

Quad Band TMA 1800/2100/2300/2600 with 694-960 bypass, 1 AISG, 4 devices - 2 subunits, 4.3-10 connectors

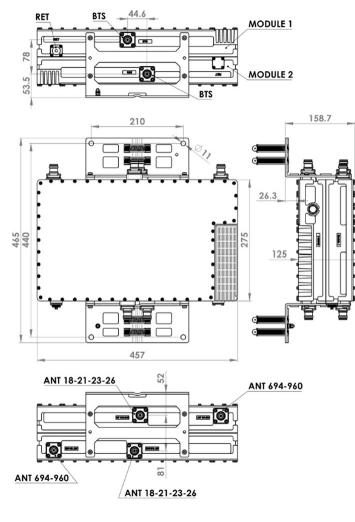
- Industry leading PIM performance
- Designed to boost UP-Link Coverage and KPIs
- TMA is operating in AISG mode
- 4 devices with 2 sub-units
- Option to by-pass TDD2300 LNA
- Single AISG with 1 RET connector
- RET interface to control antenna RET actuators with AISG standard
- Automatic LNA by-pass function
- 2 input ports and 4 output ports
- TMA with 694-960 MHz bypass
- New 4.3-10 connectors for improved PIM performance and size reduction

Product Classification

| Product Type | 1-BTS:2-ANT (Diplex) 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 | 120 mm 4.724 in |
| Width | 457 mm 17.992 in |
| Depth | 275 mm 10.827 in |
| Mounting Pipe Diameter Range | 42.6-122 mm |

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Outline Drawing



Electrical Specifications

License Band, LNA

DCS 1800 | IMT 2100 | IMT 2600 | TDD 2300

Electrical Specifications, dc Power/Alarm

| dc Switching/Redundancy | Yes | |
|----------------------------------|------------------|--|
| Lightning Surge Current | 5 kA | |
| Lightning Surge Current Waveform | 8/20 waveform | |
| Electrical Specifications, AISG | | |
| AISG Connector | 8-pin DIN Female | |
| AISG Connector Standard | IEC 60130-9 | |

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| Protocol | AISG 2.0 |
|--------------------|-----------|
| Voltage, AISG Mode | 10-30 Vdc |

Electrical Specifications

| Sub-module | 1 2 | 1 2 | 1 2 | 1 2 |
|---|---------------|---------------|---------------|---------------|
| Branch | 1 | 2 | 3 | 4 |
| Port Designation | ANT | ANT | ANT | ANT |
| License Band | DCS 1800, LNA | IMT 2100, LNA | TDD 2300, LNA | IMT 2600, LNA |
| Return Loss, typical, dB | 20 | 20 | 20 | 20 |
| Return Loss - Bypass Mode, typical, dB | 18 | 18 | 18 | 18 |

Electrical Specifications Rx (Uplink)

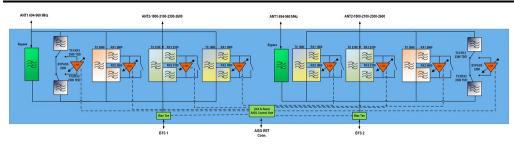
| Frequency Range, MHz | 1710-1785 | 1920-1980 | 2300-2400 | 2500-2570 |
|--|-----------|-----------|-----------|-----------|
| Bandwidth, MHz | 75 | 60 | 100 | 70 |
| Gain, nominal, dB | 12 | 12 | 12 | 12 |
| Noise Figure, typical, dB | 1.2 | 1.2 | 2.2 | 1.2 |
| Total Group Delay, typical, ns | 100 | 80 | 65 | 70 |
| Insertion Loss - Bypass Mode, typical, dB | 2 | 2 | 2 | 2 |

Electrical Specifications Tx (Downlink)

| Frequency Range, MHz | 1805-1880 | 2110-2170 | 2300-2400 | 2620-2690 |
|--------------------------------|----------------------|----------------------|-----------|----------------------|
| Bandwidth, MHz | 75 | 60 | 100 | 70 |
| Insertion Loss, typical, dB | 0.5 | 0.3 | 1.7 | 0.4 |
| Total Group Delay, typical, ns | 40 | 22 | 58 | 22 |
| Return Loss, typical, dB | 20 | 20 | 18 | 20 |
| Input Power, RMS, maximum, W | 100 | 100 | 50 | 100 |
| Input Power, PEP, maximum, W | 1000 | 1000 | 500 | 1000 |
| 3rd Order PIM, typical, dBc | -155 | -155 | | -155 |
| 3rd Order PIM Test Method | Two +43 dBm carriers | Two +43 dBm carriers | ; | Two +43 dBm carriers |

Block Diagram





Environmental Specifications

| -40 °C to +65 °C (-40 °F to +149 °F) |
|--------------------------------------|
| Up to 100% |
| IEC 60068-2-11, 30 days |
| IEC 60529:2001, IP67 |
| |

Packaging and Weights

| Included | Mounting hardware |
|-------------|---------------------|
| Volume | 15 L |
| Weight, net | 18.5 kg 40.785 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

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