HEX857CU0000x

TRI BAND | 6-PORT | PANEL ANTENNA | XXX-POL | 82° / 84° / 84° | 15.1 / 16.0 / 16.0 DBI | VARIABLE TILT

Features

- Ultra wide-band, 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
- Overall length less than 96"

Connector Description

The antenna has six (6) connectors located at the bottom.

Low Band	R1	696-960 MHz	(2x) 7/16-DIN Female
High Band #1	Y1	1695-2400 MHz	(2x) 7/16-DIN Female
High Band #2	Y2	1695-2400 MHz	(2x) 7/16-DIN Female

Electrical Characteristics

Electrical Characteristics	R1		Y1 and Y2			
Frequency Bands (MHz)	696-960 MHz		(2x) 1695-2400 MHz			
	696-806	806-960	1695-1850	1850-1990	2100-2180	2200-2400
Polarization	±45°		(2x) ±45°			
Horizontal Beamwidth	80°	82°	80°	82°	84°	79°
Vertical Beamwidth	8.8°	7.8°	5.5°	5.2°	5.0°	4.6°
Gain	14.7 dBi	15.1 dBi	15.8 dBi	16.0 dBi	15.8 dBi	16.0 dBi
Electrical Downtilt	0-10°		0-10°			
Impedance	50Ω		50Ω			
VSWR	< 1.5:1		< 1.5:1			
Upper Sidelobe Suppression	> 18 dB Typical		> 18 dB Typical			
Front-to-Back Ratio	> 30 dB		> 30 dB			
In-Band Isolation	> 23 dB		> 25 dB			
Isolation Between Ports	> 30 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)					

Mechanical Characteristics

Dimensions (Length x Width x Depth)			2421 x 305 x 204	mm	95.3 x 12.0 x 8.0 in
Weight	Antenna Only		19.5	kg	43 lbs
	Antenna with Mounting Bracket Kit **MKS09P02**		23.6	kg	52 lbs
	Antenna with Mounting Bracket Kit **MKS09T02**		25.1	kg	57.1 lbs
Survival Wind Speed			241	km/hr	150 mph
Wind Loads (160 km/hr or 100 mph)		Front	988	N	222 lbf
		Side	603	N	136 lbf

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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Electrical Downtilt Control

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

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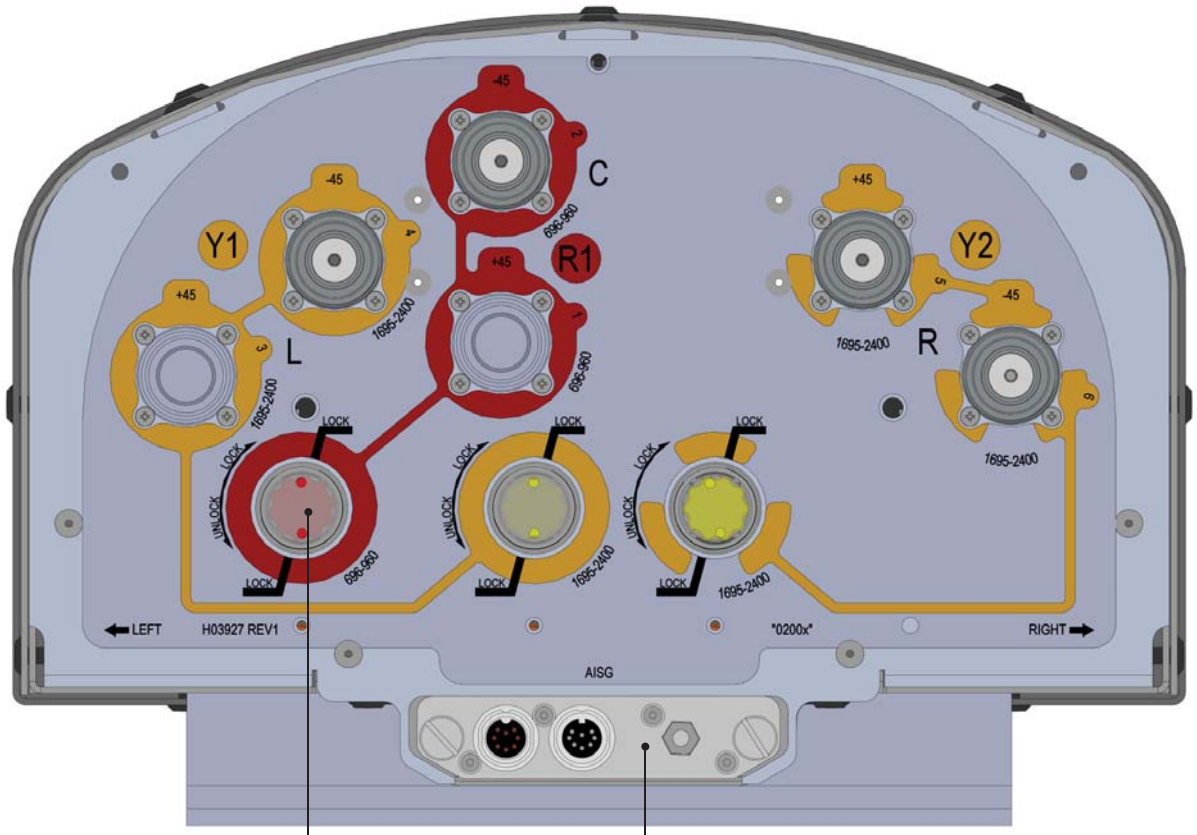

