

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

- Designed to boost UP-Link Coverage and KPIs
- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- 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

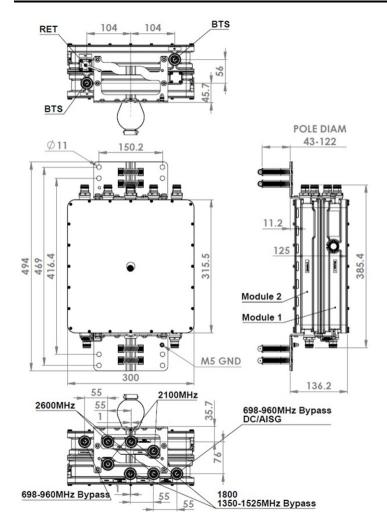
 Width
 300 mm | 11.811 in

 Depth
 125 mm | 4.921 in

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

### Outline Drawing





### **Electrical Specifications**

**License Band, LNA**DCS 1800 | EDD 800 | 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



Voltage, AISG Mode	10-30 Vdc
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### **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

-160

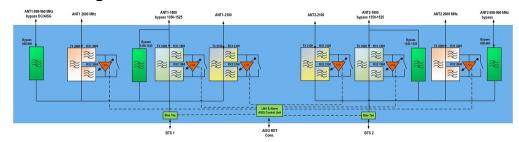
-160

**3rd Order PIM Test Method** 

Two +43 dBm carriers

Two +43 dBm carriers

#### Block Diagram



### **Environmental Specifications**

**Operating Temperature**  $-40 \,^{\circ}\text{C} \text{ to } +65 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +149 \,^{\circ}\text{F})$ 

**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** 15.4 kg | 33.951 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

