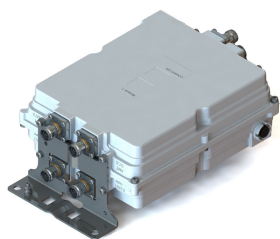


# E16S02P51



Dual Band Tower Mounted Amplifier, 1800//2100 MHz, 12 dB, 2 BTS & 4 ANT ports, AISG with 2 RET connectors

- 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
- New 4.3-10 connectors for improved PIM performance and size reduction

**OBSOLETE**

This product was discontinued on: December 31, 2024

**Replaced By:**

E14R00P56      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**      4.3-10 Female

## Dimensions

**Height**      280 mm | 11.024 in

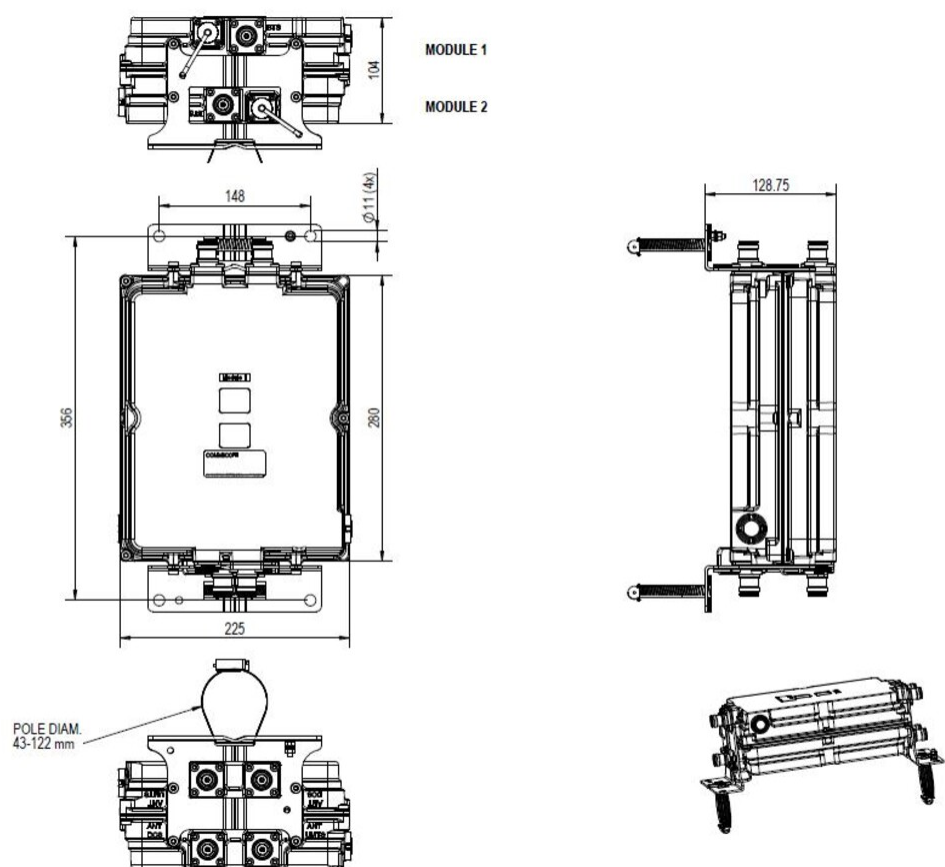
**Width**      225 mm | 8.858 in

**Depth**      104 mm | 4.094 in

**Mounting Pipe Diameter Range**      50–120 mm

## Outline Drawing

# E16S02P51



## Electrical Specifications

**License Band, LNA** DCS 1800 | IMT 2100

## Electrical Specifications, dc Power/Alarm

<b>dc Switching/Redundancy</b>	Yes
<b>Lightning Surge Current</b>	10 kA
<b>Lightning Surge Current Waveform</b>	8/20 waveform
<b>Voltage</b>	7–30 Vdc
<b>Alarm Current, CWA Mode</b>	190 mA ±15 mA

## Electrical Specifications, AISG

<b>AISG Connector</b>	8-pin DIN Female (2)
<b>AISG Connector Standard</b>	IEC 60130-9
<b>Protocol</b>	AISG 2.0
<b>Voltage, AISG Mode</b>	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)

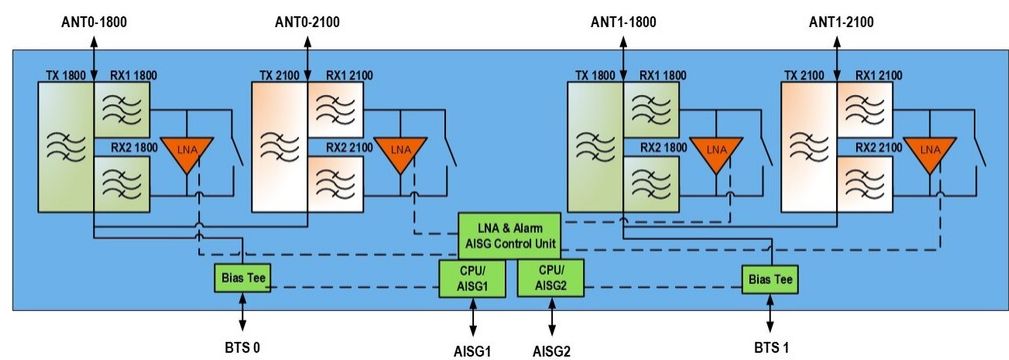
Frequency Range, MHz	1710–1785	1920–1980
Bandwidth, MHz	75	60
Gain, nominal, dB	12	12
Gain Tolerance, dB	+1.3/-1.0	±1
Noise Figure, typical, dB	1.5	1.5
Group Delay Variation, maximum, ns	30	16
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	100	80
Return Loss, minimum, dB	17	17
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
3rd Order PIM Test Method	Two +43 dBm carriers Two +43 dBm carriers	

Block Diagram

# E16S02P51



## 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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