

6208710Em

Dual Band | Twin Beam | 8-Port | Panel Antenna | (2x) X-Pol | 35° | 2100 mm

- Dual band, Twin beam antenna, Dual polarisation, 8 connectors
- Independent tilt on each band 0-10°
- RET version, 3GPP/AISG2.0 with integrated RCU
- Mounting and downtilt brackets included

| | | | | | |
|-------------------------|-----------------------|---------------------|-----------|-----------|-----------|
| PRODUCT OVERVIEW | Frequency Range (MHz) | 1710-2690 | 1710-2690 | 1710-2690 | 1710-2690 |
| | Array | ■ Y1 | ■ Y2 | ■ Y3 | ■ Y4 |
| | Connector Position | 1-2 | 3-4 | 5-6 | 7-8 |
| | Polarization | XPOL | XPOL | XPOL | XPOL |
| | Azimuth Beamwidth | 35° | 35° | 35° | 35° |
| | Electrical Downtilt | 0-10° | 0-10° | 0-10° | 0-10° |
| | Dimensions | 2100 x 360 x 159 mm | | | |



ORDERING OPTIONS Select from the different options listed below

| SELECT ELECTRICAL DOWNTILT CONTROL & AISG PROTOCOL | SELECT ACTUATOR | SELECT CONNECTOR TYPE | ANTENNA MODEL NUMBER |
|--|----------------------------------|-----------------------|----------------------|
| Manual Electrical Tilt (MET) | --- | 7/16 DIN Female | 6208710Em |
| | | 4.3-10 Female | 6208710ENm |
| Remote Electrical Tilt (RET) AISG v2.0 / 3GPP | Multi-Device Control Unit (MDCU) | 7/16 DIN Female | 6208710EGm |
| | | 4.3-10 Female | 6208710ENGm |



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ELECTRICAL SPECIFICATIONS Ultra Wide Band

■ Y1, Y2

| Frequency Range | | MHz | 1710-2690 | | |
|--|----------------|---------|------------------|------------|------------|
| | | MHz | 1710-1880 | 1920-2170 | 2500-2690 |
| Polarization | | --- | ± 45° | | |
| Gain | Over all Tilts | dBi | 18.8 ± 0.5 | 19.2 ± 0.4 | 19.8 ± 0.3 |
| Azimuth Beamwidth | | degrees | 38.0 ± 3.0 | 36.0 ± 3.0 | 30.0 ± 2.0 |
| Elevation Beamwidth | | degrees | 7.5 ± 0.5 | 7.7 ± 0.3 | 5.6 ± 0.4 |
| Beam B: Azimuth Direction | | degrees | +29° ± 3° | +29° ± 3° | +29° ± 3° |
| Electrical Downtilt | | degrees | 0-10 | | |
| Impedance | | Ohms | 50 | | |
| VSWR | | --- | < 1.5 | | |
| Passive Intermodulation | | dBc | < -150 | | |
| Front-to-Back Ratio Co-Pol, ±30° | | dB | > 28 | > 28 | > 28 |
| First Upper Sidelobe Suppression | | dB | > 16 | > 16 | > 16 |
| Upper Sidelobe Suppression, Peak to 20° | | dB | > 15 | > 15 | > 15 |
| Cross Polar Discrimination @ Main Direction (0°) | | dB | > 15 | > 15 | > 15 |
| Maximum Effective Power Per Port | | Watts | 200 | | |
| Cross Polar Isolation | | dB | Same beam : ≥ 25 | | |
| Beam-to-Beam Isolation | | dB | ≥ 25 | | |

Standard values based on NGMN-P-BASTA version 12.0 recommendation.

ELECTRICAL SPECIFICATIONS Ultra Wide Band

■ Y3, Y4

| Frequency Range | | MHz | 1710-2690 | | |
|--|----------------|---------|------------------|------------|------------|
| | | MHz | 1710-1880 | 1920-2170 | 2500-2690 |
| Polarization | | --- | ± 45° | | |
| Gain | Over all Tilts | dBi | 18.8 ± 0.5 | 19.2 ± 0.4 | 19.8 ± 0.3 |
| Azimuth Beamwidth | | degrees | 38.0 ± 3.0 | 36.0 ± 3.0 | 30.0 ± 2.0 |
| Elevation Beamwidth | | degrees | 7.5 ± 0.5 | 7.7 ± 0.3 | 5.6 ± 0.4 |
| Beam A: Azimuth Direction | | degrees | -29° ± 3° | -29° ± 3° | -29° ± 3° |
| Electrical Downtilt | | degrees | 0-10 | | |
| Impedance | | Ohms | 50 | | |
| VSWR | | --- | < 1.5 | | |
| Passive Intermodulation | | dBc | < -150 | | |
| Front-to-Back Ratio Co-Pol, ±30° | | dB | > 28 | > 28 | > 28 |
| First Upper Sidelobe Suppression | | dB | > 16 | > 16 | > 16 |
| Upper Sidelobe Suppression, Peak to 20° | | dB | > 15 | > 15 | > 15 |
| Cross Polar Discrimination @ Main Direction (0°) | | dB | > 15 | > 15 | > 15 |
| Maximum Effective Power Per Port | | Watts | 200 | | |
| Cross Polar Isolation | | dB | Same beam : ≥ 25 | | |
| Beam-to-Beam Isolation | | dB | ≥ 25 | | |

Standard values based on NGMN-P-BASTA version 12.0 recommendation.

