

E14R00P44



Tower Mounted Amplifier 1800 with 1400 MHz bypass, 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 with 1350-1525 MHz bypass
- 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 109 mm | 4.291 in

Width 168 mm | 6.614 in

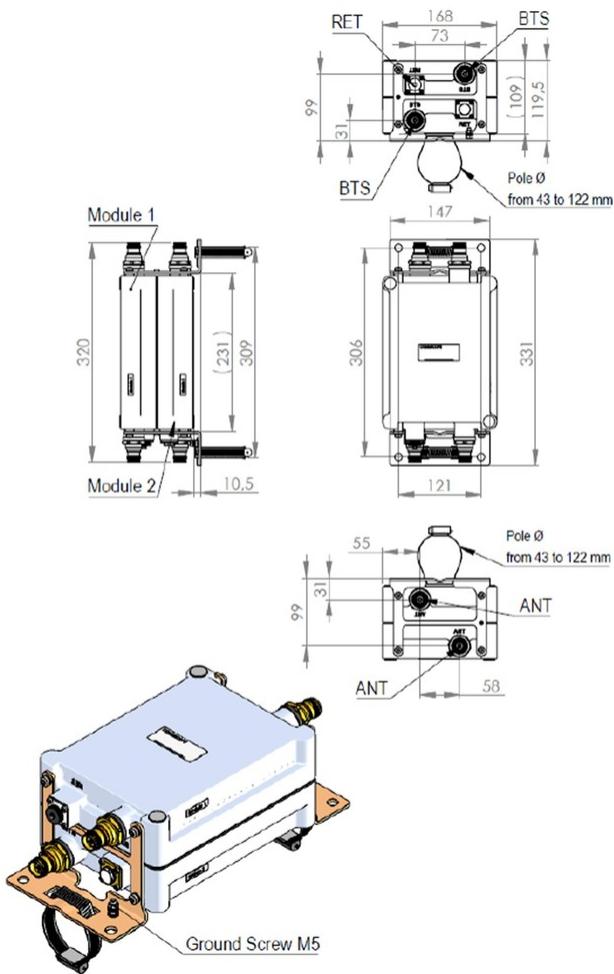
Depth 231 mm | 9.094 in

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

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

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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
Branch	1
Port Designation	ANT
License Band	DCS 1800, LNA
Return Loss, typical, dB	20
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
Noise Figure, typical, dB	1.6
Total Group Delay, typical, ns	110
Output IP3, minimum, dBm	10
Insertion Loss - Bypass Mode, typical, dB	1.5

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	1805–1880
Bandwidth, MHz	75
Insertion Loss, typical, dB	0.5
Total Group Delay, typical, ns	25
Return Loss, typical, dB	20
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum,	2000

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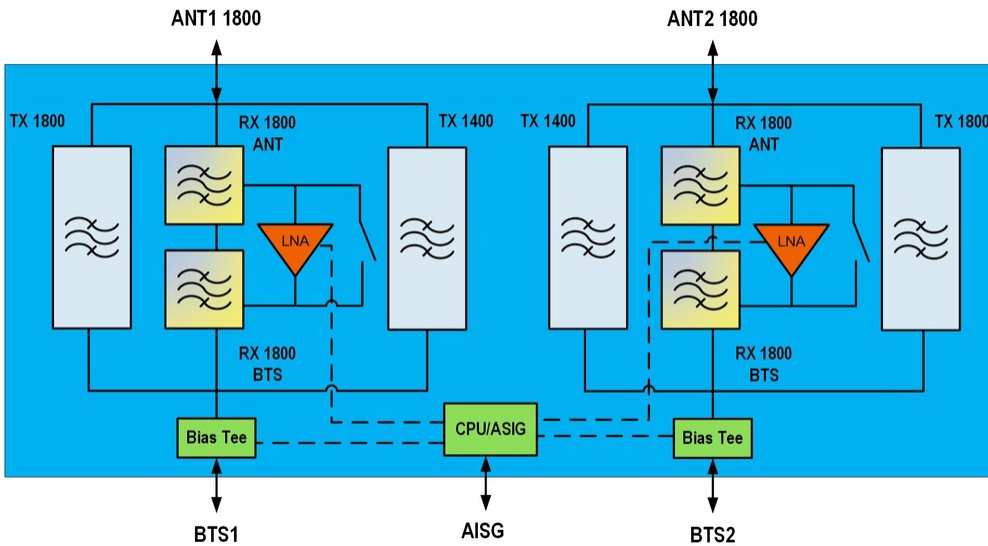
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3rd Order PIM, typical, dBc	-160
3rd Order PIM Test Method	Two +43 dBm carriers

Electrical Specifications, Band Pass

Frequency Range, MHz	1350–1525
Insertion Loss, typical, dB	0.2
Total Group Delay, typical, ns	10
Return Loss, typical, dB	20
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum, W	1000
3rd Order PIM, typical, dBc	-163
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%

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Corrosion Test Method	IEC 60068-2-11, 30 days
Ingress Protection Test Method	IEC 60529:2001, IP67

Packaging and Weights

Included	Mounting hardware
Volume	4.2 L
Weight, net	6.3 kg 13.889 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
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