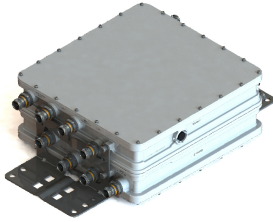


# E14R00P53

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Tri Band Tower Mounted Amplifier, 1800/2100/2600 MHz, 12 dB, 2 BTS & 8 ANT ports, AISG with 1 RET connector (1 device with 2 sub-units each), with 4.3-10 connectors, 698-960 MHz Bypass

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- Designed to boost UP-Link Coverage and KPIs
- 2 input ports and 8 output ports
- 1 device with 2 sub-units
- TMA is operating in AISG mode
- TMA with 1350-1525 MHz bypass
- TMA with 698-960 MHz bypass

## Product Classification

**Product Type** 2-BTS:8-ANT (Quadplex)

## General Specifications

**Color** Gray

**Modularity** 2-Twin

**Mounting** Pole | Wall

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

**RF Connector Interface** 4.3-10 Female

## Dimensions

**Height** 316 mm | 12.441 in

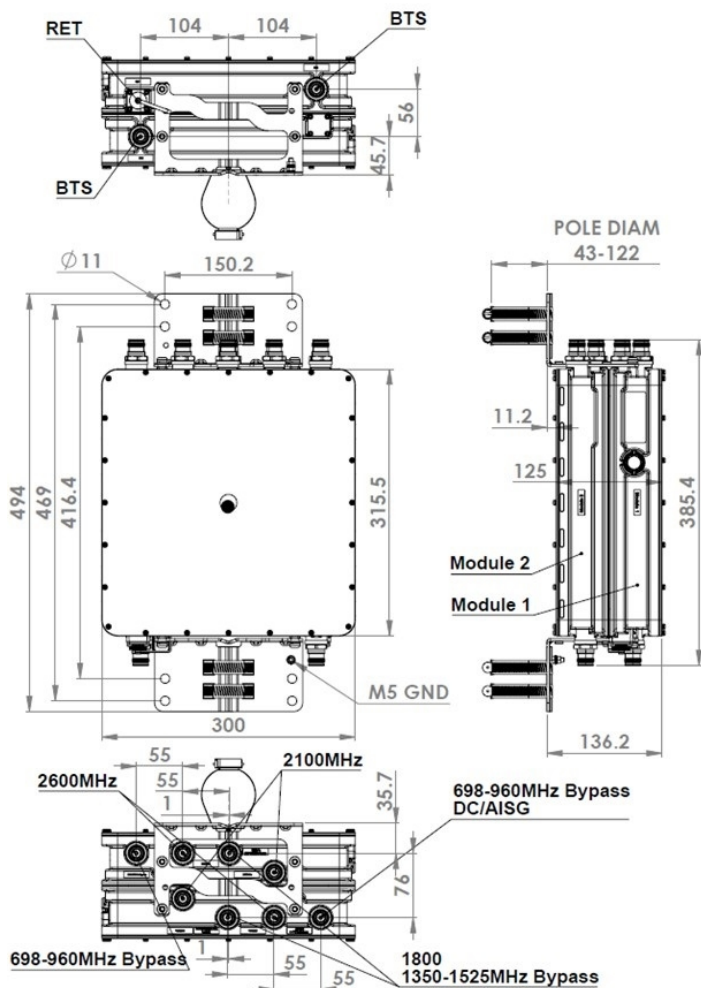
**Width** 300 mm | 11.811 in

**Depth** 125 mm | 4.921 in

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

## Outline Drawing

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## Electrical Specifications