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ELECTRICAL DOWNTILT CONTROL

For multiband antennas, electrical downtilt for each band can be controlled separately.

| | |
|--------------------------------------|---|
| Manual Electrical Tilt (MET) Control | The MET is a separate kit provided on the bottom of the antenna. This kit has colored knobs with a respective array identification indicated within it. This knob can be rotated to set an electrical downtilt as per the requirement. The tilt information of the respective arrays can be observed with an indicator provided near the knob. |
| Remote Electrical Tilt (RET) Control | The remote control of the electrical tilt is managed by a Multi-Device Control Unit (MDCU) inserted in the bottom of the antenna. See details below and refer to the ordering options to see which actuators are available with this particular 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. |

RET ACTUATOR

Amphenol's **RET-READY** antennas are delivered with the RET Actuator already installed and pre-commissioned with all antenna parameters. Every RET device is factory configured and calibrated so the antenna is ready to be used once delivered to the site which means that there is no need for further installation of RET devices.

| | | |
|-------------------------------|--|----------------------------|
| Number of RET-READY Actuators | One per antenna | |
| Input Voltage | +10 to +30 V | |
| Power Consumption | Idle State | 0.5 W |
| | Operating | 4 W typical / 10 W maximum |
| Protocol | 3GPP/AISG 2.0 | |
| Tilt Change Duration | Less than 15 seconds, typical (may vary dependent on antenna type and outdoor temperature) | |
| Precision | ± 0.5° | |
| Tilt Change Capability | 50,000 minimum | |
| RET Interface | 1 pair of AISG Male and Female (type IEC60130-9) | |
| Field Replaceable Unit | Yes | |
| Remote Control | Capable of Controlling from OMC or BTS/ NodeB or External Tools | |

ENVIRONMENTAL SPECIFICATIONS

| | | |
|----------------------------------|-----------|-----------------------------|
| Environmental Standard | --- | ETS 300 019 |
| Lightning Protection | --- | Direct Ground |
| Operating Temperature | ° C (° F) | -40° to +60° (-40° to 140°) |
| Product Environmental Compliance | --- | Product is RoHs Compliant |

ACCESSORIES


All accessories are ordered separately unless otherwise indicated

| ITEM | MODEL NUMBER | WEIGHT |
|---|--------------|-------------------|
| Brackets for pole Ø48 to Ø115 mm (Ø1.9 to Ø4.5 in) with mechanical tilt (0° to 10°) | IA00483 | 5.0 kg (11.0 lbs) |

Wall mounting brackets are available upon request

INSTALLATION

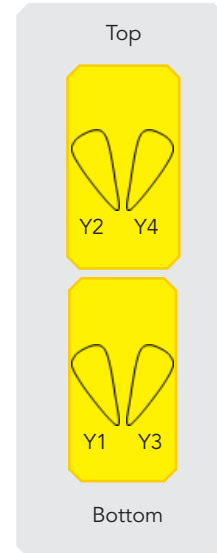
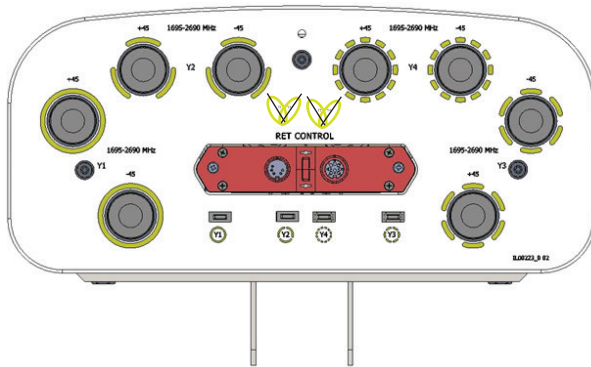
Please read all installation notes before installing this product.

| | |
|---|--|
|  | Always attach the antenna by all mounting points. |
| | Do not install the antenna with the connectors facing upwards. |

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| ARRAY LAYOUT | ARRAY | FREQUENCY | CONNECTOR | CONNECTOR TYPE |
|--------------|-------|-----------|-----------|--|
| | ■ Y1 | 1710-2690 | 1-2 | 4.3-10 Female or 7/16 DIN Female Standard Neck |
| | ■ Y2 | 1710-2690 | 3-4 | 4.3-10 Female or 7/16 DIN Female Standard Neck |
| | ■ Y3 | 1710-2690 | 5-6 | 4.3-10 Female or 7/16 DIN Female Standard Neck |
| | ■ Y4 | 1710-2690 | 7-8 | 4.3-10 Female or 7/16 DIN Female Standard Neck |

Diagram shown at right depicts the view from the front of the antenna. The illustration is not shown to scale.

MECHANICAL SPECIFICATIONS

| | | | |
|--|-------------|---------------------------------------|--------------|
| Length | mm (in) | 2100 (82.6) | |
| Width | mm (in) | 360 (14.1) | |
| Depth | mm (in) | 159 (6.2) | |
| Net Weight - Antenna Only | kg (lbs) | ≈30 (66.1) | |
| Mechanical Distance Between Mounting Points | mm (in) | 1700 (66.9) | |
| Survival Wind Speed | km/h | 200 (124) | |
| Windload (EN 1991-1-4:2005 using Wind Tunnel Coefficients) | Calculation | km/h | 150 (93.2) |
| | Frontal | N (lbf) | 823 (185.0) |
| | Lateral | N (lbf) | 232 (52.1) |
| | Rearside | N (lbf) | 1042 (234.2) |
| Reflector Material | --- | Aluminium | |
| Radiator Material | --- | Aluminium and Low loss circuit board | |
| Radome Material | --- | Fiberglass (UV, Resistant) | |
| Radome Color | --- | Gray RAL7035 | |
| Shipping Dimensions (Length x Width x Depth) | mm (in) | 2272 x 457 x 304 (89.4 x 17.9 x 11.9) | |
| Shipping Weight | kg (lbs) | ≈38 (83.7) | |

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