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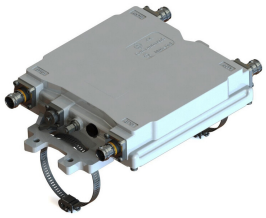

Tower Mounted Amplifier, Dual DCS 1800 with AISG 2.0, with 4.3-10 connectors

- 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

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	225 mm | 8.858 in
Width	227 mm | 8.937 in
Depth	56 mm | 2.205 in
Ground Screw Diameter	8 mm | 0.315 in
Mounting Pipe Diameter Range	40–160 mm

Outline Drawing

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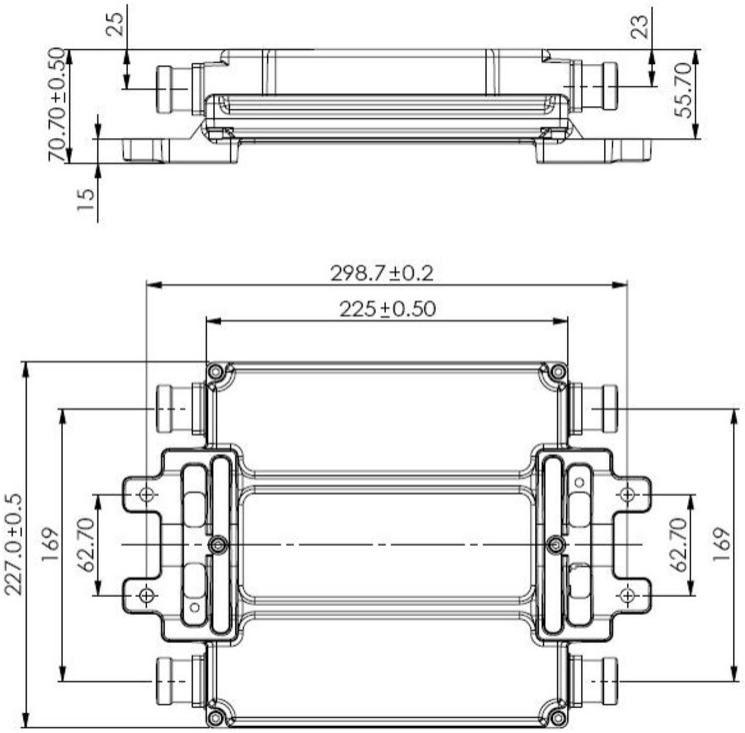

Electrical Specifications

License Band, LNA	DCS 1800
Voltage	9 Vdc

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	110 mA @ 12 V
Operating Current Tolerance	±20 mA
Voltage	7–30 Vdc
Voltage, CWA Mode	10–18 Vdc
Alarm Current, CWA Mode	195 mA ±15 mA

Electrical Specifications, AISG

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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	DCS 1800, LNA
Return Loss - Bypass Mode, typical, dB	14
TX Band Rejection, minimum, dB	75

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	**1710–1785**
Bandwidth, MHz	75
Gain, nominal, dB	12
Gain Tolerance, dB	±1
Noise Figure, maximum, dB	1.8
Noise Figure, typical, dB	1.4
Group Delay Variation, maximum, ns	50
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	150
Return Loss, minimum, dB	18
Insertion Loss - Bypass Mode, typical, dB	3

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	**1805–1880**
Bandwidth, MHz	75
Insertion Loss, maximum, dB	0.7
Insertion Loss, typical, dB	0.4

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Insertion Loss Ripple, maximum, dB	0.5
Group Delay Variation, maximum, ns	13
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	45
Return Loss, minimum, dB	18
RX Band Rejection, minimum, dB	45
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum, W	5000
3rd Order PIM, typical, dBc	-163
3rd Order PIM Test Method	Two +43 dBm carriers

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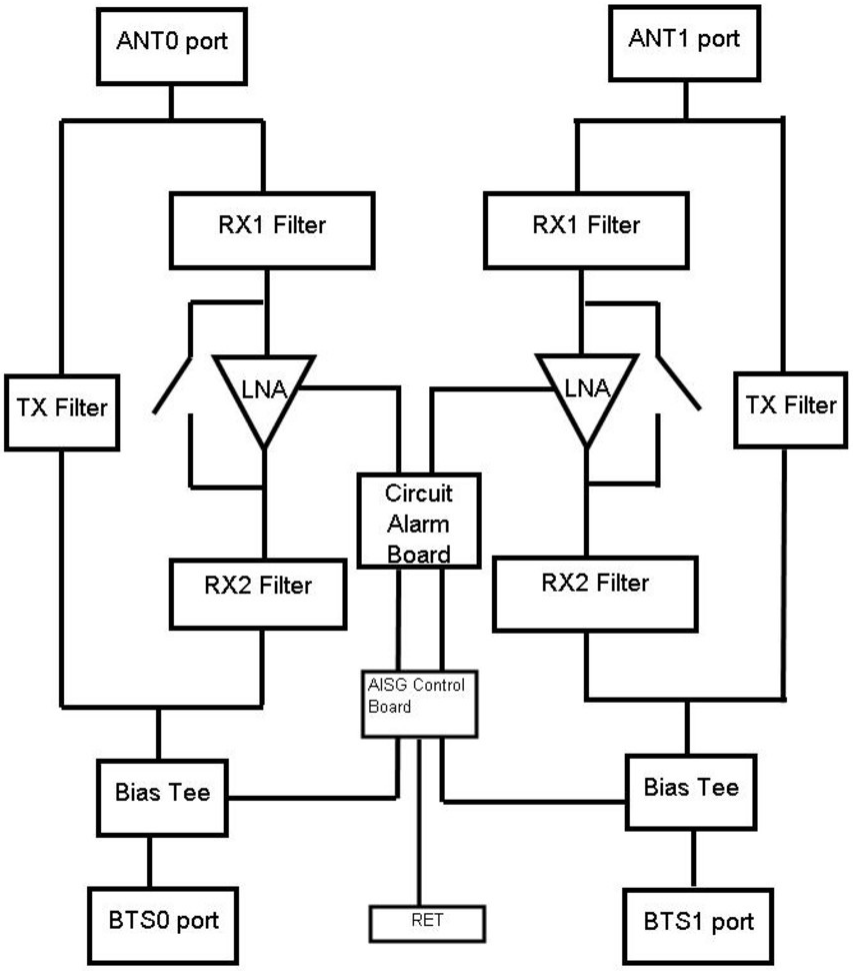
Block Diagram



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

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Volume	2.8 L
Weight, net	4.5 kg | 9.921 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