

Tower Mounted Amplifier, Dual 700 MHz with AISG 2.0, with 4.3-10 connectors

- 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
- 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
 119 mm | 4.685 in

 Width
 200 mm | 7.874 in

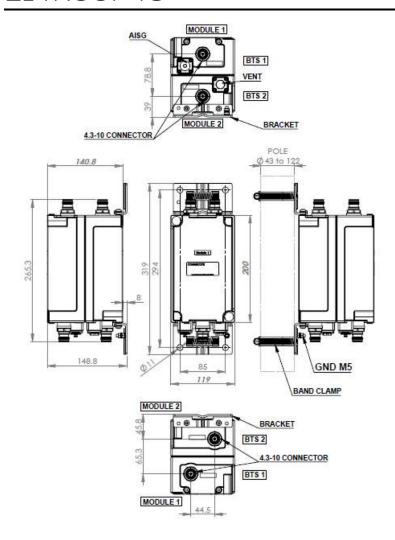
 Depth
 141 mm | 5.551 in

 Ground Screw Diameter
 8 mm | 0.315 in

 Mounting Pipe Diameter Range
 40-160 mm

Outline Drawing





Electrical Specifications

License Band, LNA APT 700 | DCS 1800

Electrical Specifications, dc Power/Alarm

Lightning Surge Current 10 kA

Lightning Surge Current Waveform 8/20 waveform

Operating Current at Voltage 240 mA @ 12 V

Electrical Specifications, AISG

AISG Connector 8-pin DIN Female
AISG Connector Standard IEC 60130-9
Protocol AISG 2.0

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Voltage, AISG Mode

10-30 Vdc

Electrical Specifications

Sub-module1 | 2Branch1Port DesignationANT

License Band APT 700, LNA

Return Loss, typical, dB 20 Return Loss - Bypass Mode, 14

typical, dB

Electrical Specifications Rx (Uplink)

703-733 Frequency Range, MHz Bandwidth, MHz 30 Gain, nominal, dB 12 Gain Tolerance, dB ±1 2 Noise Figure, maximum, dB Noise Figure, typical, dB 1.8 **Group Delay Variation,** 50 maximum, ns **Group Delay Variation** 5 Bandwidth, MHz Total Group Delay, maximum, 130 Return Loss, minimum, dB 18 **Insertion Loss - Bypass** 2.5 Mode, typical, dB

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	758-788
Bandwidth, MHz	30
Insertion Loss, maximum, dB	0.7
Insertion Loss, typical, dB	0.5
Group Delay Variation, maximum, ns	10
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum,	50

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ns

Return Loss, minimum, dB 18
Return Loss, typical, dB 21
Input Power, RMS, maximum, 200

2000

Input Power, PEP, maximum, w

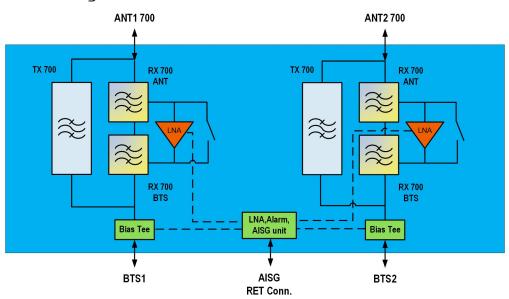
3rd Order PIM, typical, dBc

-161

3rd Order PIM Test Method

Two +43 dBm carriers

Block Diagram



Material Specifications

Finish Painted

Environmental Specifications

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

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

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Volume 3.4 L

Weight, net $5.1 \text{ kg} \mid 11.244 \text{ lb}$ Weight, without mounting hardware $4.8 \text{ kg} \mid 10.582 \text{ lb}$

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

