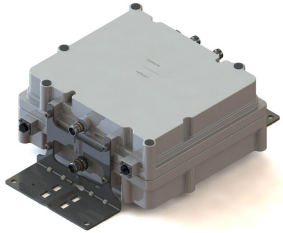


# E14R00P47



Dual Band Tower Mounted Amplifier, 700//850 MHz, 16 dB, 2 BTS & 4 ANT ports, AISG with 1 RET connector (1 device with 2 sub-units), with 4.3-10 connectors

- New 4.3-10 connectors for improved PIM performance and size reduction
- 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
- Automatic LNA by-pass function
- Connectors "in line"
- Single AISG with 1 RET connector
- 1 device with 2 sub-units
- Built in lightning protection

**OBSOLETE**

This product was discontinued on: December 31, 2024

## 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 (4)

**RF Connector Interface** 4.3-10 Female

**RF Connector Interface Body Style** Long neck

## Dimensions

**Height** 150 mm | 5.906 in

**Width** 302 mm | 11.89 in

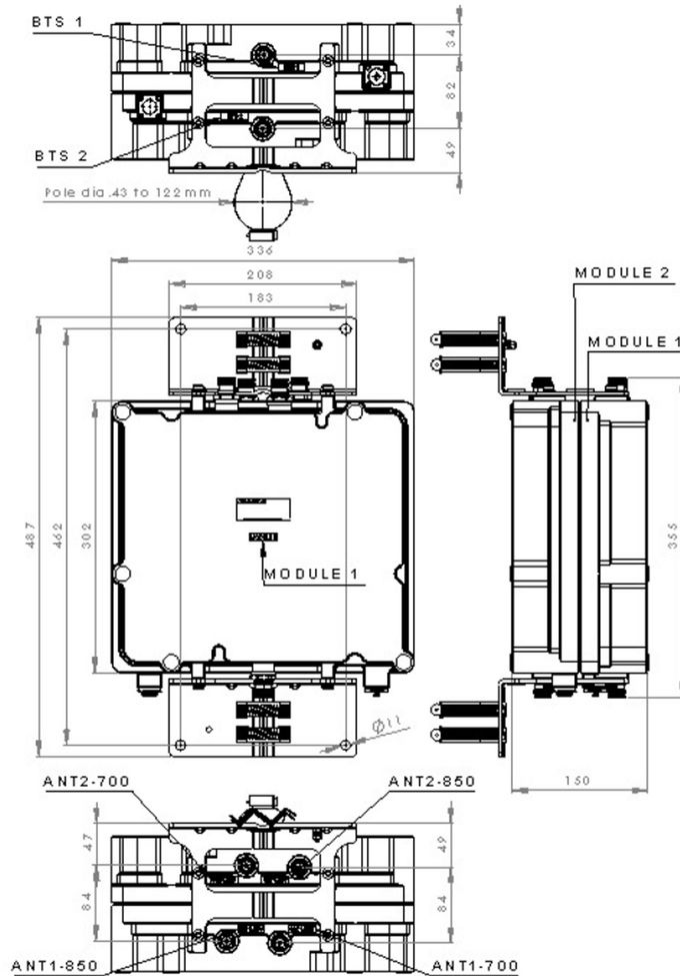
**Depth** 336 mm | 13.228 in

**Ground Screw Diameter** 6 mm | 0.236 in

**Mounting Pipe Diameter Range** 40–160 mm

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## Outline Drawing



## Electrical Specifications

**License Band, LNA** APT 700 | CEL 850 | USA 750

## 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>Operating Current at Voltage</b>	240 mA @ 12 V
<b>Operating Current Tolerance</b>	±20 mA
<b>Voltage</b>	7–30 Vdc
<b>Voltage, CWA Mode</b>	10–18 Vdc

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**Alarm Current, CWA Mode** 30–170 mA @ 10–18 V