Location of the RET Actuator

Tilt indicators covered by transparent 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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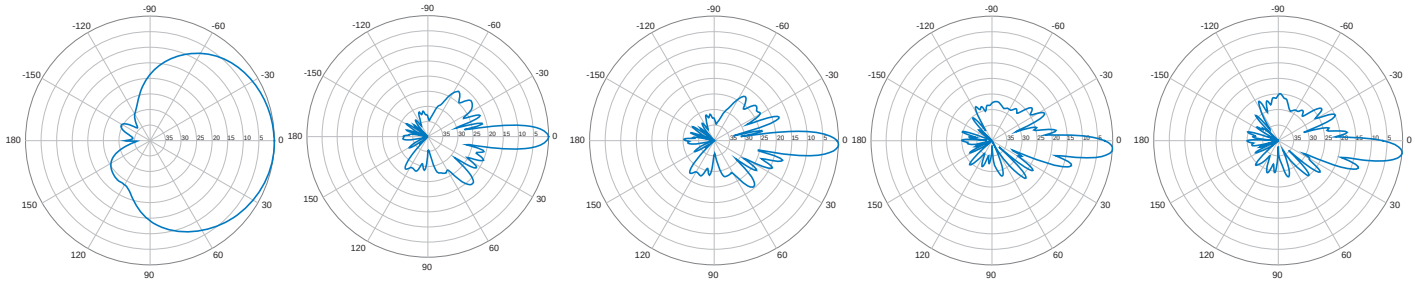
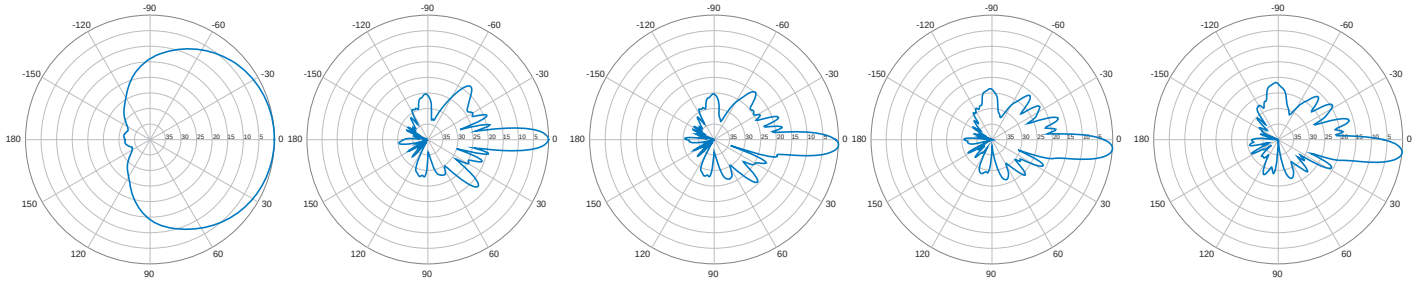
TRI BAND | 6-PORT | PANEL ANTENNA | XXX-POL | 82° / 84° / 84° | 15.1 / 16.0 / 16.0 DBI | VARIABLE TILT

