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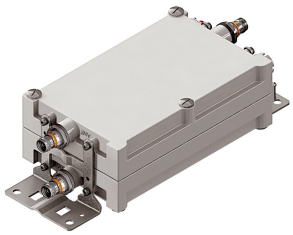

Dual Band Tower Mounted Amplifier, 1800/2100 MHz with 1400 MHz bypass, 12 dB, 2 BTS & 2 ANT ports, AISG with 1 RET connector (1 devices with 2 sub-units each), with 4.3-10 connectors

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- Designed for network modernization application, introduction of LTE1400 on existing site
- TMA with 1452-1492 MHz bypass
- 2 input ports and 2 output ports
- Automatic LNA by-pass function
- Built in lightning protection
- Connectors “in line”
- Single AISG with 1 RET connector
- 1 device with 2 sub-units

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	280 mm | 11.024 in
Width	175 mm | 6.89 in
Depth	98 mm | 3.858 in
Mounting Pipe Diameter Range	50–120 mm

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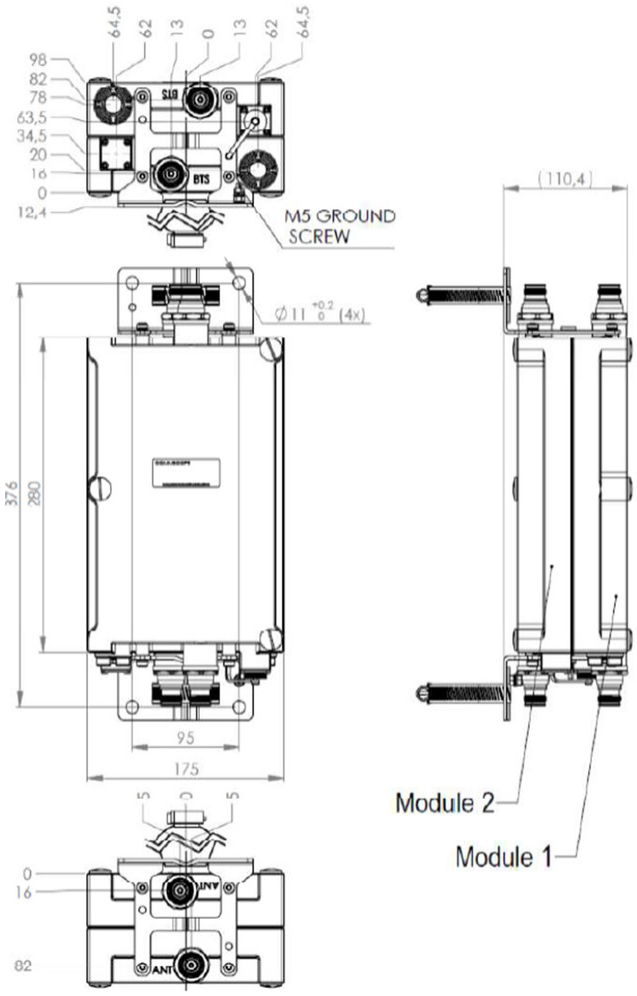
Outline Drawing



Electrical Specifications

License Band, Band Pass	SDL 1400
License Band, LNA	DCS 1800 | IMT 2100 | IMT 2600

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy	Yes
Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform
Voltage	7–30 Vdc
Alarm Current, CWA Mode	190 mA ±15 mA

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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**	**1 | 2**	**1 | 2**
Branch	1	1	1
Port Designation	ANT	ANT	ANT
License Band	SDL 1400, Band Pass	DCS 1800, LNA	IMT 2100, LNA
Return Loss - Bypass Mode, typical, dB		16	16

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	**1710–1785**	**1920–1980**
Bandwidth, MHz	75	60
Gain, nominal, dB	12	12
Noise Figure, typical, dB	1.7	1.6
Output IP3, minimum, dBm	12	12
Return Loss, minimum, dB	18	18
Insertion Loss - Bypass Mode, typical, dB	2.5	2.3

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	**1805–1880**	**2110–2170**
Bandwidth, MHz	60	60
Insertion Loss, typical, dB	0.3	0.3
Return Loss, minimum, dB	18	18
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	1000	1000
3rd Order PIM, typical, dBc	-162	-162
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers

Electrical Specifications, Band Pass

Frequency Range, MHz	**1452–1492**
Insertion Loss, typical, dB	0.35

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Return Loss, minimum, dB	18
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum, W	100
3rd Order PIM, typical, dBc	-162
3rd Order PIM Test Method	Two +43 dBm carriers

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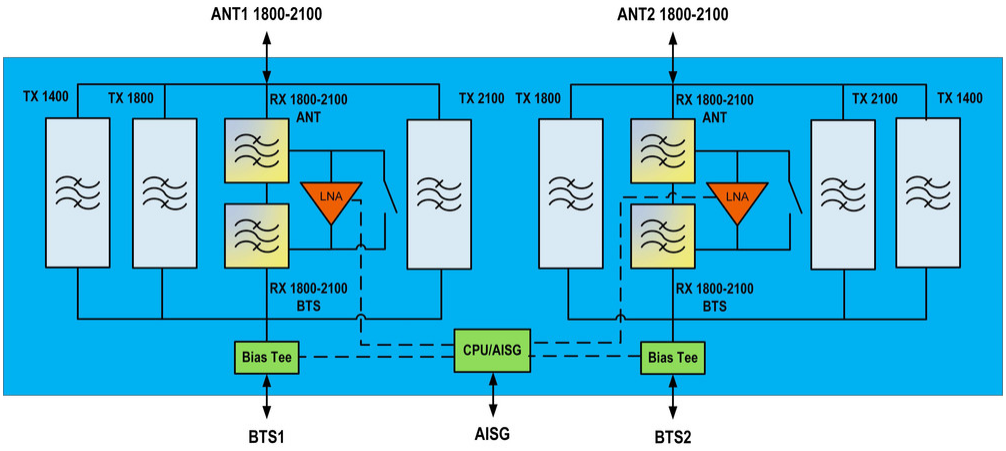
Block Diagram



Mechanical Specifications

Wind Speed, maximum	200 km/h (124 mph)

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
Volume	4.8 L
Weight, net	8 kg | 17.637 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

* Footnotes

License Band, Band Pass	License Bands that are to be passed through with no amplification
License Band, LNA	License Bands that have RxUplink amplification