## Electrical Specifications, AISG

**AISG Carrier** 2.176 MHz ± 100 ppm  
**AISG Connector** 8-pin DIN Female  
**AISG Connector Standard** IEC 60130-9  
**Default Protocol** AISG 2.0  
**Protocol** AISG 1.1 | AISG 2.0  
**Voltage, AISG Mode** 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	ANT
<b>AISG 2.0 Device Subunit</b>	E15R02P25 2/4	E15R02P25 1/3
<b>License Band</b>	APT 700, LNA USA 750, LNA	CEL 850, LNA
<b>Return Loss, typical, dB</b>	20	20
<b>Return Loss - Bypass Mode, typical, dB</b>	16	16

## Electrical Specifications Rx (Uplink)

<b>Frequency Range, MHz</b>	<b>703–748</b>	<b>824–845</b>
<b>Bandwidth, MHz</b>	45	21
<b>Gain, nominal, dB</b>	16.5	15.5
<b>Gain Tolerance, dB</b>	±1.0	+1.0/-1.0
<b>Gain Adjustment Range Increments, dB</b>	1	
<b>Noise Figure, maximum, dB</b>	1.7	2.2
<b>Noise Figure, typical, dB</b>	1.2	1.4
<b>Total Group Delay, typical, ns</b>	280	340
<b>Insertion Loss - Bypass Mode, typical, dB</b>	2	2.8

## Electrical Specifications Tx (Downlink)

<b>Frequency Range, MHz</b>	<b>758–803</b>	<b>859–890</b>
<b>Bandwidth, MHz</b>	45	31
<b>Insertion Loss, typical, dB</b>	0.35	0.35

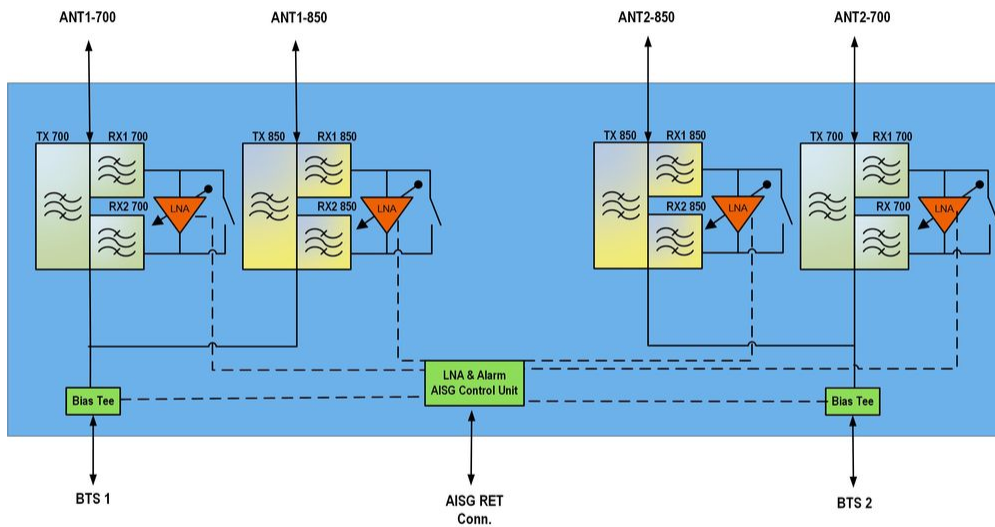
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<b>Total Group Delay, typical, ns</b>	95	75
<b>Return Loss, typical, dB</b>	20	20
<b>RX Band Rejection, minimum, dB</b>	40	40
<b>Input Power, RMS, maximum, W</b>	120	120
<b>Input Power, PEP, maximum, W</b>	1500	1500
<b>3rd Order PIM, typical, dBc</b>	-159	-159
<b>3rd Order PIM Test Method</b>	Two +43 dBm carriers Two +43 dBm carriers	

## Electrical Specifications, Band Reject

<b>Frequency Range, MHz</b>	<b>763–775</b>	<b>851–856</b>
<b>Attenuation, minimum, dB</b>	40	30

## Block Diagram



# E14R00P47

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## Material Specifications

**Finish** Painted

## 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** 15.2 L

**Weight, net** 16.5 kg | 36.376 lb

**Weight, without mounting hardware** 14.7 kg | 32.408 lb

## \* Footnotes

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