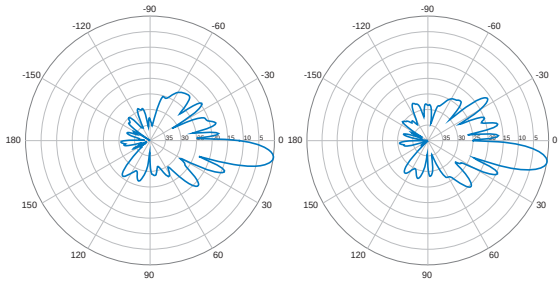
696-960 MHz



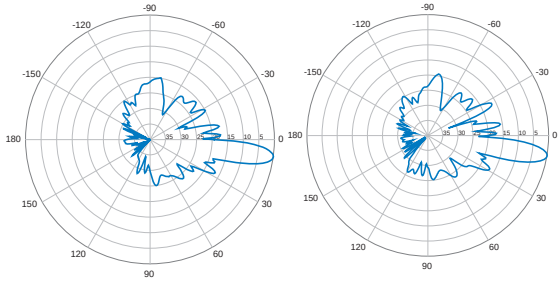
Horizontal | 750 MHz | 0° | Vertical | 750 MHz | 2° | Vertical | 750 MHz | 4° | Vertical | 750 MHz | 6° | Vertical | 750 MHz



Horizontal | 850 MHz | 0° | Vertical | 850 MHz | 2° | Vertical | 850 MHz | 4° | Vertical | 850 MHz | 6° | Vertical | 850 MHz



8° | Vertical | 750 MHz | 10° | Vertical | 750 MHz



8° | Vertical | 850 MHz | 10° | Vertical | 850 MHz

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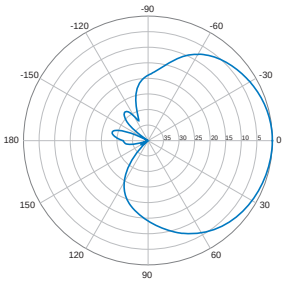
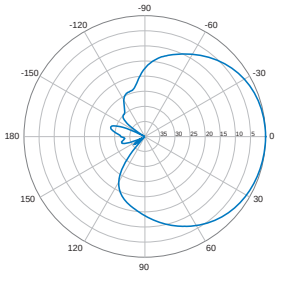
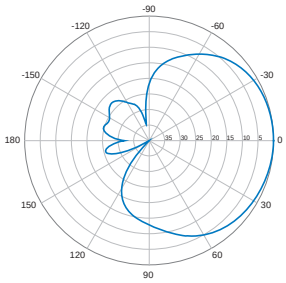
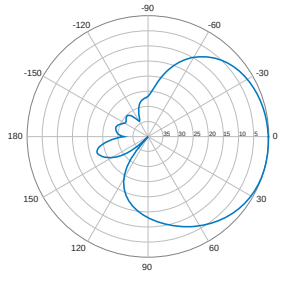
TRI BAND | 6-PORT | PANEL ANTENNA | XXX-POL | 82° / 84° / 84° | 15.1 / 16.0 / 16.0 DBI | VARIABLE TILT

