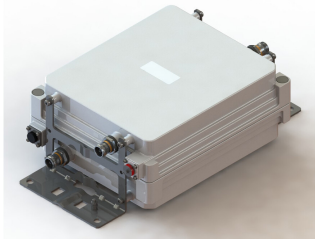


E14R00P77



Tri Band Tower Mounted Amplifier, 700//800//900 MHz, 12 dB, 2 BTS & 2 ANT ports, AISG with 1 RET connector (3 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
- 3 devices 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

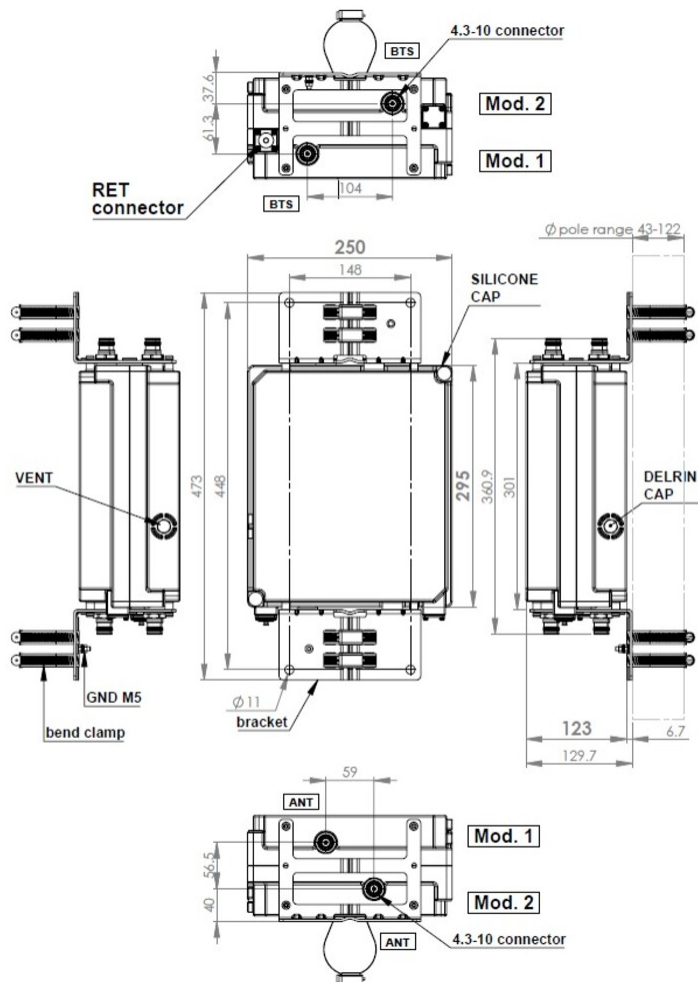
Width 123 mm | 4.843 in

Depth 295 mm | 11.614 in

Mounting Pipe Diameter Range 43–122 mm

Outline Drawing

E14R00P77



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 \pm 10 mA

Electrical Specifications, AISG

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

E14R00P77

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)

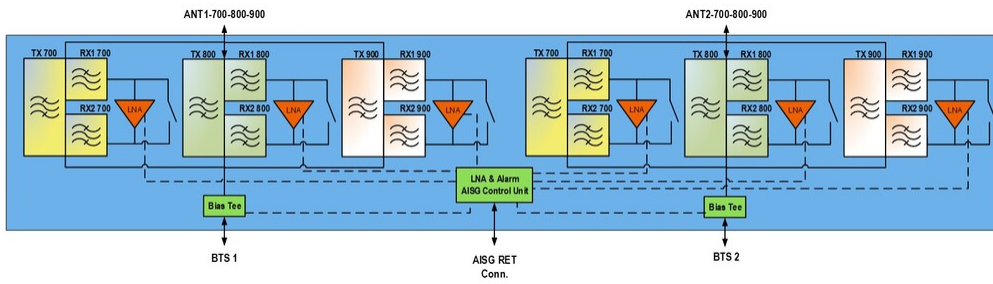
Frequency Range, MHz	703–733	832–862	880–915
Bandwidth, MHz	30	30	35
Gain, nominal, dB	12	12	12
Noise Figure, typical, dB	1.3	1.6	1.6
Total Group Delay, typical, ns	100	210	210
Insertion Loss - Bypass Mode, typical, dB	2.5	3.4	3.4

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	-145	-145	-145
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers	Two +43 dBm carriers

Block Diagram

E14R00P77



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
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