# E14R00P67



Tri Band Tower Mounted Amplifier, 1800/2100/2600 MHz, 12 dB, 4 BTS & 4 ANT ports, AISG with 1 RET connector (1 device with 2 sub-units each), with 4.3-10 connectors, 700-900 & 1400 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
- 4 input ports and 4 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

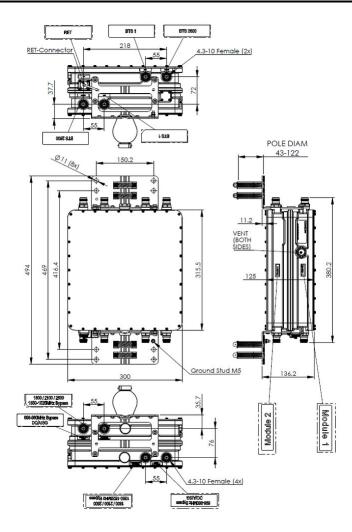
Product Type	4-BTS:4-ANT (Quadplex)
General Specifications	
Color	Gray
Modularity	2-Twin
Mounting	Pole   Wall
Mounting Pipe Hardware	Band clamps (2)
RF Connector Interface	4.3-10 Female
Dimensions	
Height	316 mm   12.441 in
Width	300 mm   11.811 in
Depth	125 mm   4.921 in
Mounting Pipe Diameter Range	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**

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	0.2
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

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#### 3rd Order PIM, typical, dBc

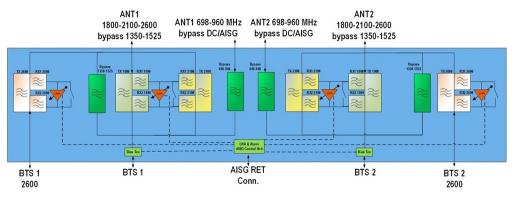
**3rd Order PIM Test Method** 

-160

Two +43 dBm carriers

-160 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
Ingress Protection Test Method	IEC 60529:2001, IP67
Packaging and Weights	

Included	Mounting hardware
Volume	11.8 L
Weight, net	15.2 kg   33.51 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

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