

HEX658CW0000x

TRI BAND | HEX PORT | PANEL ANTENNA | XXX-POL | 70° / 65° / 65° | 15.8 / 17.2 / 17.2 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 bottom, each marked with a colored ring.

| | | | |
|-------------|------|---------------|----------------------|
| Low Band | ■ R1 | 696-960 MHz | (2x) 7/16-DIN Female |
| Mid Band #1 | ■ B1 | 1695-2180 MHz | (2x) 7/16-DIN Female |
| Mid Band #2 | ■ B2 | 1695-2180 MHz | (2x) 7/16-DIN Female |

Electrical Characteristics

| Electrical Characteristics | R1 | | B1 B2 | | |
|----------------------------|----------------------------------|----------|--------------------|-----------|-----------|
| Frequency Bands (MHz) | 696-960 MHz | | (2x) 1695-2180 MHz | | |
| | 696-806 | 806-960 | 1695-1850 | 1850-1990 | 2100-2180 |
| Polarization | ±45° | | (2x) ±45° | | |
| Horizontal Beamwidth | 75° | 70° | 65° | 63° | 60° |
| Vertical Beamwidth | 9.2° | 7.9° | 6.0° | 5.5° | 5.0° |
| Gain | 15.1 dBi | 15.8 dBi | 16.7 dBi | 16.9 dBi | 17.2 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) | | 2508 x 305 x 180 mm | 98.7 x 12.0 x 7.1 in |
| Weight | Antenna Only | 19.8 kg | 43.7 lbs |
| | Antenna with Mounting Bracket Kit MKS09P02 | 23.9 kg | 52.7 lbs |
| | Antenna with Mounting Bracket Kit MKS09T02 | 26.2 kg | 57.8 lbs |
| Survival Wind Speed | | 241 km/hr | 150 mph |
| Wind Loads (160 km/hr or 100 mph) | Front | 930 N | 209 lbf |
| | Side | 550 N | 124 lbf |

