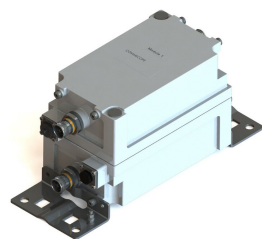


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Tower Mounted Amplifier, Dual 700 MHz with AISG 2.0, with 4.3-10 connectors

- TMA is operating in AISG & CWA mode, Alarm Current consumption CWA mode 190 mA
- Designed to boost UP-Link Coverage and KPIs
- RET interface to control antenna RET actuators with AISG standard
- Single AISG with 1 RET connector
- Automatic LNA by-pass function
- Built in lightning protection
- Connectors “in line”
- 2 input ports and 2 output ports

Product Classification

Product Type 1-BTS:1-ANT (Uniplex) | Tower mounted amplifier

General Specifications

Color Gray

Modularity 2-Twin

Mounting Pole | Wall

Mounting Pipe Hardware Band clamps (2)

RF Connector Interface 4.3-10 Female

Dimensions

Height 119 mm | 4.685 in

Width 200 mm | 7.874 in

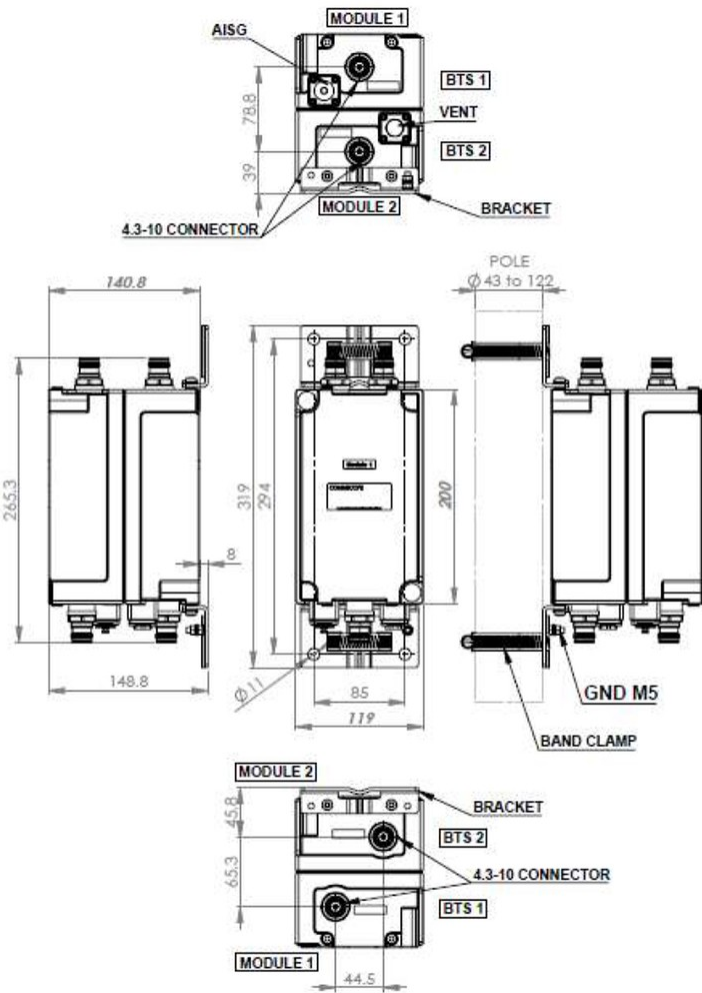
Depth 141 mm | 5.551 in

Ground Screw Diameter 8 mm | 0.315 in

Mounting Pipe Diameter Range 40–160 mm

Outline Drawing

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Electrical Specifications

License Band, LNA APT 700 | DCS 1800

Electrical Specifications, dc Power/Alarm

Lightning Surge Current 10 kA
Lightning Surge Current Waveform 8/20 waveform
Operating Current at Voltage 240 mA @ 12 V

Electrical Specifications, AISG

AISG Connector 8-pin DIN Female
AISG Connector Standard IEC 60130-9
Protocol AISG 2.0

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Voltage, AISG Mode 10–30 Vdc

Electrical Specifications

| | |
|--|--------------|
| Sub-module | 1 2 |
| Branch | 1 |
| Port Designation | ANT |
| License Band | APT 700, LNA |
| Return Loss, typical, dB | 20 |
| Return Loss - Bypass Mode, typical, dB | 14 |

