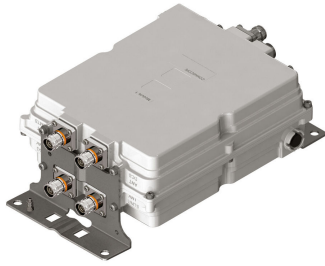


E16S02P59



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 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
- 1 device with 2 sub-units
- New 4.3-10 connectors for improved PIM performance and size reduction

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 4.3-10 Female

Dimensions

Height 280 mm | 11.024 in

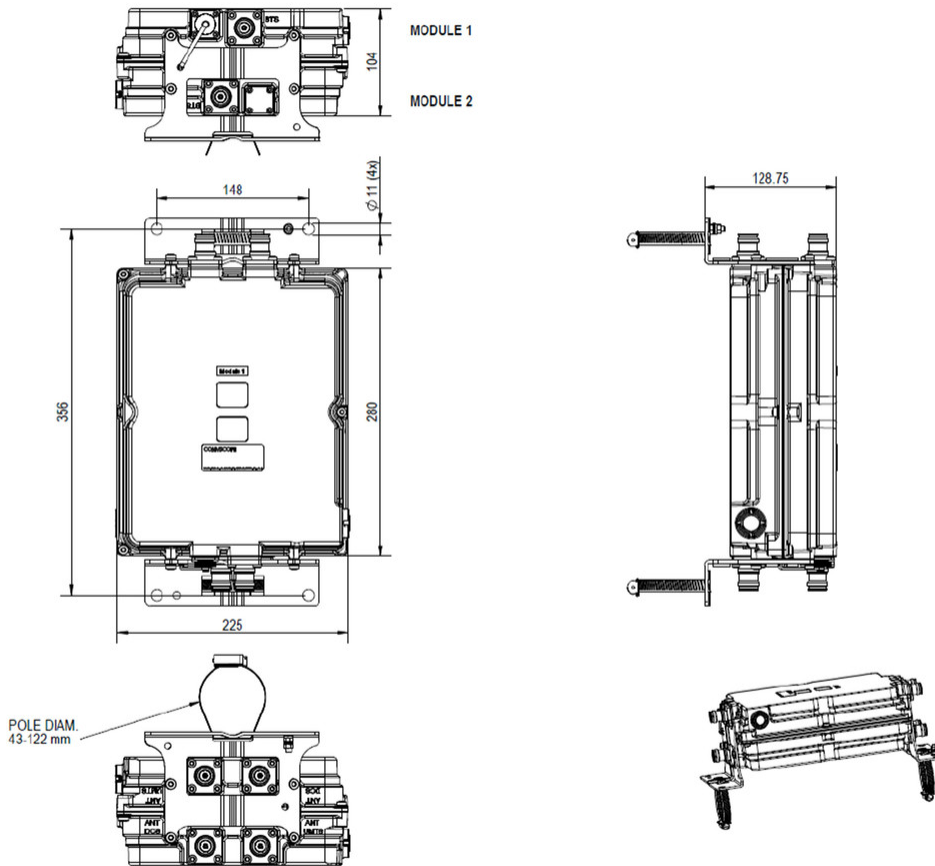
Width 225 mm | 8.858 in

Depth 104 mm | 4.094 in

Mounting Pipe Diameter Range 50–120 mm

E16S02P59

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 \pm 10 mA

Electrical Specifications, AISG

E16S02P59

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
3rd Order PIM, maximum, dBc	-161	-161

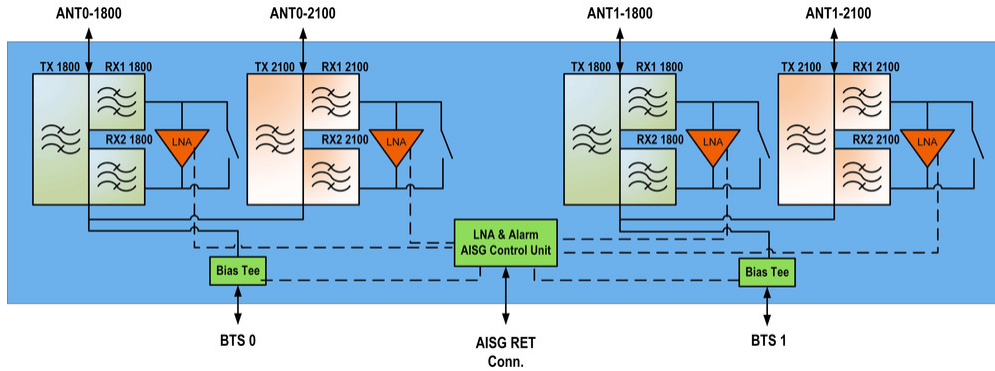
E16S02P59

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	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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