Survival Wind Speed		241	km/hr	150	mph		
(1/Olay (hara 100 and b)		Front	2131	N	479	lbf	
		Side	450	N	101	lbf	





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Electrical Downtilt Co	ntrol			
Manual Electrical Tilt (MET) Control	Electrical downtilt for each band can be controlled separately. 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	Electrical downtilt for each band can be controlled separately. 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). Do not remove the transparent cap(s) from the antenna.			
RET Actuators (Units are Field Replaceable)	Multi-Device Control Unit (MDCU) 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.	Multi-Device Dual Unit (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 for unique AISG port configirations		
		Port A Port B		
		Two separate inputs for independent control of each band		



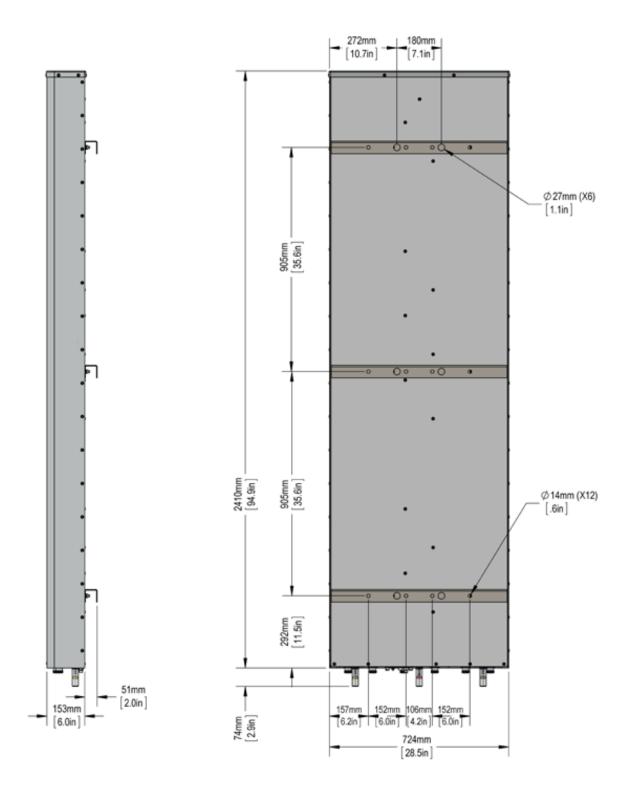


In order to operate RET control, the transparent caps covering the tilt adjustment indicators must be engaged and locked. Do not cut them from the antenna.

for RET Control (MDCU shown)

