

Dual Band Tower Mounted Amplifier, 1800//2100 MHz, 12 dB, 2 BTS & 4 ANT ports, with 4.3-10 connectors, AISG with 1 RET connectors (2 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
- 2 devices with 2 sub-units
- 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
 280 mm | 11.024 in

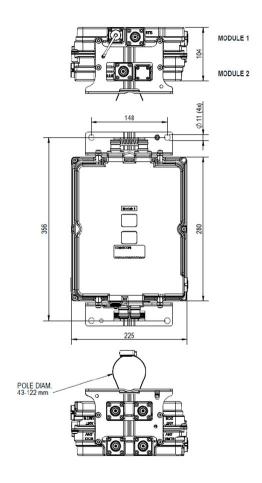
 Width
 225 mm | 8.858 in

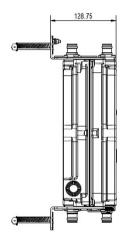
 Depth
 104 mm | 4.094 in

**Mounting Pipe Diameter Range** 50–120 mm

### Outline Drawing









### **Electrical Specifications**

License Band, LNA DCS 1800 | IMT 2100

### Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy Yes

**Lightning Surge Current** 10 kA

**Lightning Surge Current Waveform** 8/20 waveform

**Voltage** 7–30 Vdc

**Alarm Current, CWA Mode** 190 mA ±10 mA

### Electrical Specifications, AISG

**AISG Connector** 8-pin DIN Female

AISG Connector Standard IEC 60130-9

**COMMSCOPE®** 

Protocol	AISG 2.0
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	14	14

## Electrical Specifications Rx (Uplink)

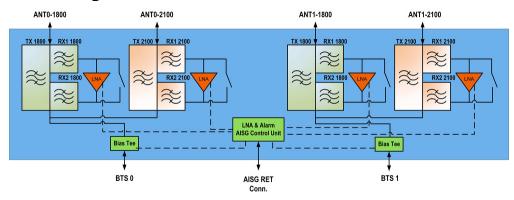
Frequency Range, MHz	1710-1785	1920-1980
Bandwidth, MHz	75	60
Gain, nominal, dB	12	12
Gain Tolerance, dB	+1.3/-1.0	±1
Noise Figure, typical, dB	1.5	1.5
Group Delay Variation, maximum, ns	30	16
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	100	80
Return Loss, minimum, dB	17	17
Insertion Loss - Bypass Mode, typical, dB	2.5	2.5

## Electrical Specifications Tx (Downlink)

Frequency Range, MHz	1805-1880	2110-2170
Bandwidth, MHz	75	60
Insertion Loss, maximum, dB	0.6	0.5
Insertion Loss, typical, dB	0.5	0.4
Group Delay Variation, maximum, ns	10	4
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	45	25
Return Loss, minimum, dB	18	18
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	2000	2000
3rd Order PIM, maximum, dBc	-161	-161
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers

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### Block Diagram



### **Environmental Specifications**

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

**Relative Humidity** Up to 100%

Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

**Included** Mounting hardware

Volume 6.5 L

**Weight, net** 7 kg | 15.432 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