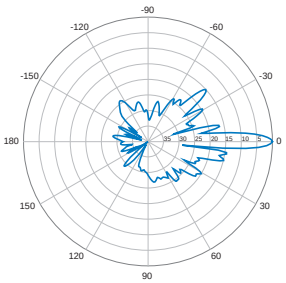
1695-2400 MHz

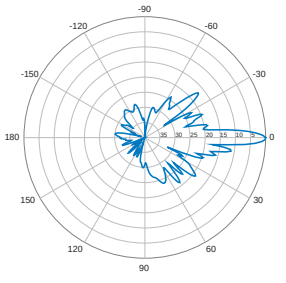

Horizontal | 1800 MHz

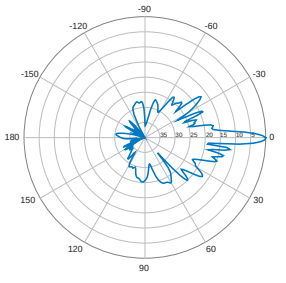

Horizontal | 1900 MHz

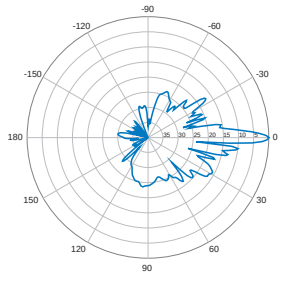

Horizontal | 2100 MHz

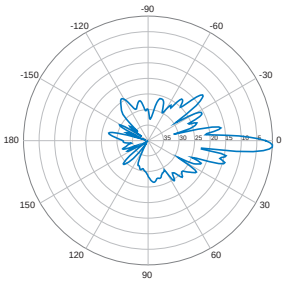

Horizontal | 2400 MHz

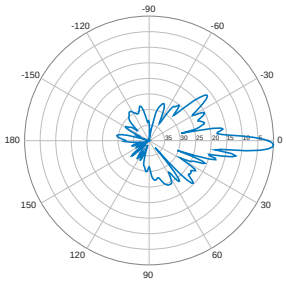

0° | Vertical | 1800 MHz

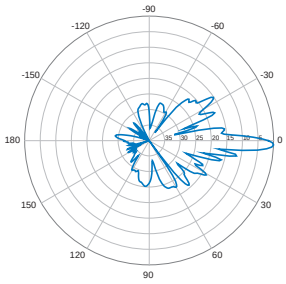

0° | Vertical | 1900 MHz

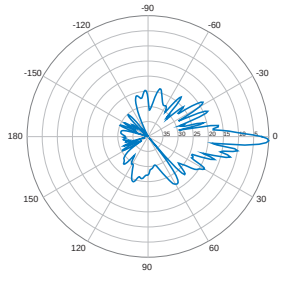

0° | Vertical | 2100 MHz

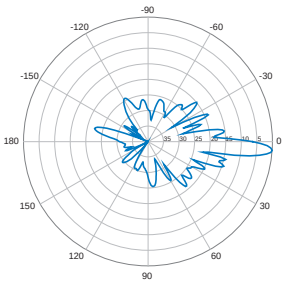

0° | Vertical | 2400 MHz

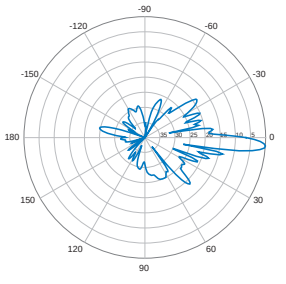

2° | Vertical | 1800 MHz

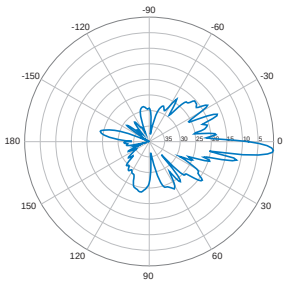

2° | Vertical | 1900 MHz

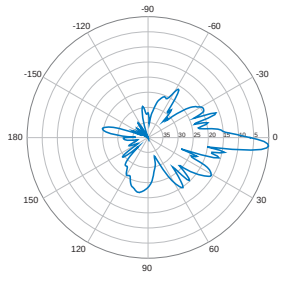

2° | Vertical | 2100 MHz

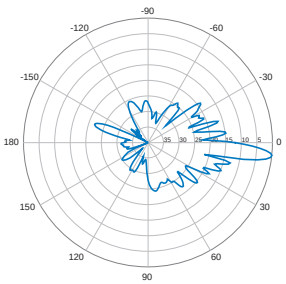

2° | Vertical | 2400 MHz

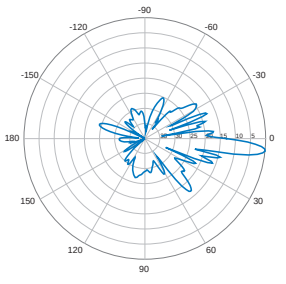

4° | Vertical | 1800 MHz

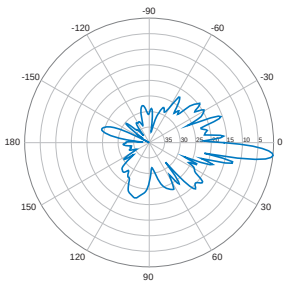

4° | Vertical | 1900 MHz

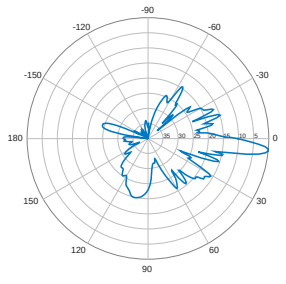

4° | Vertical | 2100 MHz


4° | Vertical | 2400 MHz


6° | Vertical | 1800 MHz


6° | Vertical | 1900 MHz


6° | Vertical | 2100 MHz


6° | Vertical | 2400 MHz

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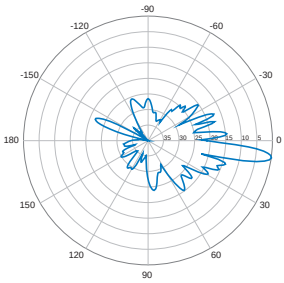
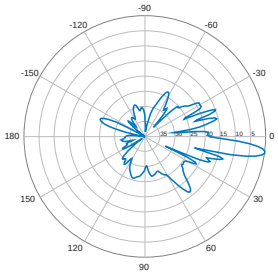
