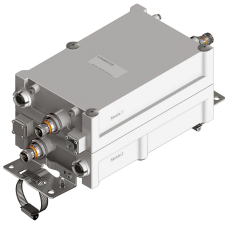


E14R00P42



Dual Band Tower Mounted Amplifier, 700//800 MHz, 12 dB, 2 BTS & 2 ANT ports, AISG with 1 RET connector (2 devices with 2 sub-units), with 4.3-10 connectors

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- 2 input ports and 2 output ports
- Designed to boost UP-Link Coverage and KPIs
- Automatic LNA by-pass function
- Connectors “in line”
- TMA is operating in AISG mode
- Single AISG with 1 RET connector
- 2 devices with 2 sub-units
- Built in lightning protection

Product Classification

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

General Specifications

Color Gray

Modularity 2-Twin

Mounting Pipe Hardware Band clamps (2)

RF Connector Interface 4.3-10 Female

Dimensions

Height 140 mm | 5.512 in

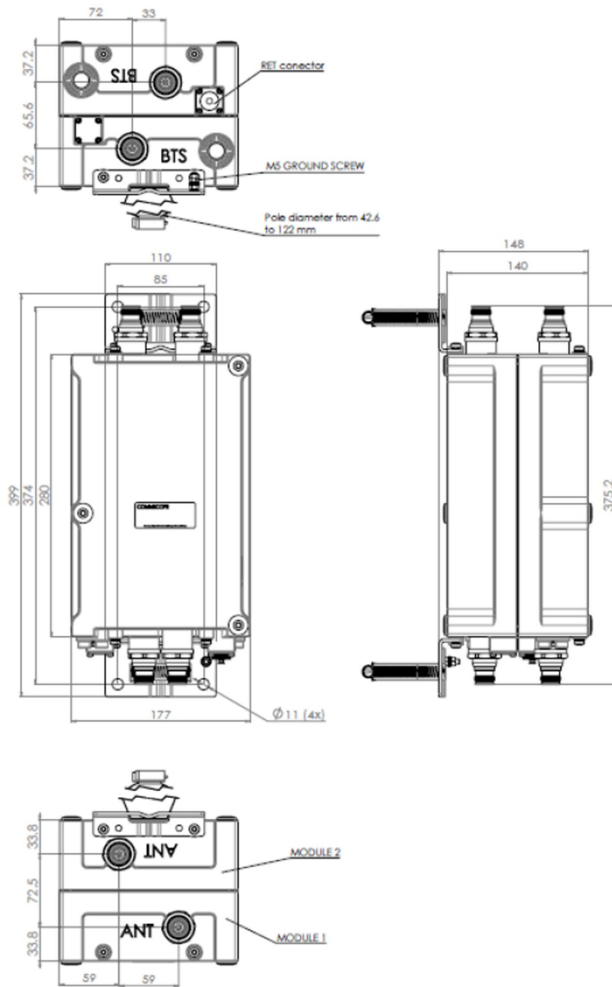
Width 177 mm | 6.969 in

Depth 260 mm | 10.236 in

Mounting Pipe Diameter Range 42.6–122 mm

Outline Drawing

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Electrical Specifications

License Band, Band Pass	APT 700
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

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	10–30 Vdc

Electrical Specifications

Sub-module	1 2	1 2
Branch	1	2
Port Designation	ANT 700	ANT 800
License Band	APT 700, Band Pass APT 700, LNA	EDD 800, LNA
Return Loss, typical, dB	20	20
Return Loss - Bypass Mode, typical, dB	14	14

Electrical Specifications Rx (Uplink)

	703–733	832–862
Frequency Range, MHz		
Bandwidth, MHz	30	30
Gain, nominal, dB	12	12
Noise Figure, typical, dB	1.25	1.3
Group Delay Variation, maximum, ns	30	60
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	120	220
Total Group Delay, typical, ns	90	180
Return Loss, minimum, dB	16	16
Insertion Loss - Bypass Mode, typical, dB	1.8	1.7

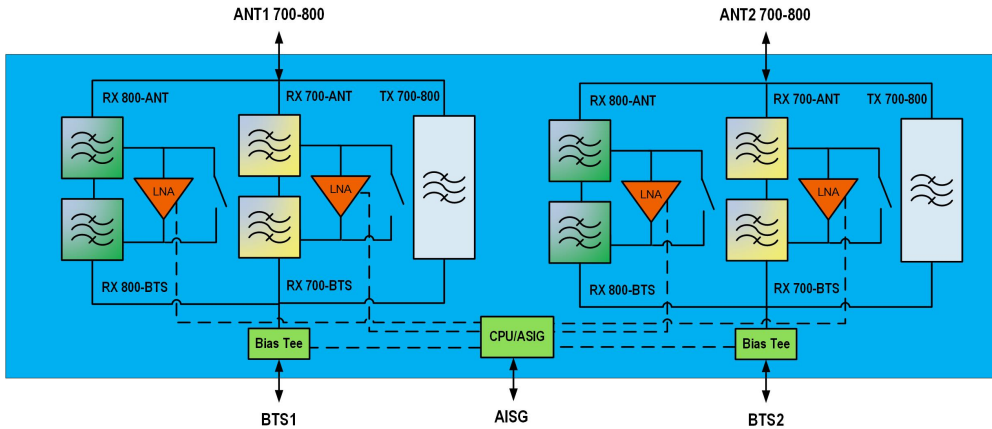
Electrical Specifications Tx (Downlink)

	758–788	791–821
Frequency Range, MHz		
Bandwidth, MHz	30	30
Insertion Loss, maximum, dB	0.7	0.7
Insertion Loss, typical, dB	0.5	0.5
Group Delay Variation, maximum, ns	10	18
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	45	55
Total Group Delay, typical, ns	35	45
Return Loss, minimum, dB	18	18
Return Loss, typical, dB	20	20
Input Power, RMS, maximum, W	200	200

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Input Power, PEP, maximum, W	1000	1000
3rd Order PIM, typical, dBc	-162	-162
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers

Block Diagram



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	7 L
Weight, net	11 kg 24.251 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



* Footnotes

License Band, Band Pass License Bands that are to be passed through with no amplification

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License Band, LNA

License Bands that have RxUplink amplification