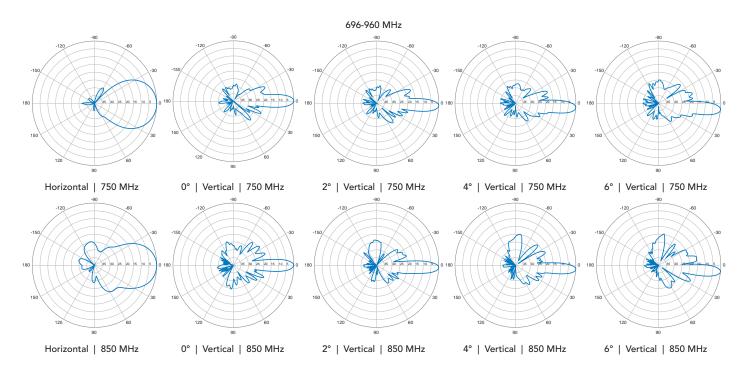


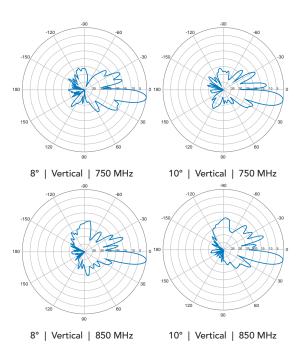
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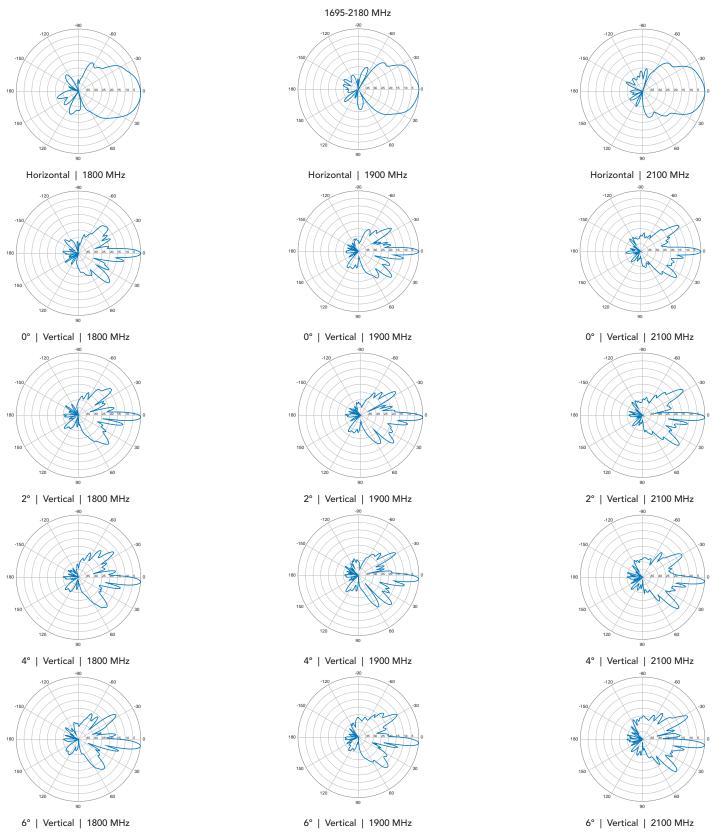
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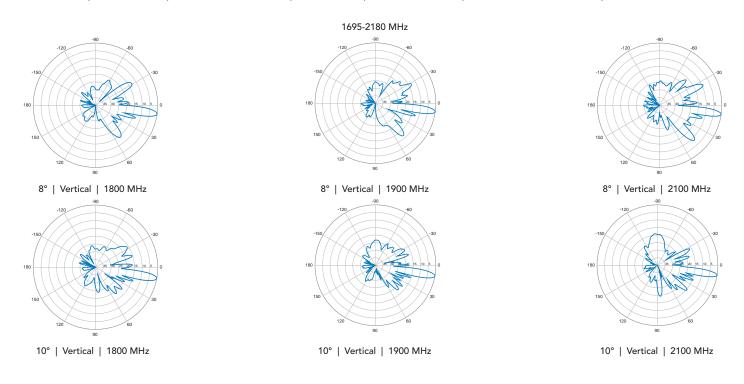


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Antenna Ordering Options

Select Electrical	Actuatos Docariation	Select RET Ad	Antenna	
Tilt Type	Actuator Description	Port A	Port B	Model Number
Manual Electrical Tilt				HEX338CW000 0M
Remote Electrical Tilt AISG v2.0 / 3GPP with an MDCU RET Actuator	The MDCU (Multi-Device Control Unit) 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.			HEX338CW000 0G
Remote Electrical Tilt	The MDDU (Multi-Device Dual Unit) Remote Electrical Tilt allows two separate RET Controllers to		White / Blue 1695-2180 / 1695-2180 MHz	HEX338CW000 0L
AISG v2.0 / 3GPP with an MDDU RET Actuator	independently drive the RETs in Amphenol antennas with factory installed motors (for antenna sharing). The MDDU is factory installed.	Blue 1695-2180 MHz	White / Red 1695-2180 / 696-960 MHz	HEX338CW000L1
		White 1695-2180 MHz	Blue / Red 1695-2180 / 696-960 MHz	HEX338CW000 L2

Mounting Kit Ordering Options All mounting bracket kits are ordered separately unless otherwise indicated.

Mounting Options	Part Number	Image	Fits Pipe Diameter	Weight
3-Point Mounting Bracket Kit	MKS09P04		50-115 mm 2.0-4.5 in	14.5 kg 32 lbs
3-Point Mounting & Downtilt Bracket Kit	MKS09T04		50-115 mm 2.0-4.5 in	9.2 kg 20.3 lbs