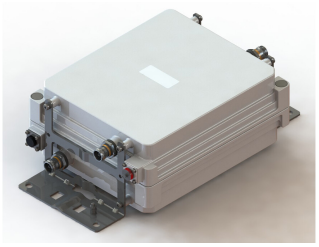
E14ROOP76



Tri Band Tower Mounted Amplifier, 700//800//900 MHz, 12 dB, 2 BTS & 2 ANT ports, AISG with 1 RET connector (1 device with 2 sub-units each)

- TMA is operating in AISG & CWA mode, Alarm Current consumption CWA mode 190 mA
- 2 input ports and 2 output ports
- Designed to boost UP-Link Coverage and KPIs
- 1 device with 2 sub-units
- Automatic LNA by-pass function
- Connectors “in line”
- Single AISG with 1 RET connector
- Built in lightning protection

Product Classification

Product Type	2-BTS:2-ANT (Uniplex) | Tower mounted amplifier

General Specifications

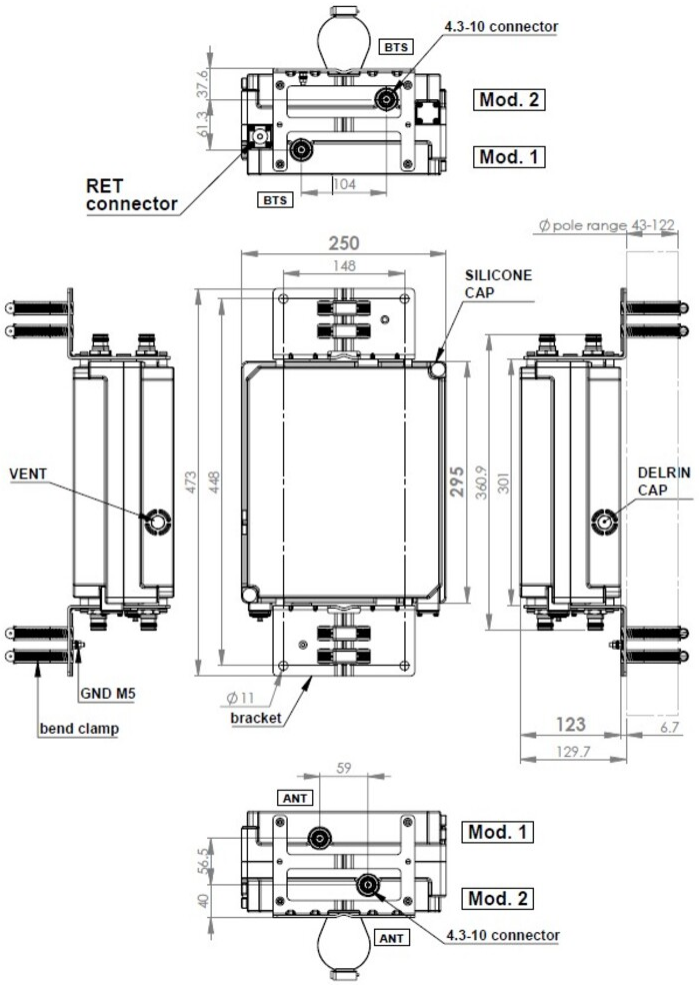
Color	Gray
Modularity	2-Twin
Mounting	Pole | Wall
Mounting Pipe Hardware	Band clamps (2)
RF Connector Interface	4.3-10 Female

Dimensions

Height	250 mm | 9.843 in
Width	123 mm | 4.843 in
Depth	295 mm | 11.614 in
Mounting Pipe Diameter Range	43–122 mm

Outline Drawing

E14ROOP76



Electrical Specifications

License Band, LNA	APT 700 | CEL 900 | EDD 800

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy	Yes
Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform
Alarm Current, CWA Mode	190 mA ±10 mA

Electrical Specifications, AISG

AISG Connector	8-pin DIN Female
AISG Connector Standard	IEC 60130-9

E14ROOP76

Protocol	AISG 2.0
Voltage, AISG Mode	7–30 Vdc

Electrical Specifications

Sub-module	**1 | 2**	**1 | 2**	**1 | 2**
Branch	1	2	3
Port Designation	ANT	ANT	ANT
License Band	APT 700, LNA	EDD 800, LNA	CEL 900, LNA
Return Loss, typical, dB	20	20	20
Return Loss - Bypass Mode, typical, dB	16	16	16

Electrical Specifications Rx (Uplink)

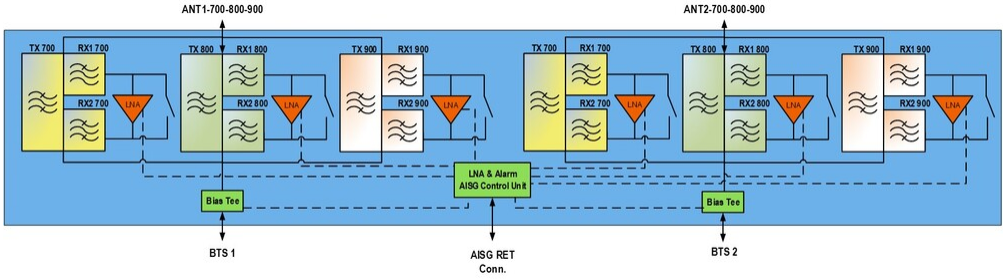
Frequency Range, MHz	**703–733**	**832–862**	**880–915**
Bandwidth, MHz	30	30	35
Gain, nominal, dB	12	12	12
Noise Figure, typical, dB	1.3	1.6	1.6
Total Group Delay, typical, ns	100	210	210
Insertion Loss - Bypass Mode, typical, dB	2.5	3.4	3.4

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	**758–788**	**791–821**	**925–960**
Bandwidth, MHz	30	30	35
Insertion Loss, typical, dB	0.3	0.3	0.35
Total Group Delay, typical, ns	40	40	40
Return Loss, typical, dB	20	20	20
Input Power, RMS, maximum, W	200	200	200
Input Power, PEP, maximum, W	1000	1000	1000
3rd Order PIM, typical, dBc	-160	-160	-160
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers	Two +43 dBm carriers

Block Diagram

E14ROOP76



Environmental Specifications

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Corrosion Test Method	IEC 60068-2-11, 30 days
Environmental Test Method	ETSI EN 300 019-1-4
Ingress Protection Test Method	IEC 60529:2001, IP67

Packaging and Weights

Included	Mounting hardware
Volume	9.1 L
Weight, net	10.3 kg | 22.708 lb
Weight, without mounting hardware	9.5 kg | 20.944 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