

E14R00P72



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 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 234 mm | 9.213 in

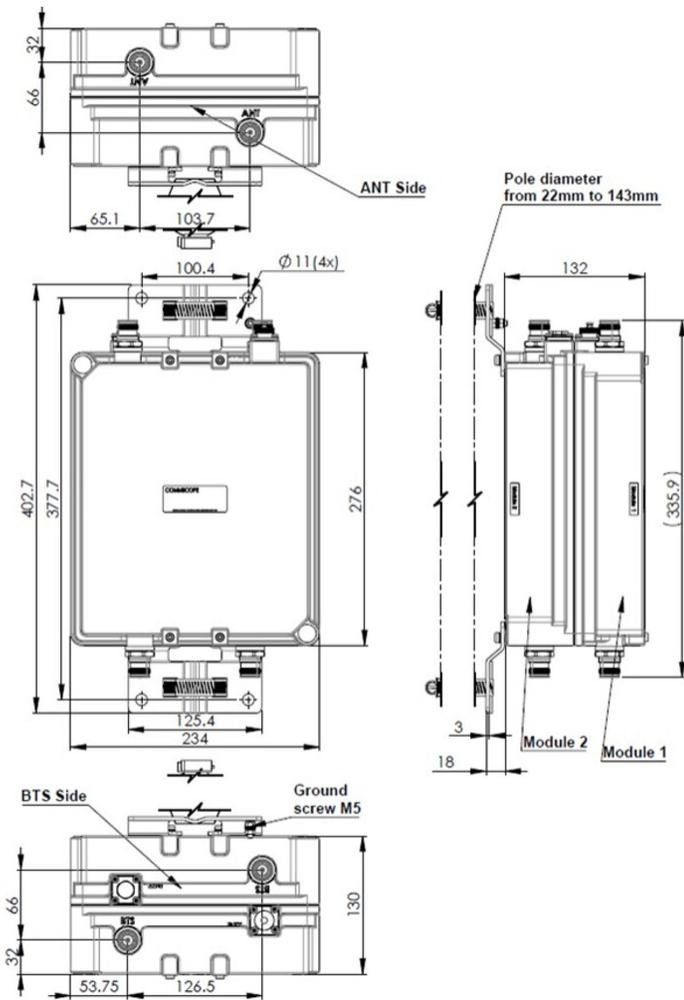
Width 130 mm | 5.118 in

Depth 276 mm | 10.866 in

Mounting Pipe Diameter Range 43–122 mm

Outline Drawing

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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

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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)

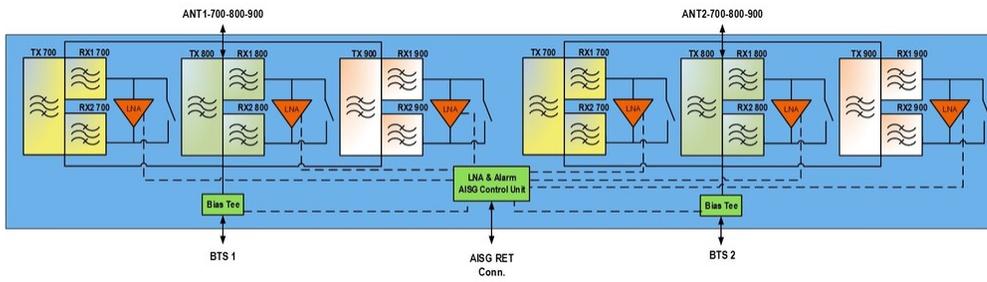
Frequency Range, MHz	723–733	852–862	890–905
Bandwidth, MHz	10	10	15
Gain, nominal, dB	12	12	12
Noise Figure, typical, dB	1.3	1.3	1.6
Total Group Delay, typical, ns	110	90	140
Insertion Loss - Bypass Mode, typical, dB	2.3	2.2	2.6

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	778–788	811–821	935–950
Bandwidth, MHz	10	10	15
Insertion Loss, typical, dB	0.3	0.3	0.3
Total Group Delay, typical, ns	30	40	30
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	-146	-146	-146
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers	Two +43 dBm carriers

Block Diagram

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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	8.4 L
Weight, net	9.5 kg 20.944 lb
Weight, without mounting hardware	9.1 kg 20.062 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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