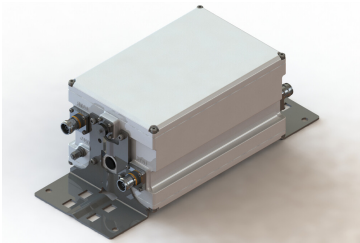


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Tower Mounted Amplifier, Dual GSM/UMTS 900 with AISG

- Industry leading PIM performance
- TMA is operating in AISG & CWA mode, Alarm Current consumption CWA mode 190 mA
- 2 input ports and 2 output ports
- Designed to boost UP-Link Coverage and KPIs
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector

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 Bolt clamps (2)

RF Connector Interface 4.3-10 Female

RF Connector Interface Body Style Long neck

Dimensions

Height 260 mm | 10.236 in

Width 170 mm | 6.693 in

Depth 140 mm | 5.512 in

Ground Screw Diameter 8 mm | 0.315 in

Mounting Pipe Diameter Range 43–122 mm

Electrical Specifications

License Band, LNA CEL 900

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy Yes

Lightning Surge Current 20 kA

Lightning Surge Current Waveform 8/20 waveform

Operating Current at Voltage 100 mA @ 12 Vdc

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Operating Current Tolerance	±10 mA
Voltage	7–30 Vdc
Alarm Current, CWA Mode	185 mA ±10 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	CEL 900, LNA
Return Loss - Bypass Mode, typical, dB	14
TX Band Rejection, minimum, dB	80

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	880–915
Bandwidth, MHz	35
Gain, nominal, dB	12
Gain Tolerance, dB	±1
Noise Figure, maximum, dB	1.6
Noise Figure, typical, dB	1.3
Group Delay Variation, maximum, ns	60
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	200
Output IP3, minimum, dBm	22
Return Loss, minimum, dB	18
Insertion Loss - Bypass Mode, typical, dB	3

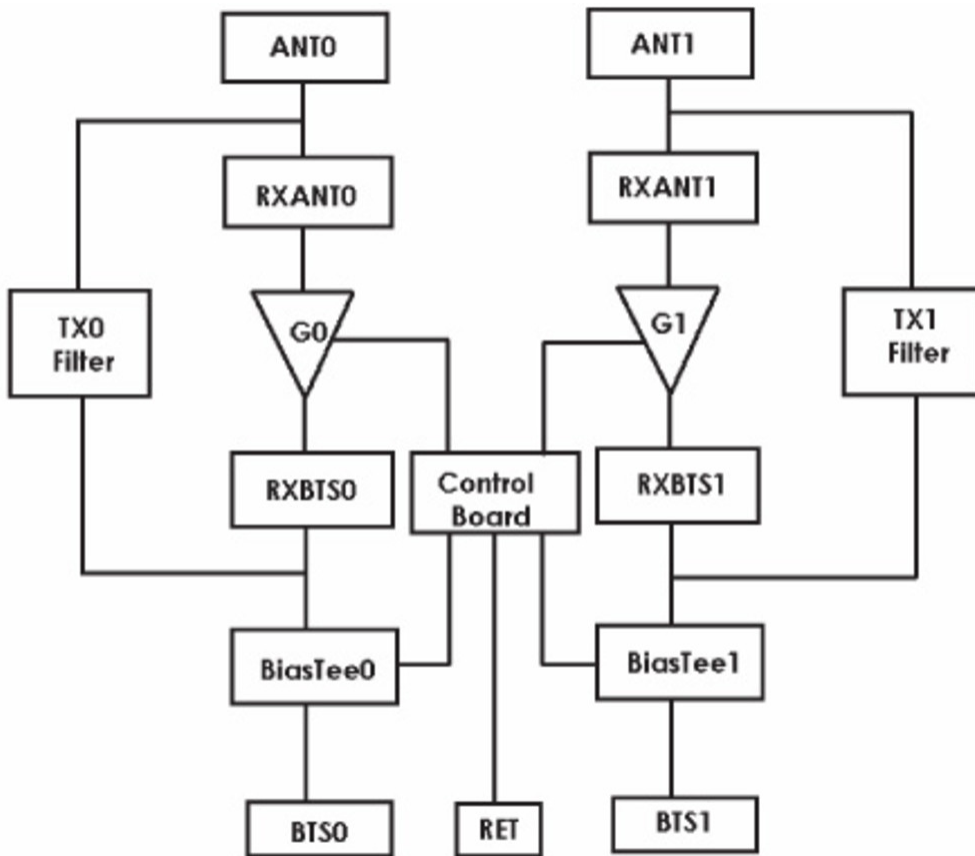
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Electrical Specifications Tx (Downlink)

Frequency Range, MHz	925–960
Bandwidth, MHz	35
Insertion Loss, maximum, dB	0.7
Insertion Loss, typical, dB	0.4
Insertion Loss Ripple, maximum, dB	0.5
Group Delay Variation, maximum, ns	28
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	78
Return Loss, minimum, dB	18
RX Band Rejection, minimum, dB	40
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum, W	5000
3rd Order PIM, typical, dBc	-160
3rd Order PIM Test Method	Two +43 dBm carriers

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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

Weight, net 8 kg | 17.637 lb

Regulatory Compliance/Certifications

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Agency

ISO 9001:2015

Classification

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

*** Footnotes****License Band, LNA**

License Bands that have RxUplink amplification