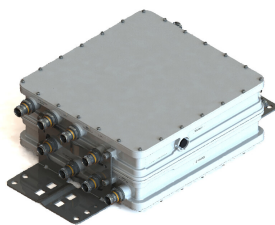


# E14R00P53



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

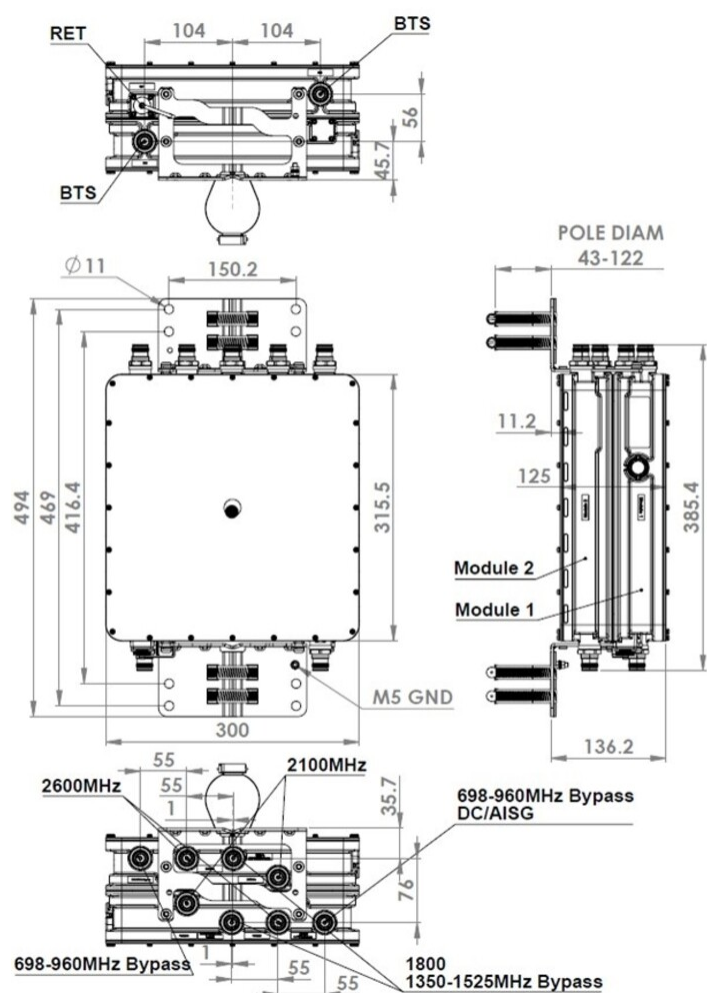
**Width** 300 mm | 11.811 in

**Depth** 125 mm | 4.921 in

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

## Outline Drawing

# E14R00P53



## 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

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

## Electrical Specifications Rx (Uplink)

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

## Electrical Specifications Tx (Downlink)

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

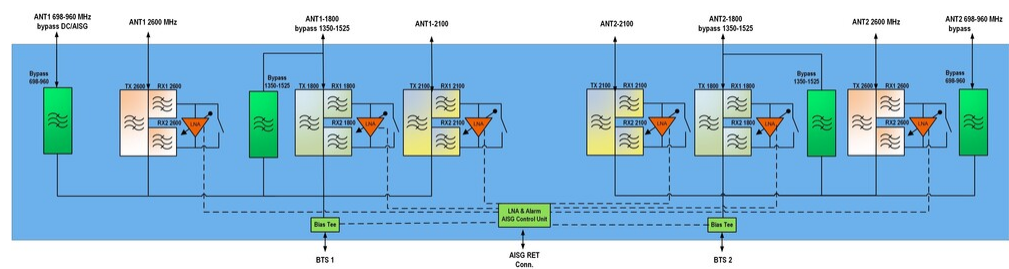
## Electrical Specifications, Band Pass

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

# E14R00P53

3rd Order PIM, typical, dBc	-160	-160
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers

## Block Diagram



## 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
Environmental Test Method	ETSI EN 300 019-1-4
Ingress Protection Test Method	IEC 60529:2001, IP67

## Packaging and Weights

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

## \* Footnotes

License Band, LNA	License Bands that have RxUplink amplification
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