**License Band, LNA** DCS 1800 | IMT 2100 | IMT 2600

## Electrical Specifications, dc Power/Alarm

**dc Switching/Redundancy** Yes

**Lightning Surge Current** 10 kA

**Lightning Surge Current Waveform** 8/20 waveform

## Electrical Specifications, AISG

**AISG Connector** 8-pin DIN Female

**AISG Connector Standard** IEC 60130-9

**Protocol** AISG 2.0

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Voltage, AISG Mode

10–30 Vdc

## Electrical Specifications

<b>Sub-module</b>	<b>1   2</b>	<b>1   2</b>	<b>1   2</b>
<b>Branch</b>	1	2	3
<b>Port Designation</b>	ANT	ANT	ANT
<b>License Band</b>	DCS 1800, LNA	IMT 2100, LNA	IMT 2600, LNA
<b>Return Loss, typical, dB</b>	20	20	20
<b>Return Loss - Bypass Mode, typical, dB</b>	16	16	16

## Electrical Specifications Rx (Uplink)

<b>Frequency Range, MHz</b>	<b>1710–1785</b>	<b>1920–1980</b>	<b>2500–2570</b>
<b>Bandwidth, MHz</b>	75	60	70
<b>Gain, nominal, dB</b>	12	12	12
<b>Noise Figure, typical, dB</b>	1.4	1.5	1.5
<b>Total Group Delay, typical, ns</b>	120	60	60
<b>Insertion Loss - Bypass Mode, typical, dB</b>	2.2	2	2.3

## Electrical Specifications Tx (Downlink)

<b>Frequency Range, MHz</b>	<b>1805–1880</b>	<b>2110–2170</b>	<b>2620–2690</b>
<b>Bandwidth, MHz</b>	75	60	70
<b>Insertion Loss, typical, dB</b>	0.5	0.35	0.45
<b>Total Group Delay, typical, ns</b>	50	25	30
<b>Return Loss, typical, dB</b>	20	20	20
<b>Input Power, RMS, maximum, W</b>	200	200	200
<b>Input Power, PEP, maximum, W</b>	2000	2000	2000
<b>3rd Order PIM, typical, dBc</b>	-160	-160	-160
<b>3rd Order PIM Test Method</b>	Two +43 dBm carriers	Two +43 dBm carriers	Two +43 dBm carriers

## Electrical Specifications, Band Pass

<b>Frequency Range, MHz</b>	<b>698–960</b>	<b>1350–1525</b>
<b>Insertion Loss, typical, dB</b>	0.2	0.25
<b>Total Group Delay, typical, ns</b>	5	15
<b>Return Loss, typical, dB</b>	19	20
<b>Input Power, RMS, maximum, W</b>	200	200
<b>Input Power, PEP, maximum, W</b>	1000	1000

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**3rd Order PIM, typical, dBc**

-160

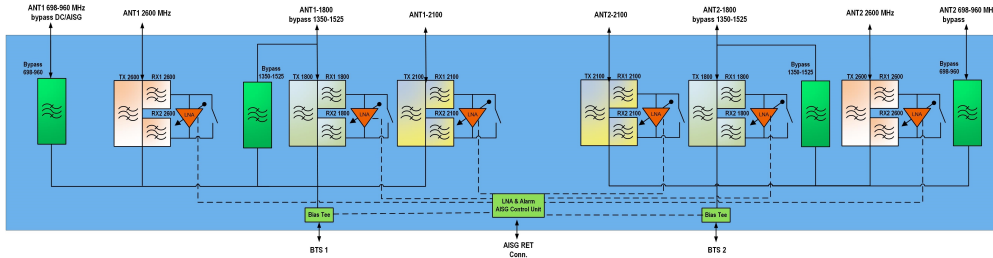
-160

**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>Environmental Test Method</b>	ETSI EN 300 019-1-4
<b>Ingress Protection Test Method</b>	IEC 60529:2001, IP67

## Packaging and Weights

<b>Included</b>	Mounting hardware
<b>Volume</b>	11.8 L
<b>Weight, net</b>	15.5 kg   34.172 lb
<b>Weight, without mounting hardware</b>	14.5 kg   31.967 lb

## \* Footnotes

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