

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

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- Designed to boost UP-Link Coverage and KPIs
- TMA is operating in AISG & CWA mode, Alarm Current consumption CWA mode 250 mA
- 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

MountingPole | WallMounting Pipe HardwareBand clamps (2)RF Connector Interface4.3-10 Female

RF Connector Interface Body Style Long neck

#### Dimensions

 Height
 188 mm | 7.402 in

 Width
 170 mm | 6.693 in

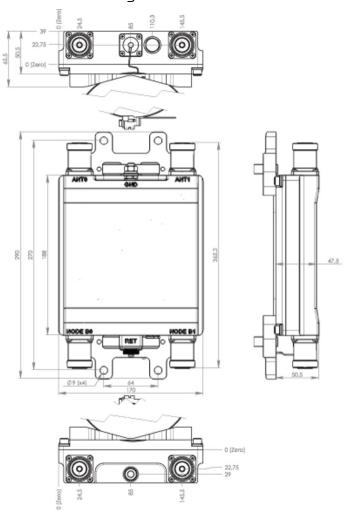
 Depth
 50 mm | 1.969 in

 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 250 mA ±15 mA

#### 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

TX Band Rejection, minimum,

80

dВ

#### Electrical Specifications Rx (Uplink)

Frequency Range, MHz 1920-1980

**Bandwidth, MHz** 60

Gain, nominal, dB 12
Gain Tolerance, dB ±1

Noise Figure, maximum, dB 1.4

Noise Figure, typical, dB 1.2

**Group Delay Variation,** 12

maximum, ns

**Group Delay Variation** 5

Bandwidth, MHz

**Total Group Delay, maximum,** 60

ns

Output IP3, minimum, dBm 24
Return Loss, minimum, dB 18

Insertion Loss - Bypass 3.2

Mode, typical, dB

Electrical Specifications Tx (Downlink)

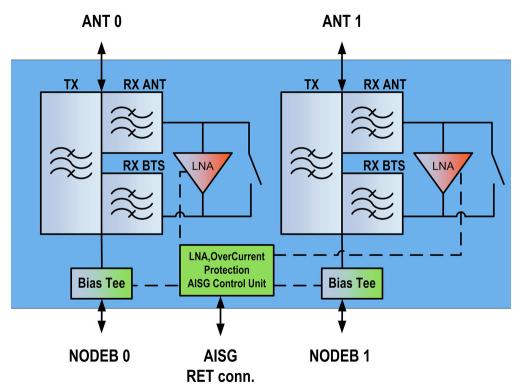
Frequency Range, MHz 2110-2170



Bandwidth, MHz	60
Insertion Loss, maximum, dB	0.4
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

ANDREW®
an Amphenol company

ISO 9001:2015

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

\* Footnotes

License Band, LNA

License Bands that have RxUplink amplification

