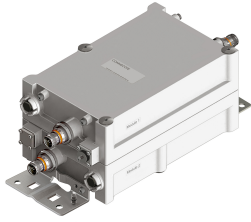


# E14R00P41

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Dual Band Tower Mounted Amplifier, 700//800 MHz, 12 dB, 2 BTS & 2 ANT ports, AISG with 1 RET connector (1 device with 2 sub-units), with 4.3-10 connectors

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- 2 input ports and 2 output ports
- Designed to boost UP-Link Coverage and KPIs
- Automatic LNA by-pass function
- Connectors “in line”
- TMA is operating in AISG mode
- 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

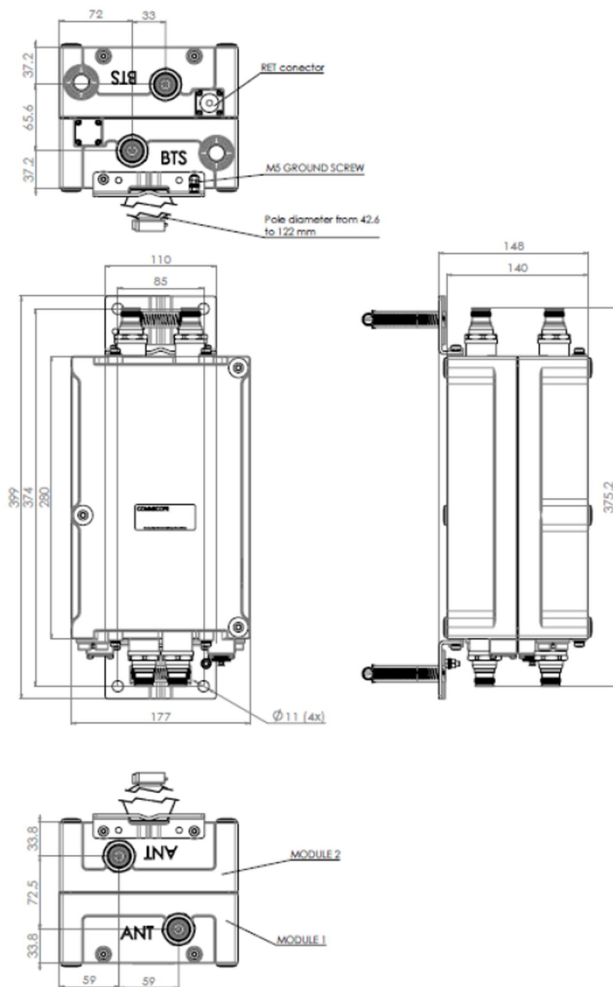
**Width** 177 mm | 6.969 in

**Depth** 260 mm | 10.236 in

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

## Outline Drawing

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## Electrical Specifications

<b>License Band, Band Pass</b>	APT 700
<b>License Band, LNA</b>	APT 700   CEL 900   EDD 800

## 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

## Electrical Specifications, AISG

<b>AISG Connector</b>	8-pin DIN Female
<b>AISG Connector Standard</b>	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 800
<b>License Band</b>	APT 700, Band Pass APT 700, LNA	EDD 800, LNA
<b>Return Loss, typical, dB</b>	20	20
<b>Return Loss - Bypass Mode, typical, dB</b>	14	14

## Electrical Specifications Rx (Uplink)

	<b>703–733</b>	<b>832–862</b>
<b>Frequency Range, MHz</b>		
<b>Bandwidth, MHz</b>	30	30
<b>Gain, nominal, dB</b>	12	12
<b>Noise Figure, typical, dB</b>	1.25	1.3
<b>Group Delay Variation, maximum, ns</b>	30	60
<b>Group Delay Variation Bandwidth, MHz</b>	5	5
<b>Total Group Delay, maximum, ns</b>	120	220
<b>Total Group Delay, typical, ns</b>	90	180
<b>Return Loss, minimum, dB</b>	16	16
<b>Insertion Loss - Bypass Mode, typical, dB</b>	1.8	1.7

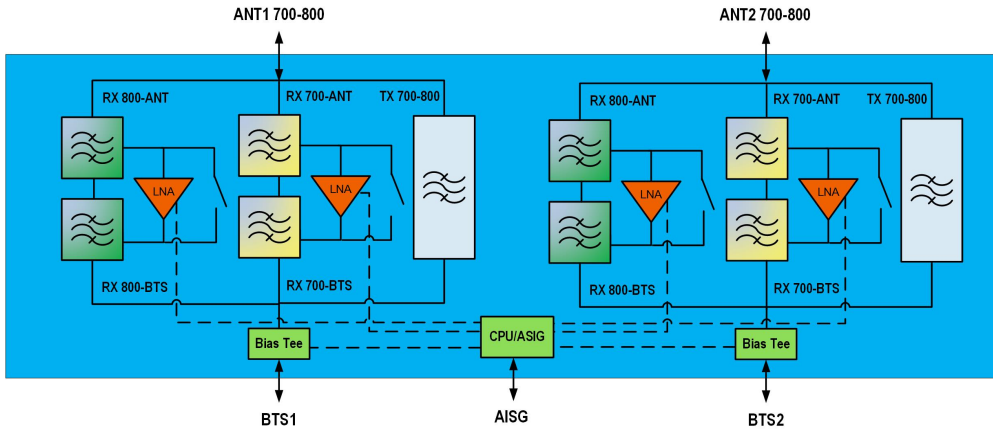
## Electrical Specifications Tx (Downlink)

	<b>758–788</b>	<b>791–821</b>
<b>Frequency Range, MHz</b>		
<b>Bandwidth, MHz</b>	30	30
<b>Insertion Loss, maximum, dB</b>	0.7	0.7
<b>Insertion Loss, typical, dB</b>	0.5	0.5
<b>Group Delay Variation, maximum, ns</b>	10	18
<b>Group Delay Variation Bandwidth, MHz</b>	5	5
<b>Total Group Delay, maximum, ns</b>	45	55
<b>Total Group Delay, typical, ns</b>	35	45
<b>Return Loss, minimum, dB</b>	18	18
<b>Return Loss, typical, dB</b>	20	20
<b>Input Power, RMS, maximum, W</b>	200	200

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<b>Input Power, PEP, maximum, W</b>	1000	1000
<b>3rd Order PIM, typical, dBc</b>	-162	-162
<b>3rd Order PIM Test Method</b>	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>	7 L
<b>Weight, net</b>	11 kg   24.251 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



## \* Footnotes

**License Band, Band Pass** License Bands that are to be passed through with no amplification

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**License Band, LNA**

License Bands that have RxUplink amplification