

E15S02P59



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

- 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

OBSOLETE

This product was discontinued on: July 1, 2022

Replaced By:

E16S02P59

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

Product Classification

Product Type 1-BTS:2-ANT (Diplex) | Tower mounted amplifier

General Specifications

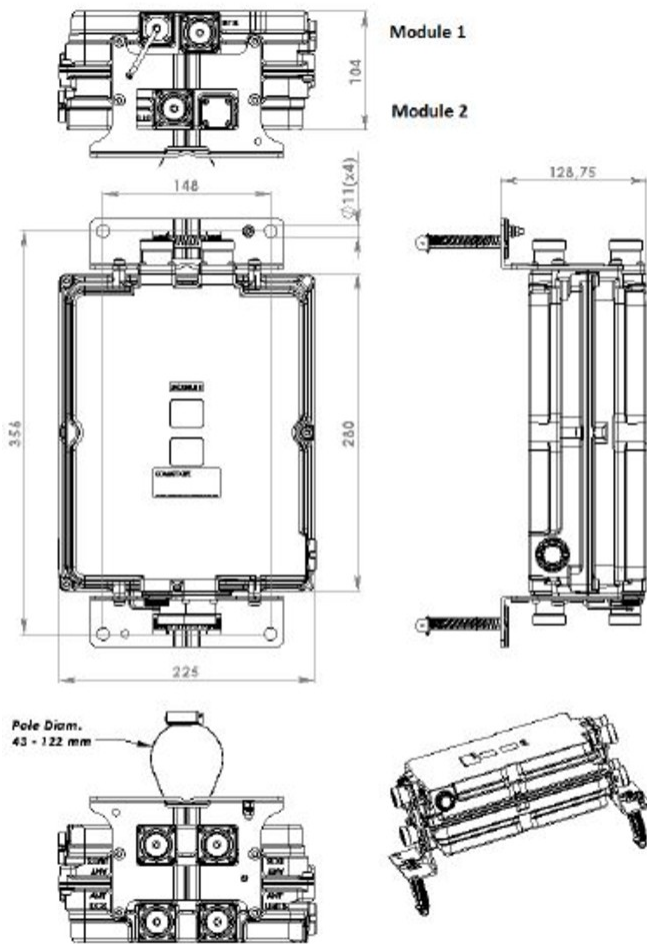
Color Gray
Modularity 2-Twin
Mounting Pole | Wall
Mounting Pipe Hardware Band clamps (2)
RF Connector Interface 7-16 DIN Female

Dimensions

Height 280 mm | 11.024 in
Width 225 mm | 8.858 in
Depth 104 mm | 4.094 in
Mounting Pipe Diameter Range 50–120 mm

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Outline Drawing



Electrical Specifications

License Band, LNA DCS 1800 | IMT 2100

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy	Yes
Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform
Voltage	7-30 Vdc
Alarm Current, CWA Mode	190 mA ±10 mA

Electrical Specifications, AISG

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AISG Connector	8-pin DIN Female
AISG Connector Standard	IEC 60130-9
Protocol	AISG 2.0
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	14	14

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	1710–1785	1920–1980
Bandwidth, MHz	75	60
Gain, nominal, dB	12	12
Gain Tolerance, dB	+1.3/-1.0	±1
Noise Figure, typical, dB	1.5	1.5
Group Delay Variation, maximum, ns	30	16
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	100	80
Return Loss, minimum, dB	17	17
Insertion Loss - Bypass Mode, typical, dB	2.5	2.5

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	1805–1880	2110–2170
Bandwidth, MHz	75	60
Insertion Loss, maximum, dB	0.6	0.5
Insertion Loss, typical, dB	0.5	0.4
Group Delay Variation, maximum, ns	10	4
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	45	25
Return Loss, minimum, dB	18	18
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	2000	2000

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3rd Order PIM, maximum, dBc

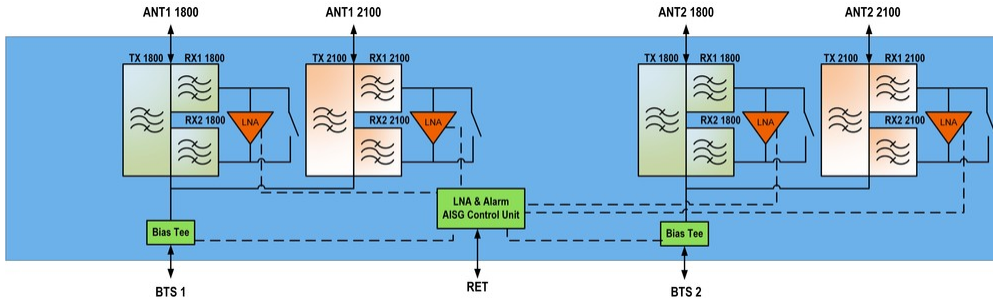
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3rd Order PIM Test Method

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

6.5 L

Weight, net

7 kg | 15.432 lb

Regulatory Compliance/Certifications

Agency

ISO 9001:2015

Classification

Designed, manufactured and/or distributed under this quality management system



* Footnotes

License Band, LNA

License Bands that have RxUplink amplification