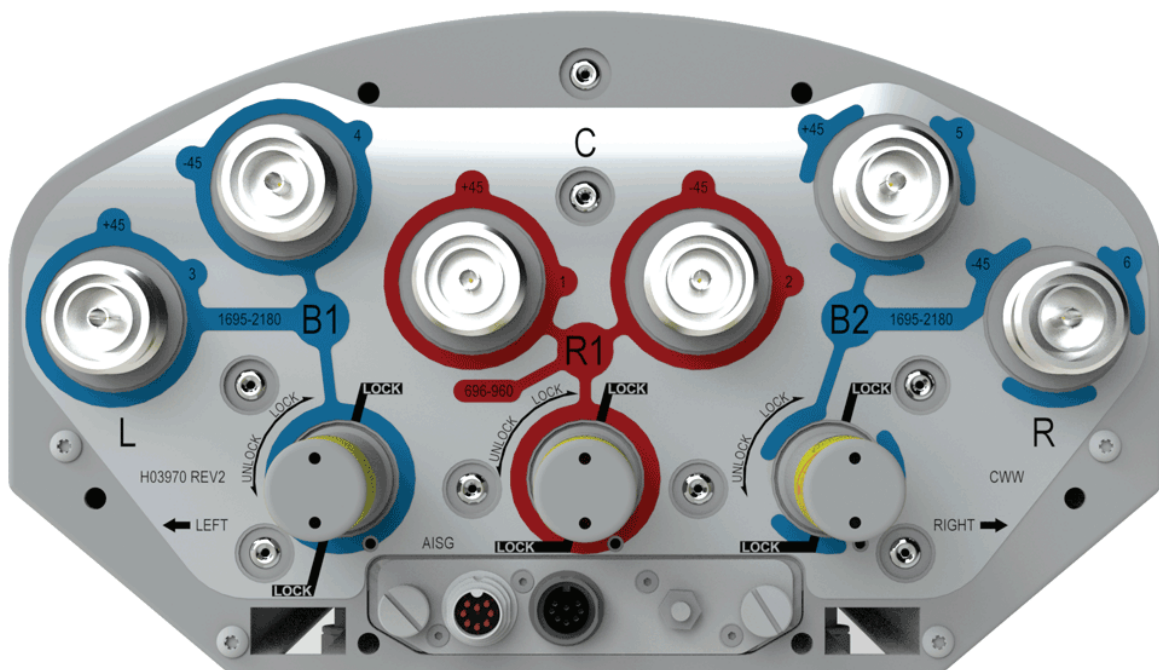


HEX658CW0000x

TRI BAND | HEX PORT | PANEL ANTENNA | XXX-POL | 70° / 65° / 65° | 15.8 / 17.2 / 17.2 DBI | VARIABLE TILT

Electrical Downtilt Control

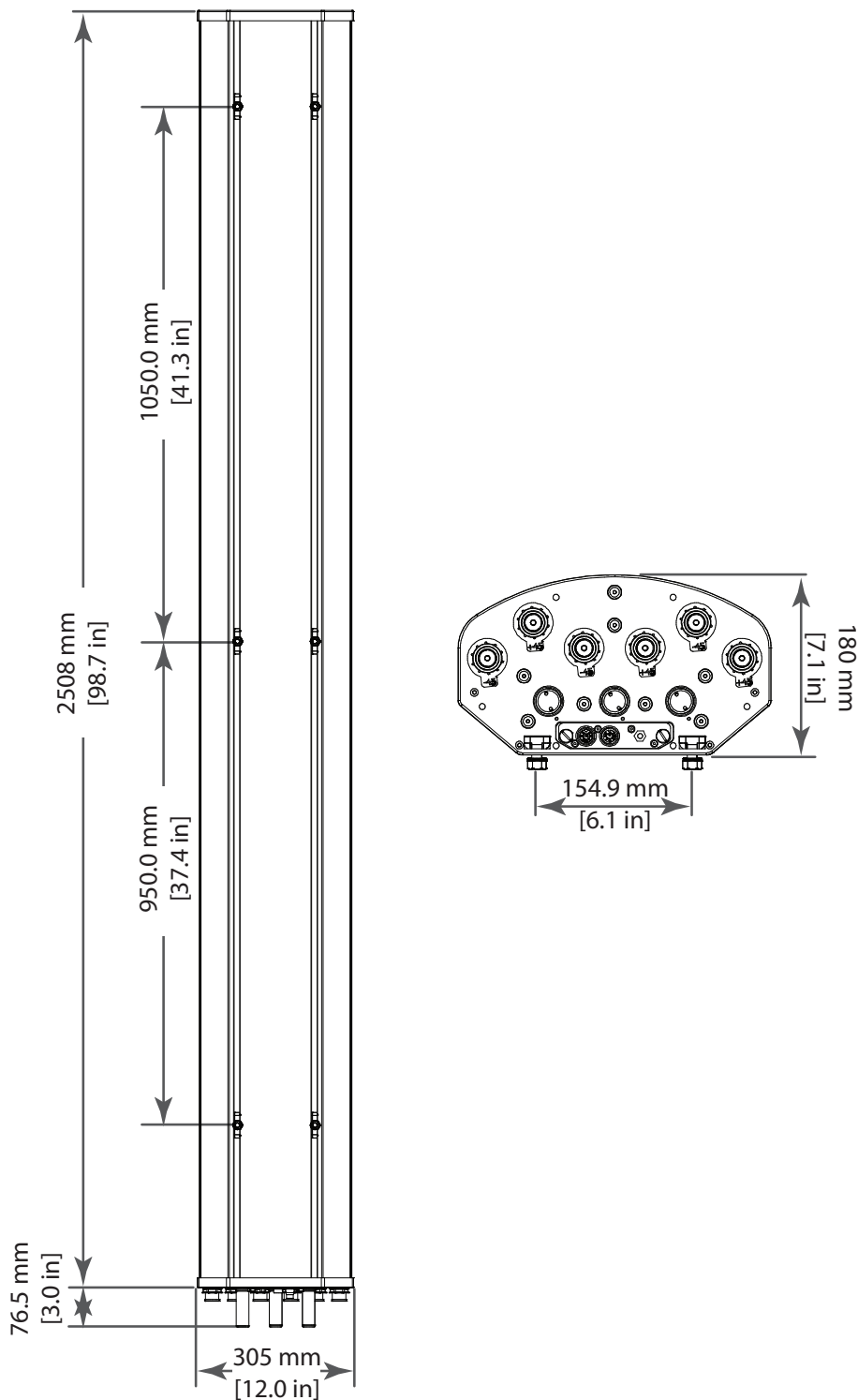
| | | |
|--|---|---|
| Manual Electrical Tilt (MET) Control | Electrical downtilt for each band can be controlled separately. A colored knob at the end of the tilt indicator allows change of the tilt without need of a tool. The knob color is identical to the corresponding connector ring color. To access 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 configurations |
| |  |  <p>Port A Port B</p> <p>Two separate inputs for independent control of each band</p> |



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.

HEX658CW0000x

TRI BAND | HEX PORT | PANEL ANTENNA | XXX-POL | 70° / 65° / 65° | 15.8 / 17.2 / 17.2 DBI | VARIABLE TILT



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.

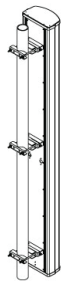

HEX658CW0000x

TRI BAND | HEX PORT | PANEL ANTENNA | XXX-POL | 70° / 65° / 65° | 15.8 / 17.2 / 17.2 DBI | VARIABLE TILT

Antenna Ordering Options

| Select Electrical Tilt Type | Actuator Description | Select RET Actuator Port Configuration | | Antenna Model Number |
|--|---|--|--------------------------------------|------------------------|
| | | Port A | Port B | |
| Manual Electrical Tilt | --- | --- | --- | HEX658CW0000 M |
| 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. | --- | --- | HEX658CW0000 G |
| 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 | B2 / B1 1695-2180 / 1695-2400 MHz | HEX658CW0000 L |
| | | B1 1695-2180 MHz | B2 / R1 1695-2180 / 696-960 MHz | HEX658CW0000 L1 |
| | | B2 1695-2180 MHz | B1 / R1 1695-2180 / 696-960 MHz | HEX658CW0000 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 |

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.