

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

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

#### 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
 280 mm | 11.024 in

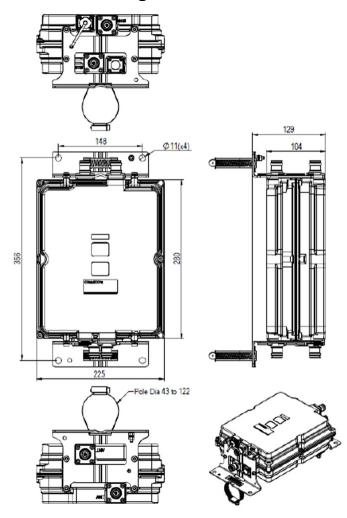
 Width
 225 mm | 8.858 in

 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 ±15 mA

Electrical Specifications, AISG

**COMMSCOPE®** 

AISG Connector

AISG Connector Standard

Protocol

Voltage, AISG Mode

8-pin DIN Female

IEC 60130-9

AISG 2.0

Voltage, AISG Mode

10-30 Vdc

### **Electrical Specifications**

Sub-module	1   2	1   2
Branch	1	1
Port Designation	ANT	ANT
License Band	DCS 1800, LNA	IMT 2100, LNA

Return Loss - Bypass Mode, typical, dB 15

## Electrical Specifications Rx (Uplink)

Frequency Range, MHz	1710-1785	1920-1980
Bandwidth, MHz	75	60
Gain, nominal, dB	12	12
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
Output IP3, minimum, dBm	20	20
Return Loss, minimum, dB	18	18
Insertion Loss - Bypass Mode, typical, dB	2	2

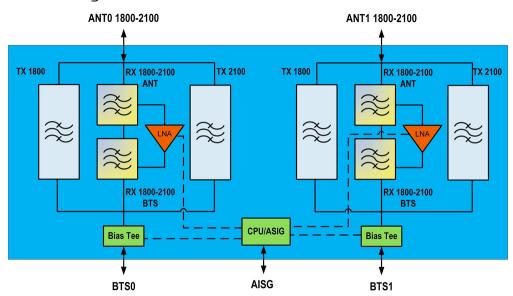
## Electrical Specifications Tx (Downlink)

Frequency Range, MHz	1805-1880	2110-2170
Bandwidth, MHz	75	60
Insertion Loss, typical, dB	0.4	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, typical, dBc	-160	-160
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%

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

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