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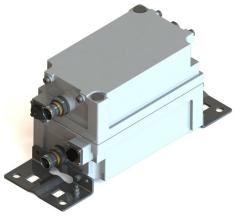

Tower Mounted Amplifier, Dual 700 MHz with AISG 2.0, with 4.3-10 connectors

- 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

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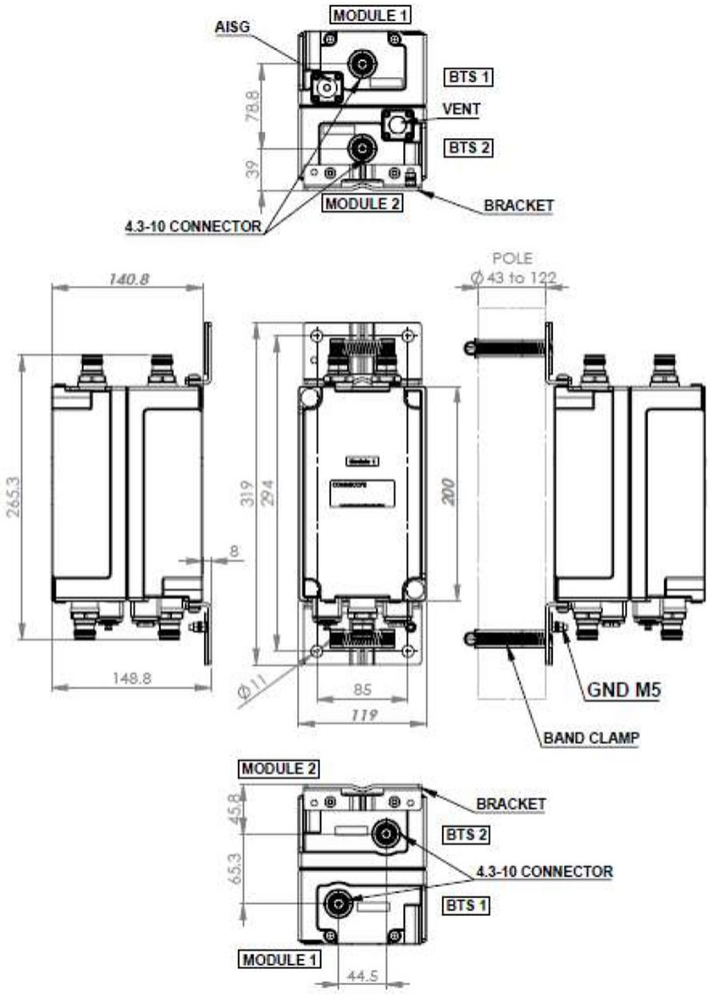


Electrical Specifications

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

Voltage, AISG Mode	10–30 Vdc

Electrical Specifications

Sub-module	**1 | 2**
Branch	1
Port Designation	ANT
License Band	APT 700, LNA
Return Loss, typical, dB	20
Return Loss - Bypass Mode, typical, dB	14

Electrical Specifications Rx (Uplink)

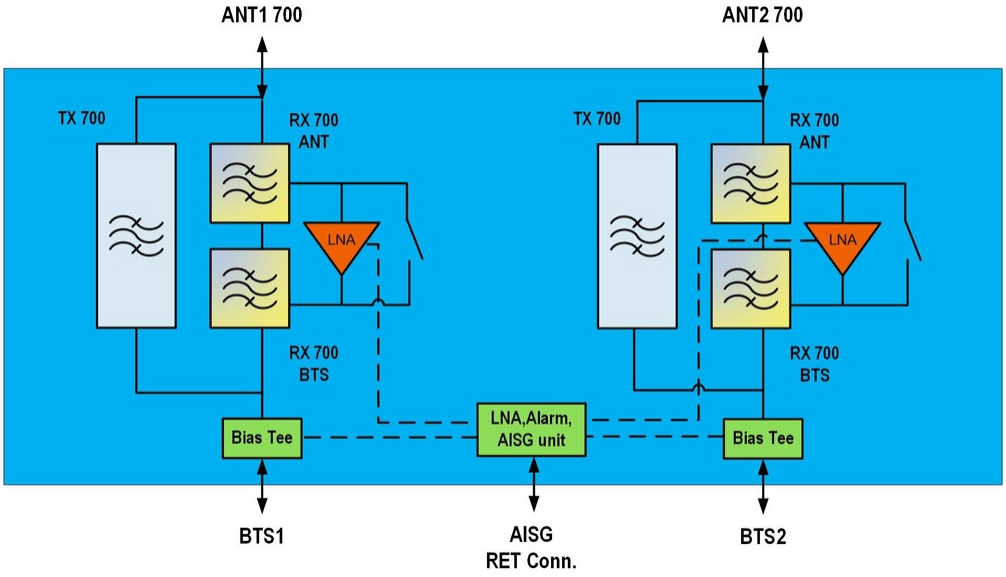
Frequency Range, MHz	**703–733**
Bandwidth, MHz	30
Gain, nominal, dB	12
Gain Tolerance, dB	±1
Noise Figure, maximum, dB	2
Noise Figure, typical, dB	1.8
Group Delay Variation, maximum, ns	50
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	130
Return Loss, minimum, dB	18
Insertion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

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

ns	
Return Loss, minimum, dB	18
Return Loss, typical, dB	21
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum, W	2000
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 °C to +65 °C (-40 °F to +149 °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

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Volume	3.4 L
Weight, net	5.1 kg | 11.244 lb
Weight, without mounting hardware	4.8 kg | 10.582 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