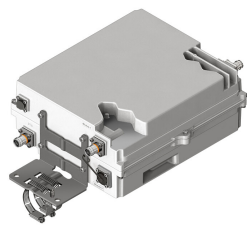


# E16R02P28



Dual Band Tower Mounted Amplifier, 700//900 MHz, 12 dB, 2 BTS & 2 ANT ports, AISG with 1 RET connector (2 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
- 2 devices with 2 sub-units
- Built in lightning protection

**OBSOLETE**

This product was discontinued on: December 31, 2024

**Replaced By:**

E14R00P49

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

## Product Classification

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

## General Specifications

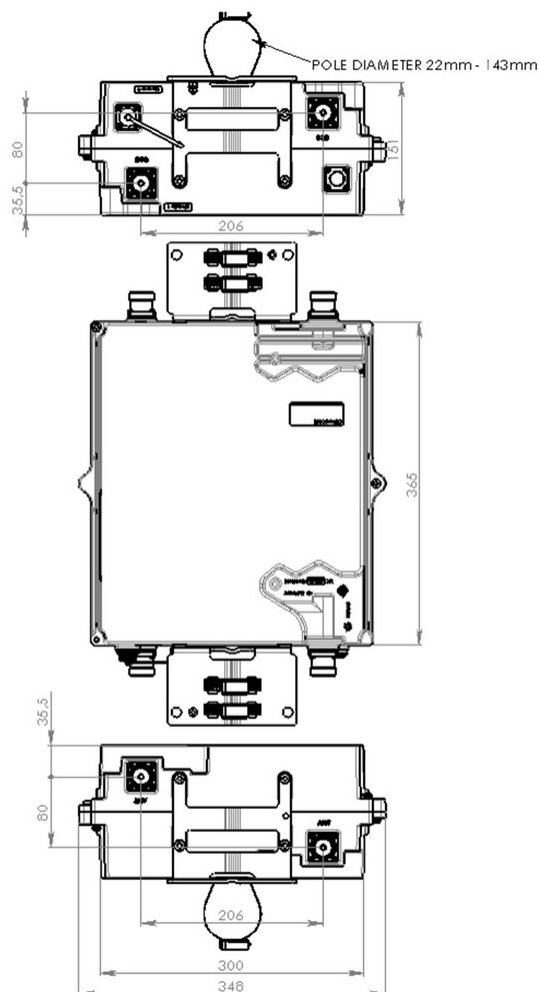
<b>Color</b>	Gray
<b>Modularity</b>	2-Twin
<b>Mounting Pipe Hardware</b>	Band clamps (2)
<b>RF Connector Interface</b>	4.3-10 Female

## Dimensions

<b>Height</b>	151 mm   5.945 in
<b>Width</b>	305 mm   12.008 in
<b>Depth</b>	370 mm   14.567 in
<b>Mounting Pipe Diameter Range</b>	42.6–122 mm

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## Outline Drawing



## Electrical Specifications

**License Band, LNA** CEL 900 | EDD 800

## 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

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<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 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>	18	18

## Electrical Specifications Rx (Uplink)

<b>Frequency Range, MHz</b>	<b>703–748</b>	<b>898–915</b>
<b>Bandwidth, MHz</b>	45	16.6
<b>Gain, nominal, dB</b>	13	13
<b>Noise Figure, maximum, dB</b>	2	2
<b>Noise Figure, typical, dB</b>	1.5	1.5
<b>Group Delay Variation, maximum, ns</b>	190	60
<b>Group Delay Variation Bandwidth, MHz</b>	5	5
<b>Return Loss, minimum, dB</b>	18	16
<b>Insertion Loss - Bypass Mode, typical, dB</b>	1.3	1.8

## Electrical Specifications Tx (Downlink)

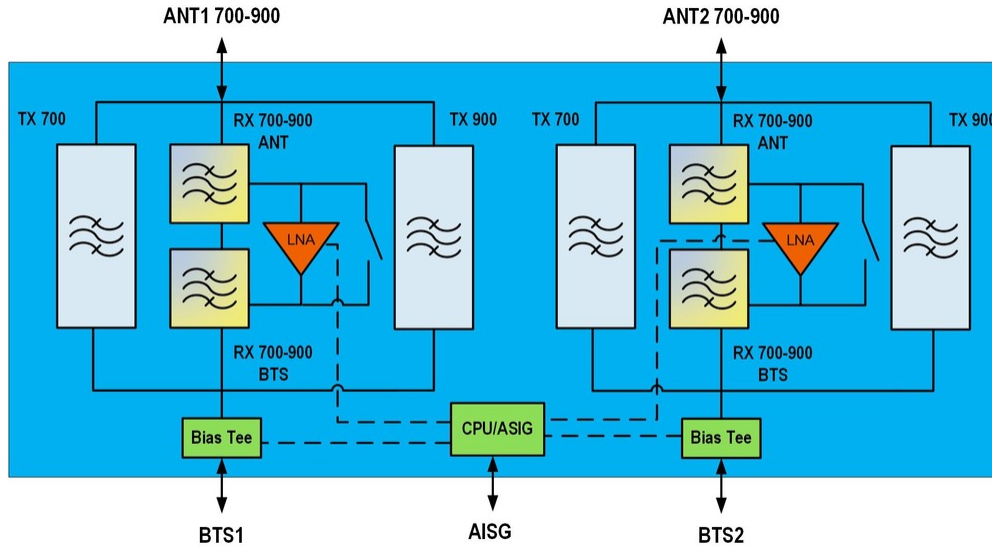
<b>Frequency Range, MHz</b>	<b>758–803</b>	<b>943–960</b>
<b>Bandwidth, MHz</b>	45	16.6
<b>Insertion Loss, maximum, dB</b>	0.6	0.6
<b>Insertion Loss, typical, dB</b>	0.5	0.5
<b>Group Delay Variation, maximum, ns</b>	35	35
<b>Group Delay Variation Bandwidth, MHz</b>	5	5
<b>Return Loss, minimum, dB</b>	16	16
<b>Return Loss, typical, dB</b>	20	20
<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

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### 3rd Order PIM Test Method

Two +43 dBm carriers Two +43 dBm carriers

## 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>	16.7 L
<b>Weight, net</b>	18 kg   39.683 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.