



Tower Mounted Amplifier, Dual 700 MHz with AISG 2.0

- 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
- Connectors “in line”
- 2 input ports and 2 output ports

OBSOLETE

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 144 mm | 5.669 in

Width 230 mm | 9.055 in

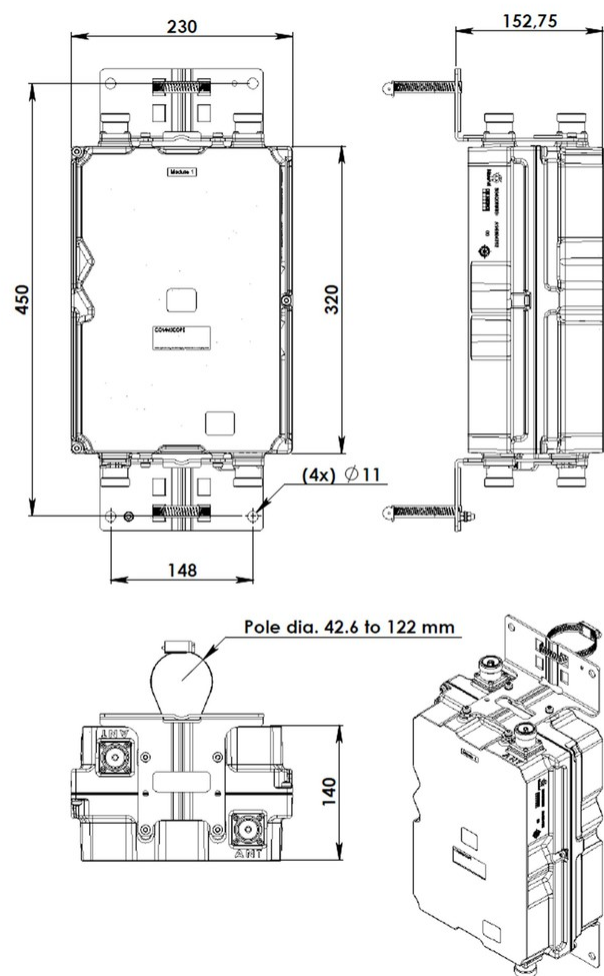
Depth 320 mm | 12.598 in

Ground Screw Diameter 8 mm | 0.315 in

Mounting Pipe Diameter Range 40–160 mm

Outline Drawing

E14R02P27



Electrical Specifications

License Band, LNA APT 700

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, CWA Mode	7–18 Vdc
Alarm Current, CWA Mode	190 mA ±10 mA

E14R02P27

Electrical Specifications, AISG

AISG Connector	8-pin DIN Female
AISG Connector Standard	IEC 60130-9
Protocol	AISG 2.0
Voltage, AISG Mode	7–30 Vdc

Electrical Specifications

Sub-module	1 2
Branch	1
Port Designation	ANT
License Band	APT 700, LNA
Return Loss, typical, dB	20
Return Loss - Bypass Mode, typical, dB	18

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	703–748
Bandwidth, MHz	45
Gain, nominal, dB	13
Gain Tolerance, dB	±1
Noise Figure, maximum, dB	2
Noise Figure, typical, dB	1.2
Group Delay Variation, maximum, ns	100
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	150
Return Loss, minimum, dB	18
Insertion Loss - Bypass Mode, typical, dB	1.3

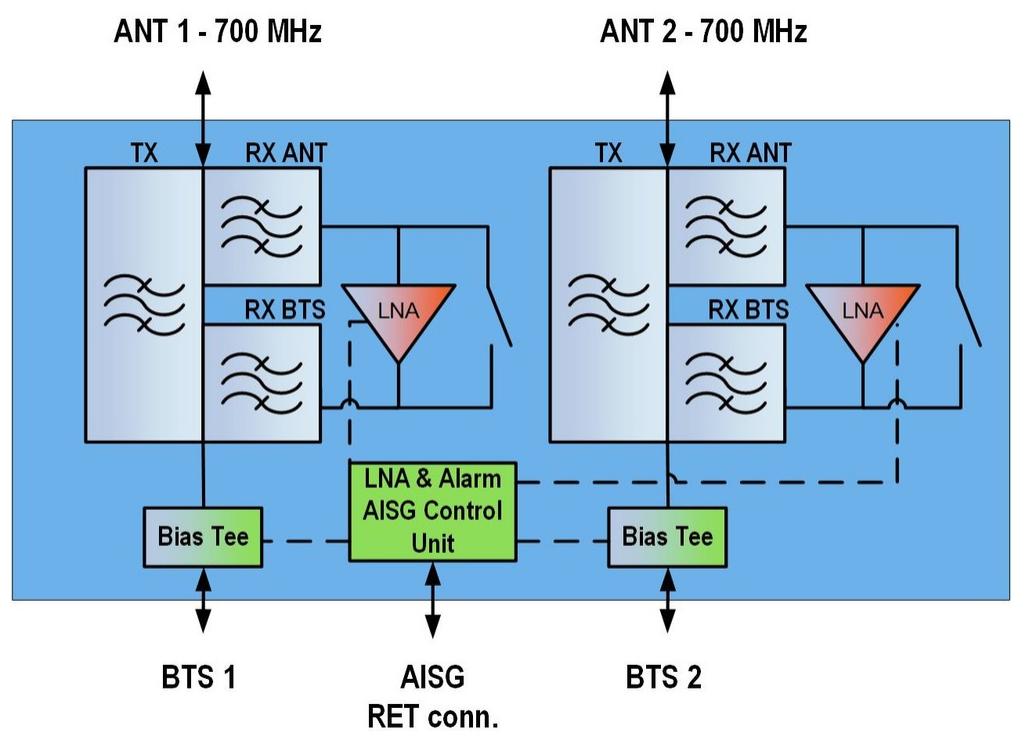
Electrical Specifications Tx (Downlink)

Frequency Range, MHz	758–803
Bandwidth, MHz	45
Insertion Loss, maximum, dB	0.5
Insertion Loss, typical, dB	0.4

E14R02P27

Group Delay Variation, maximum, ns	30
Group Delay Variation Bandwidth, MHz	5
Return Loss, minimum, dB	18
Return Loss, typical, dB	20
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum, W	2500
3rd Order PIM, typical, dBc	-160
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)

E14R02P27

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	10 L
Weight, net	12 kg 26.455 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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