



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)

- 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

## OBsolete

This product was discontinued on: December 30, 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

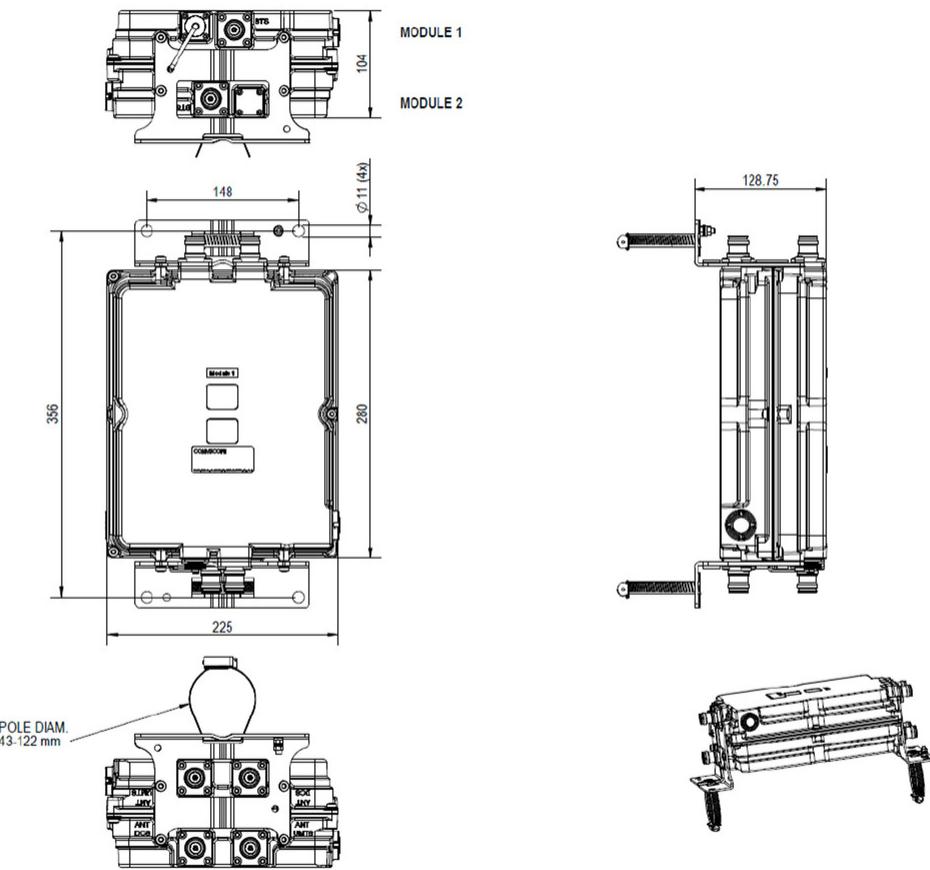
## General Specifications

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

## Dimensions

<b>Height</b>	280 mm   11.024 in
<b>Width</b>	225 mm   8.858 in
<b>Depth</b>	104 mm   4.094 in
<b>Mounting Pipe Diameter Range</b>	50–120 mm

## Outline Drawing



## 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 ±10 mA

### Electrical Specifications, AISG

<b>AISG Connector</b>	8-pin DIN Female
<b>AISG Connector Standard</b>	IEC 60130-9
<b>Protocol</b>	AISG 2.0
<b>Voltage, AISG Mode</b>	10–30 Vdc

## Electrical Specifications

<b>Sub-module</b>	<b>1   2</b>	<b>1   2</b>
<b>Branch</b>	1	2
<b>Port Designation</b>	ANT 1800	ANT 2100
<b>License Band</b>	DCS 1800, LNA	IMT 2100, LNA
<b>Return Loss - Bypass Mode, typical, dB</b>	14	14

## Electrical Specifications Rx (Uplink)

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

## Electrical Specifications Tx (Downlink)

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

**3rd Order PIM, maximum, dBc**

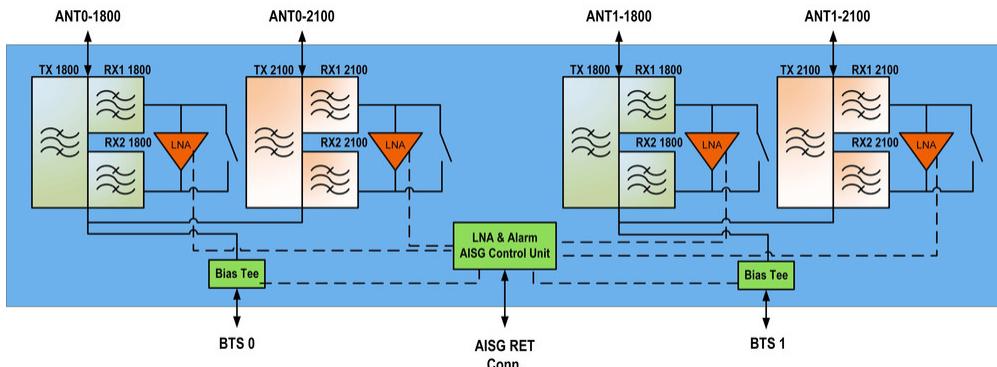
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**3rd Order PIM Test Method**

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

## \* Footnotes

**License Band, LNA** License Bands that have RxUplink amplification