

Dual Band Tower Mounted Amplifier, 1800//2100 MHz, 12 dB, 2 BTS & 4 ANT ports, AISG with 1 RET connectors (1 devices with 2 sub-units each)

- Industry leading PIM performance
- TMA is operating in AISG & CWA mode, Alarm Current consumption CWA mode 190 mA
- 2 input ports and 4 output ports
- Designed to boost UP-Link Coverage and KPIs
- 1 device with 2 sub-units
- New 4.3-10 connectors for improved PIM performance and size reduction

Product Classification

Product Type 2-BTS:4-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
 215 mm | 8.465 in

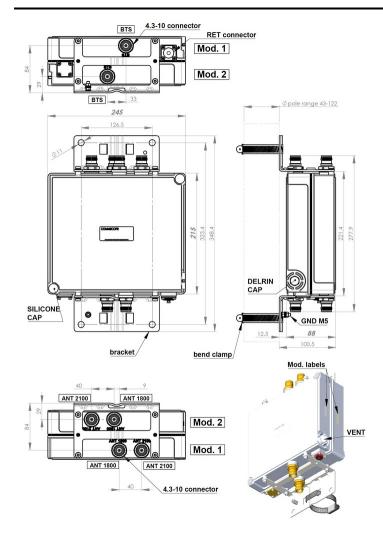
 Width
 245 mm | 9.646 in

 Depth
 88 mm | 3.465 in

Mounting Pipe Diameter Range 43–122 mm

Outline Drawing





Electrical Specifications

License Band, LNA DCS 1800 | IMT 2100

Electrical Specifications, dc Power/Alarm

Lightning Surge Current 10 kA

Lightning Surge Current Waveform 8/20 waveform

Voltage 7–30 Vdc

Electrical Specifications, AISG

AISG Connector 8-pin DIN Female

AISG Connector Standard IEC 60130-9

Protocol AISG 2.0

COMMSCOPE®

| Voltage. | AISG Mode |
|----------|-----------|
|----------|-----------|

10-30 Vdc

Electrical Specifications

| Sub-module | 1 2 | 1 2 |
|--|---------------|---------------|
| Branch | 1 | 2 |
| Port Designation | ANT 1800 | ANT 2100 |
| License Band | DCS 1800, LNA | IMT 2100, LNA |
| Return Loss - Bypass Mode, typical, dB | 16 | 16 |

Electrical Specifications Rx (Uplink)

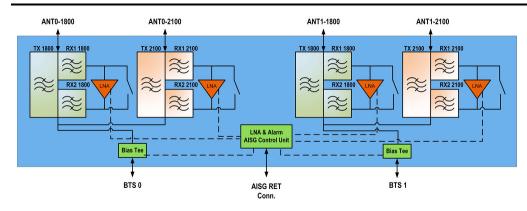
| Frequency Range, MHz | 1710-1785 | 1920-1980 |
|---|-----------|-----------|
| Bandwidth, MHz | 75 | 60 |
| Gain, nominal, dB | 12 | 12 |
| Gain Tolerance, dB | +1.4/-1.0 | ±1 |
| Noise Figure, typical, dB | 1.7 | 1.6 |
| Group Delay Variation, maximum, ns | 50 | 30 |
| Group Delay Variation Bandwidth, MHz | 5 | 5 |
| Total Group Delay, maximum, ns | 130 | 100 |
| Return Loss, minimum, dB | 16 | 16 |
| Insertion Loss - Bypass Mode, typical, dB | 2.5 | 2.3 |

Electrical Specifications Tx (Downlink)

| Frequency Range, MHz | 1805-1880 | 2110-2170 |
|--------------------------------------|----------------------|----------------------|
| Bandwidth, MHz | 75 | 60 |
| Insertion Loss, maximum, dB | 0.7 | 0.4 |
| Insertion Loss, typical, dB | 0.5 | 0.3 |
| Group Delay Variation, maximum, ns | 20 | 10 |
| Group Delay Variation Bandwidth, MHz | 5 | 5 |
| Total Group Delay, maximum, ns | 50 | 25 |
| Return Loss, minimum, dB | 18 | 18 |
| Input Power, RMS, maximum, W | 200 | 200 |
| Input Power, PEP, maximum, W | 1000 | 1000 |
| 3rd Order PIM, typical, dBc | -160 | -162 |
| 3rd Order PIM Test Method | Two +43 dBm carriers | Two +43 dBm carriers |

Block Diagram

COMMSCOPE®



Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C} \text{ to } +65 \,^{\circ}\text{C} \left(-40 \,^{\circ}\text{F to } +149 \,^{\circ}\text{F}\right)$

Relative Humidity Up to 100%

Corrosion Test Method IEC 60068-2-11, 30 days

Environmental Test Method ETSI EN 300 019-1-4
Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

Included Mounting hardware

Volume 4.6 L

Weight, net 7.1 kg | 15.653 lb Weight, without mounting hardware 6.6 kg | 14.55 lb

* Footnotes

License Band, LNALicense Bands that have RxUplink amplification

