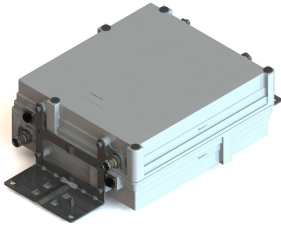


# E14R00P49

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Dual Band Tower Mounted Amplifier, 700//900 MHz, 12 dB, 2 BTS & 2 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 2 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

## Product Classification

**Product Type** 1-BTS:1-ANT (Uniplex) | Tower mounted amplifier

## General Specifications

**Color** Gray

**Modularity** 2-Twin

**Mounting Pipe Hardware** Band clamps (2)

**RF Connector Interface** 4.3-10 Female

## Dimensions

**Height** 140 mm | 5.512 in

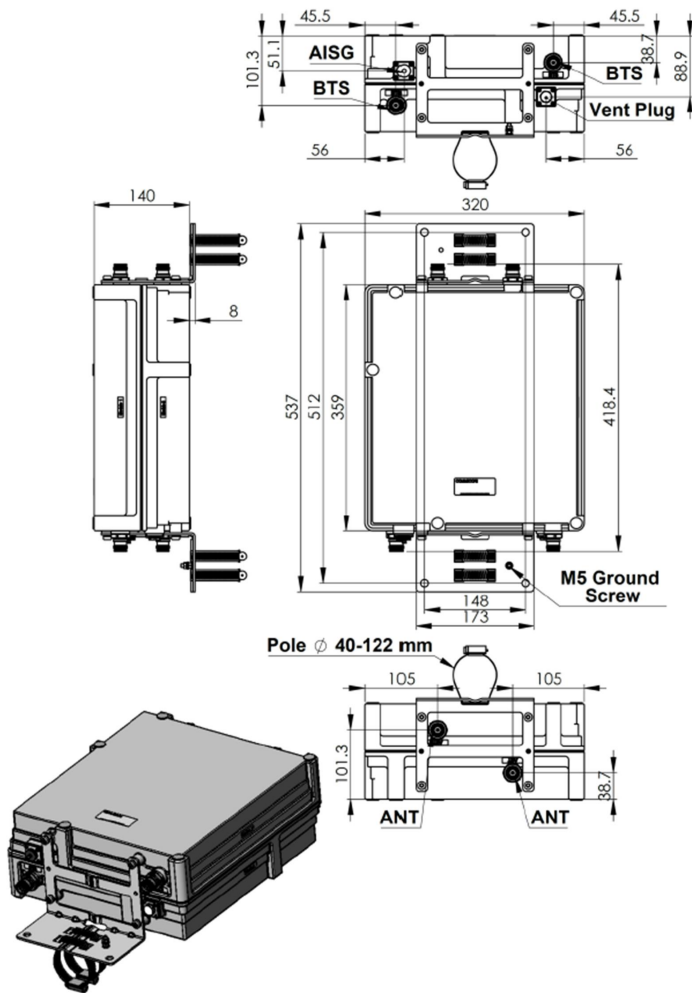
**Width** 320 mm | 12.598 in

**Depth** 359 mm | 14.134 in

**Mounting Pipe Diameter Range** 42.6–122 mm

## Outline Drawing

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## Electrical Specifications

**License Band, LNA** APT 700 | CEL 900

## Electrical Specifications, dc Power/Alarm

**dc Switching/Redundancy** Yes  
**Lightning Surge Current** 10 kA  
**Lightning Surge Current Waveform** 8/20 waveform  
**Alarm Current, CWA Mode** 190 mA  $\pm$ 10 mA

## Electrical Specifications, AISG

**AISG Connector** 8-pin DIN Female  
**AISG Connector Standard** IEC 60130-9

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<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 700	ANT 900
<b>License Band</b>	APT 700, LNA	CEL 900, LNA
<b>Return Loss, typical, dB</b>	20	20
<b>Return Loss - Bypass Mode, typical, dB</b>	14	14

