

E14R00P57



Dual Band Tower Mounted Amplifier, 1800//2100 MHz, 12 dB, 2 BTS & 4 ANT ports, AISG with 1 RET connectors (2 devices with 2 sub-units each)

- Industry leading PIM performance
- TMA is operating in AISG & CWA mode, Alarm Current consumption CWA mode 190 mA
- 2 input ports and 4 output ports
- Designed to boost UP-Link Coverage and KPIs
- 2 devices with 2 sub-units
- New 4.3-10 connectors for improved PIM performance and size reduction

Product Classification

Product Type 2-BTS:4-ANT (Diplex) | Tower mounted amplifier

General Specifications

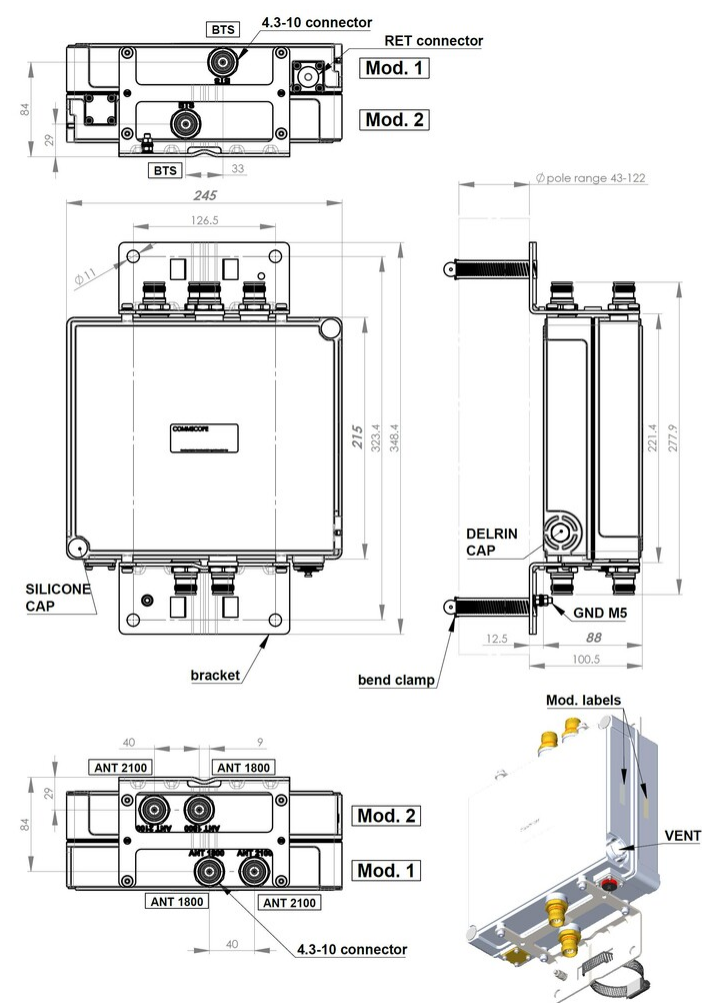
Color	Gray
Modularity	2-Twin
Mounting	Pole Wall
Mounting Pipe Hardware	Band clamps (2)
RF Connector Interface	4.3-10 Female

Dimensions

Height	215 mm 8.465 in
Width	245 mm 9.646 in
Depth	88 mm 3.465 in
Mounting Pipe Diameter Range	43–122 mm

Outline Drawing

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Electrical Specifications

License Band, LNA DCS 1800 | IMT 2100

Electrical Specifications, dc Power/Alarm

Lightning Surge Current 10 kA

Lightning Surge Current Waveform 8/20 waveform

Voltage 7–30 Vdc

Electrical Specifications, AISG

AISG Connector 8-pin DIN Female

AISG Connector Standard IEC 60130-9

Protocol AISG 2.0

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Voltage, AISG Mode

10–30 Vdc

Electrical Specifications

Sub-module	1 2	1 2
Branch	1	2
Port Designation	ANT 1800	ANT 2100
License Band	DCS 1800, LNA	IMT 2100, LNA
Return Loss - Bypass Mode, typical, dB	16	16

Electrical Specifications Rx (Uplink)

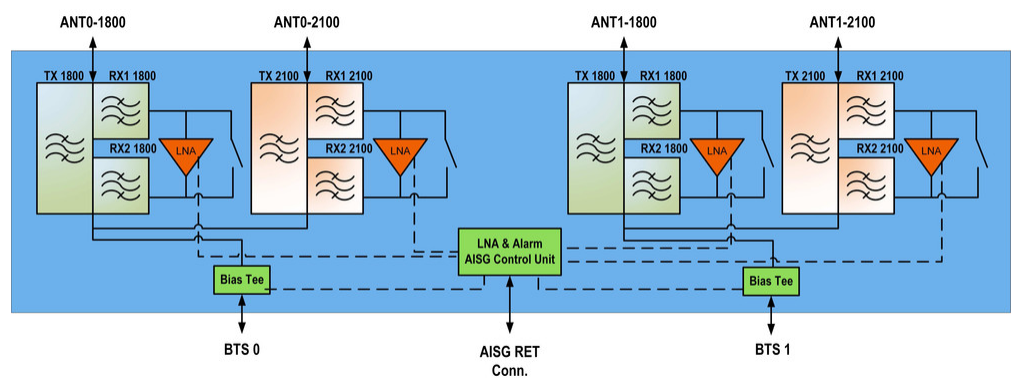
Frequency Range, MHz	1710–1785	1920–1980
Bandwidth, MHz	75	60
Gain, nominal, dB	12	12
Gain Tolerance, dB	+1.4/-1.0	±1
Noise Figure, typical, dB	1.7	1.6
Group Delay Variation, maximum, ns	50	30
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	130	100
Return Loss, minimum, dB	16	16
Insertion Loss - Bypass Mode, typical, dB	2.5	2.3

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	1805–1880	2110–2170
Bandwidth, MHz	75	60
Insertion Loss, maximum, dB	0.7	0.4
Insertion Loss, typical, dB	0.5	0.3
Group Delay Variation, maximum, ns	20	10
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	50	25
Return Loss, minimum, dB	18	18
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	1000	1000
3rd Order PIM, typical, dBc	-160	-162
3rd Order PIM Test Method	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)
Relative Humidity	Up to 100%
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	4.6 L
Weight, net	7.1 kg 15.653 lb
Weight, without mounting hardware	6.6 kg 14.55 lb

* Footnotes

License Band, LNA	License Bands that have RxUplink amplification
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