

Tower Mounted Amplifier, Dual UMTS 2100 with AISG, 4.3-10 connectors

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- 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

4.3-10 Female

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 Body Style Medium neck

Dimensions

RF Connector Interface

 Height
 188 mm | 7.402 in

 Width
 170 mm | 6.693 in

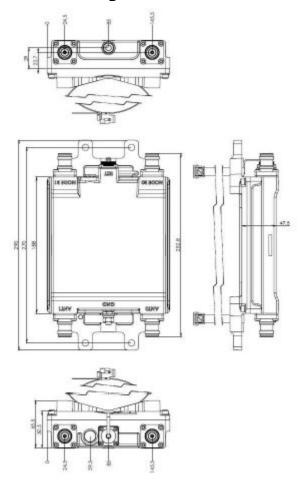
 Depth
 50 mm | 1.969 in

 Ground Screw Diameter
 8 mm | 0.315 in

 Mounting Pipe Diameter Range
 40-160 mm



Outline Drawing



Electrical Specifications

License Band, LNA IMT 2100

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 100 mA @ 12 V

Operating Current Tolerance $\pm 15 \text{ mA}$ Voltage 7-30 Vdc

Alarm Current, CWA Mode 185 mA ±10 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 IMT 2100, LNA

Return Loss - Bypass Mode,

typical, dB

19

80

TX Band Rejection, minimum,

dΒ

Electrical Specifications Rx (Uplink)

Frequency Range, MHz 1920-1980

Bandwidth, MHz 60

Gain, nominal, dB 12

Noise Figure, maximum, dB 1.4

Noise Figure, typical, dB 1.2

Group Delay Variation, 12

maximum, ns

Group Delay Variation 5

Bandwidth, MHz

Gain Tolerance, dB

5

±1

Total Group Delay, maximum, 60

ns

Return Loss, minimum, dB 18

Insertion Loss - Bypass Mode, typical, dB 3.2

Electrical Specifications Tx (Downlink)

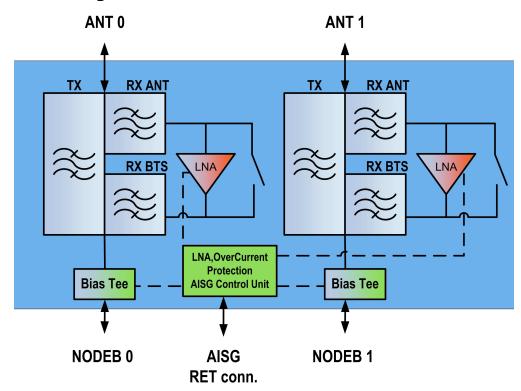
Frequency Range, MHz 2110-2170

Bandwidth, MHz 60
Insertion Loss, maximum, dB 0.4

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| Insertion Loss Ripple, maximum, dB | 0.1 |
|---|------|
| Group Delay Variation, maximum, ns | 3 |
| Group Delay Variation Bandwidth, MHz | 5 |
| Total Group Delay, maximum, ns | 18 |
| Return Loss, minimum, dB | 18 |
| RX Band Rejection, minimum, dB | 50 |
| Input Power, RMS, maximum, W | 160 |
| Input Power, PEP, maximum, W | 2500 |
| 3rd Order PIM, typical, dBc | -160 |

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%

Corrosion Test Method IEC 60068-2-11, 30 days
Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

Included Mounting hardware

Volume 1.6 L

Weight, net 3.3 kg | 7.275 lb

Regulatory Compliance/Certifications

Agency Classification

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ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



* Footnotes

License Band, LNALicense Bands that have RxUplink amplification

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