E14ROOP44

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

OBSOLETE

Product Classification

Product Type	1-BTS:1-ANT (Uniplex) | Tower mounted amplifier

General Specifications

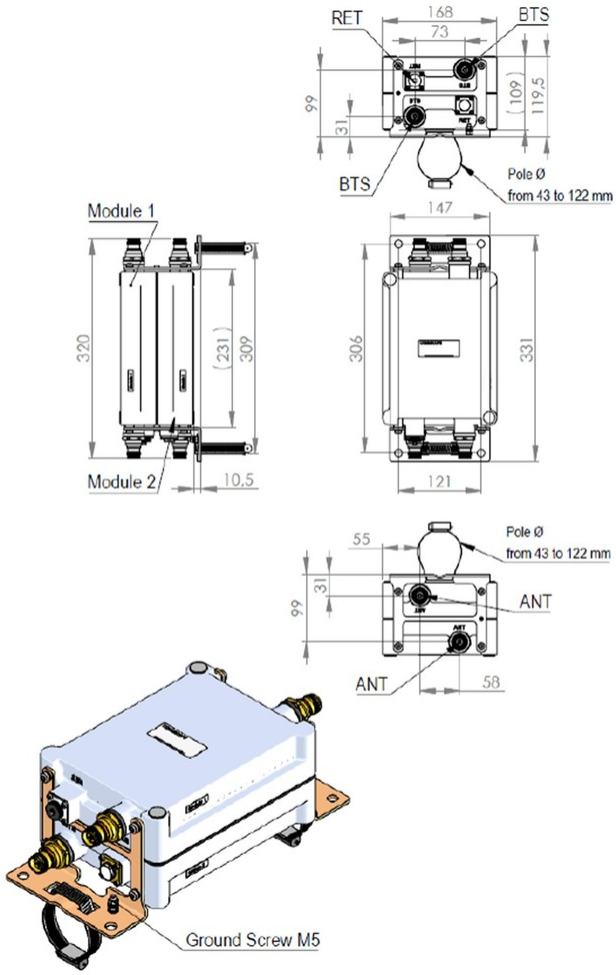
Color	Gray
Modularity	2-Twin
Mounting	Pole | Wall
Mounting Pipe Hardware	Band clamps (2)
RF Connector Interface	4.3-10 Female

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

E14ROOP44



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

E14ROOP44

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)

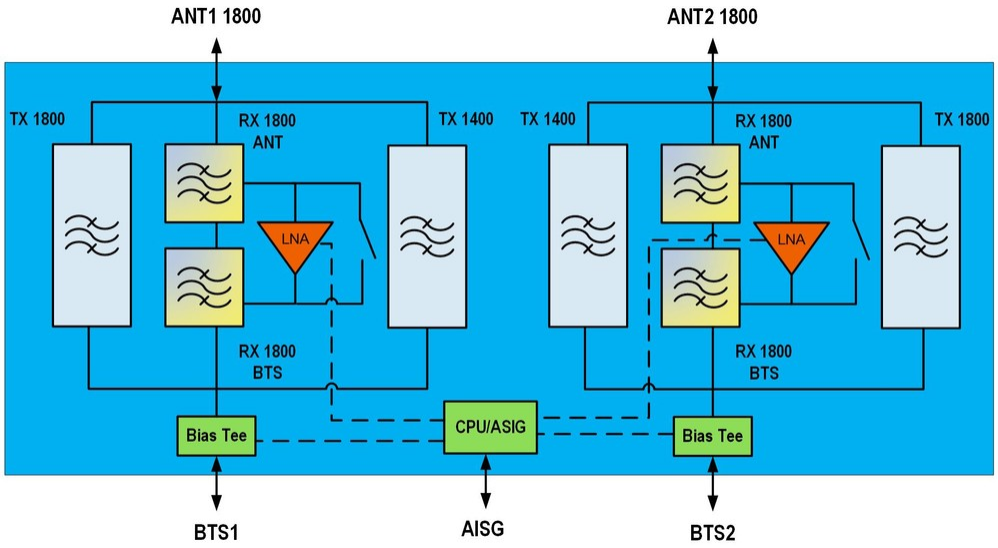
Frequency Range, MHz	**1805–1880**
Bandwidth, MHz	75
Insertion Loss, typical, dB	0.5
Total Group Delay, typical, ns	25
Return Loss, typical, dB	20
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum,	2000

W	
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%

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