

Tower Mounted Amplifier 1800 with 1400 MHz bypass, AISG 2.0, with 4.3-10 connectors

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- TMA with 1350-1525 MHz bypass
- 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
- 1 device with 2 sub-units
- 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
 109 mm | 4.291 in

 Width
 168 mm | 6.614 in

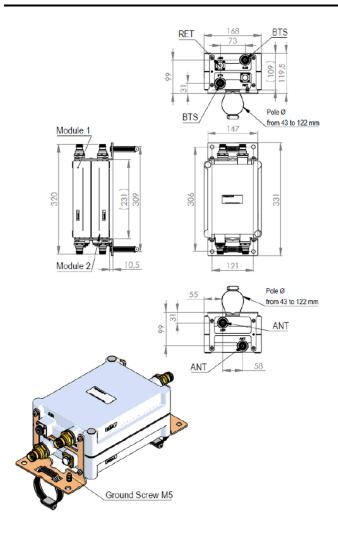
 Depth
 231 mm | 9.094 in

 Ground Screw Diameter
 8 mm | 0.315 in

 Mounting Pipe Diameter Range
 40-160 mm

Outline Drawing





Electrical Specifications

License Band, LNA DCS 1800

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy Yes

Lightning Surge Current 10 kA

Lightning Surge Current Waveform 8/20 waveform

Operating Current at Voltage $$110\,\mathrm{mA}\ @\ 12\,\mathrm{V}$$

Operating Current Tolerance ±20 mA

 Voltage
 7-30 Vdc

 Voltage, CWA Mode
 10-18 Vdc

Alarm Current, CWA Mode 195 mA ±15 mA

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Electrical Specifications, AISG

AISG Connector 8-pin DIN Female

AISG Connector Standard IEC 60130-9

Protocol AISG 2.0

Voltage, AISG Mode 10-30 Vdc

Electrical Specifications

Sub-module 1 | 2

Branch 1

Port Designation ANT

License Band DCS 1800, LNA

Return Loss, typical, dB 20

Return Loss - Bypass Mode,

typical, dB

TX Band Rejection, minimum, 75

dΒ

Electrical Specifications Rx (Uplink)

14

Frequency Range, MHz 1710-1785

Bandwidth, MHz 75
Gain, nominal, dB 12
Noise Figure, typical, dB 1.6
Total Group Delay, typical, ns 110
Output IP3, minimum, dBm 10
Insertion Loss - Bypass 1.5

Mode, typical, dB

Electrical Specifications Tx (Downlink)

2000

Frequency Range, MHz 1805-1880

Bandwidth, MHz 75
Insertion Loss, typical, dB 0.5
Total Group Delay, typical, ns 25
Return Loss, typical, dB 20
Input Power, RMS, maximum, W

Input Power, PEP, maximum,

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W

3rd Order PIM, typical, dBc -160

3rd Order PIM Test Method Two +43 dBm carriers

Electrical Specifications, Band Pass

Frequency Range, MHz 1350-1525

Insertion Loss, typical, dB0.2Total Group Delay, typical, ns10Return Loss, typical, dB20Input Power, RMS, maximum,200

W

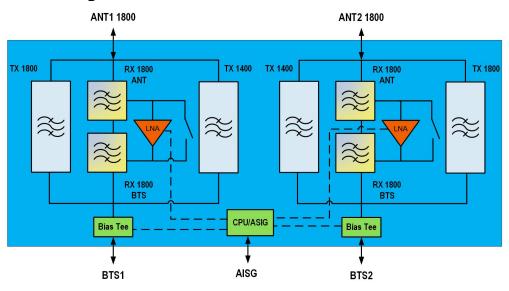
Input Power, PEP, maximum, 1000

W

3rd Order PIM, typical, dBc -163

3rd Order PIM Test Method Two +43 dBm carriers

Block Diagram



Material Specifications

Finish Painted

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%

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

Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

Included Mounting hardware

Volume 4.2 L

Weight, net 6.3 kg | 13.889 lb

Regulatory Compliance/Certifications

Agency Classification

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



* Footnotes

License Band, LNALicense Bands that have RxUplink amplification

