

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

MountingPole | WallMounting Pipe HardwareBand clamps (2)RF Connector Interface4.3-10 Female

Dimensions

 Height
 280 mm | 11.024 in

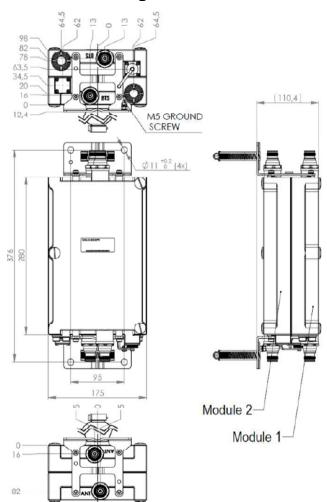
 Width
 175 mm | 6.89 in

 Depth
 98 mm | 3.858 in

Mounting Pipe Diameter Range 50–120 mm



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

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

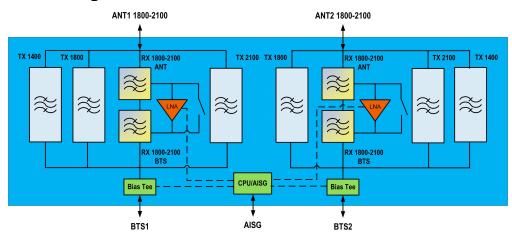
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Return Loss, minimum, dB	18
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum, W	100
3rd Order PIM, typical, dBc	-162

3rd Order PIM Test Method Two +43 dBm carriers



Block Diagram



Mechanical Specifications

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

Environmental Specifications

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

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

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License Band, LNA

License Bands that have RxUplink amplification