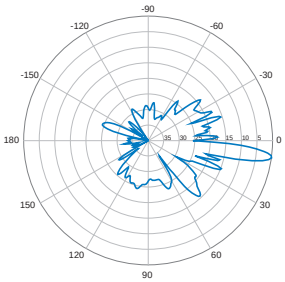
1695-2400 MHz



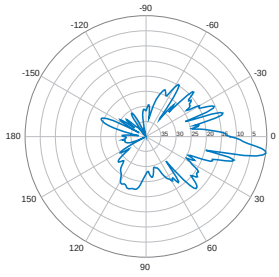
8° | Vertical | 1800 MHz



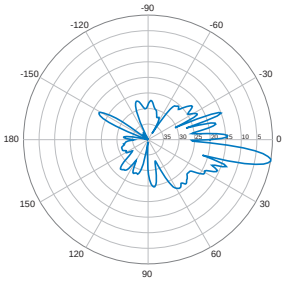
8° | Vertical | 1900 MHz



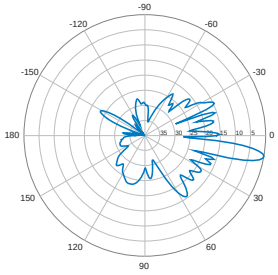
8° | Vertical | 2100 MHz



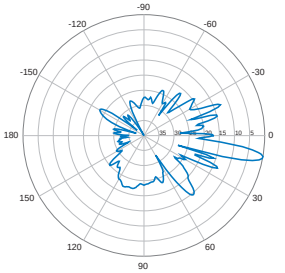
8° | Vertical | 2400 MHz



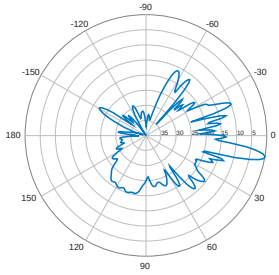
10° | Vertical | 1800 MHz



10° | Vertical | 1900 MHz



10° | Vertical | 2100 MHz



10° | Vertical | 2400 MHz

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Antenna Ordering Options

Select Electrical Tilt Type	Actuator Description	Select RET Actuator Port Configuration		Antenna Model Number
		Port A	Port B	
Manual Electrical Tilt	---	---	---	HEX857CU0000**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.	---	---	HEX857CU0000**0G**
Remote Electrical Tilt AISG v2.0 / 3GPP with an **MDDU** RET Actuator	The **MDDU** (Multi-Device Dual Unit) 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.	R1 696-960 MHz	Y2 / Y1 1695-2400 / 1695-2400 MHz	HEX857CU0000**0L**
		Y1 1695-2400 MHz	Y2 / R1 1695-2400 / 696-960 MHz	HEX857CU000**L1**
		Y2 1695-2400 MHz	Y1 / R1 1695-2400 / 696-960 MHz	HEX857CU000**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	MKS09P02		50-115 mm 2.0-4.5 in	4.1 kg 9 lbs
3-Point Mounting & Downtilt Bracket Kit	MKS09T02		50-115 mm 2.0-4.5 in	6.4 kg 14 lbs