Electrical Specifications Rx (Uplink)

| | |
|---|---------|
| Frequency Range, MHz | 703–733 |
| Bandwidth, MHz | 30 |
| Gain, nominal, dB | 12 |
| Gain Tolerance, dB | ±1 |
| Noise Figure, maximum, dB | 2 |
| Noise Figure, typical, dB | 1.8 |
| Group Delay Variation, maximum, ns | 50 |
| Group Delay Variation Bandwidth, MHz | 5 |
| Total Group Delay, maximum, ns | 130 |
| Return Loss, minimum, dB | 18 |
| Insertion Loss - Bypass Mode, typical, dB | 2.5 |

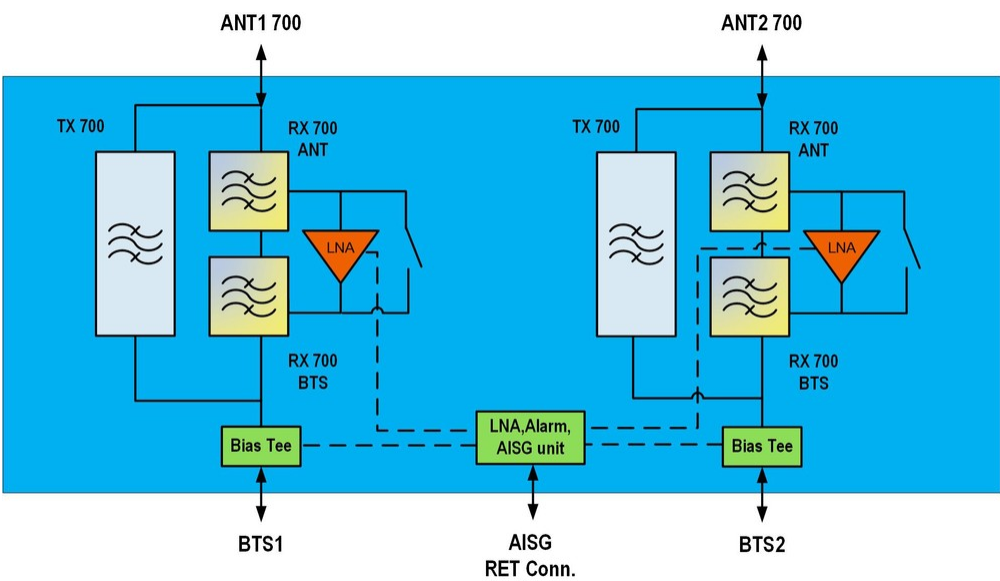
Electrical Specifications Tx (Downlink)

| | |
|--------------------------------------|---------|
| Frequency Range, MHz | 758–788 |
| Bandwidth, MHz | 30 |
| Insertion Loss, maximum, dB | 0.7 |
| Insertion Loss, typical, dB | 0.5 |
| Group Delay Variation, maximum, ns | 10 |
| Group Delay Variation Bandwidth, MHz | 5 |
| Total Group Delay, maximum, | 50 |

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| | |
|------------------------------|----------------------|
| ns | |
| Return Loss, minimum, dB | 18 |
| Return Loss, typical, dB | 21 |
| Input Power, RMS, maximum, W | 200 |
| Input Power, PEP, maximum, W | 2000 |
| 3rd Order PIM, typical, dBc | -161 |
| 3rd Order PIM Test Method | Two +43 dBm carriers |

Block Diagram



Material Specifications

| | |
|--------|---------|
| Finish | Painted |
|--------|---------|

Environmental Specifications

| | |
|--------------------------------|--------------------------------------|
| Operating Temperature | -40 °C to +65 °C (-40 °F to +149 °F) |
| Relative Humidity | Up to 100% |
| Corrosion Test Method | IEC 60068-2-11, 30 days |
| Ingress Protection Test Method | IEC 60529:2001, IP67 |

Packaging and Weights

| | |
|----------|-------------------|
| Included | Mounting hardware |
|----------|-------------------|

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| | |
|-----------------------------------|--------------------|
| Volume | 3.4 L |
| Weight, net | 5.1 kg 11.244 lb |
| Weight, without mounting hardware | 4.8 kg 10.582 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

* Footnotes

| | |
|-------------------|--|
| License Band, LNA | License Bands that have RxUplink amplification |
|-------------------|--|