## Electrical Specifications Rx (Uplink)

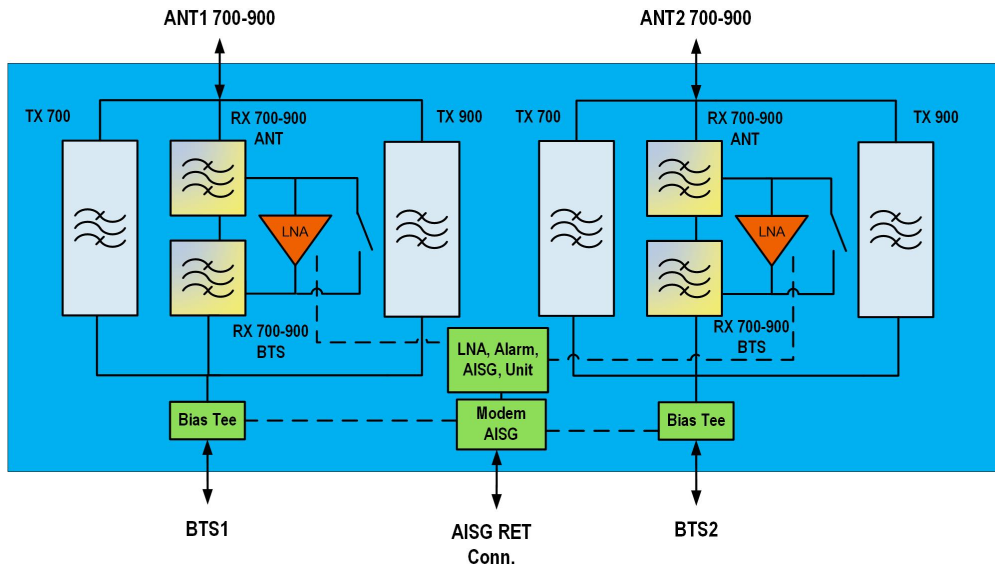
<b>Frequency Range, MHz</b>	<b>703–748</b>	<b>890–915</b>
<b>Bandwidth, MHz</b>	45	25
<b>Gain, nominal, dB</b>	13	13
<b>Gain Tolerance, dB</b>	+0.75/-0.75	
<b>Noise Figure, maximum, dB</b>	2	2
<b>Noise Figure, typical, dB</b>	1.2	1.5
<b>Group Delay Variation, maximum, ns</b>	120	70
<b>Group Delay Variation Bandwidth, MHz</b>	5	5
<b>Total Group Delay, maximum, ns</b>	160	100
<b>Return Loss, minimum, dB</b>	16	16
<b>Insertion Loss - Bypass Mode, typical, dB</b>	1.5	2.2

## Electrical Specifications Tx (Downlink)

<b>Frequency Range, MHz</b>	<b>758–803</b>	<b>935–960</b>
<b>Bandwidth, MHz</b>	45	25
<b>Insertion Loss, typical, dB</b>	0.5	0.4
<b>Total Group Delay, maximum, ns</b>	65	55
<b>Return Loss, minimum, dB</b>	18	18
<b>Return Loss, typical, dB</b>	22	22
<b>Input Power, RMS, maximum, W</b>	200	200
<b>Input Power, PEP, maximum, W</b>	2500	2500
<b>3rd Order PIM, typical, dBc</b>	-153	-153
<b>3rd Order PIM Test Method</b>	Two +43 dBm carriers	Two +43 dBm carriers

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## Block Diagram



## Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +65 °C (-40 °F to +149 °F)
<b>Relative Humidity</b>	Up to 100%
<b>Corrosion Test Method</b>	IEC 60068-2-11, 30 days
<b>Ingress Protection Test Method</b>	IEC 60529:2001, IP67

## Packaging and Weights

<b>Included</b>	Mounting hardware
<b>Volume</b>	16.1 L
<b>Weight, net</b>	16.2 kg   35.715 lb
<b>Weight, without mounting hardware</b>	15 kg   33.069 lb

## \* Footnotes

<b>License Band, LNA</b>	License Bands that have RxUplink amplification
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