

Tower Mounted Amplifier, Twin AWS 1-4 with AISG, 4.3-10 Connectors

• New 4.3-10 connectors for improved PIM performance and size reduction

OBSOLETE

Replaced By:

TMAT19G21B68-21 E14R00P71

Tower Mounted Amplifier, Twin Diplexed PCS(B25)/AWS 1-4, 555-894 MHz bypass 4.3-10

Product Classification

Product Type 1-BTS:1-ANT (Uniplex) | Tower mounted amplifier

General Specifications

Color Gray
Modularity 2-Twin

MountingPole | WallMounting Pipe HardwareBand clamps (2)RF Connector Interface4.3-10 FemaleRF Connector Interface Body StyleLong neck

Dimensions

 Height
 161 mm | 6.339 in

 Width
 196 mm | 7.717 in

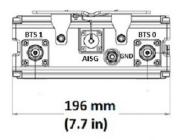
 Depth
 78 mm | 3.071 in

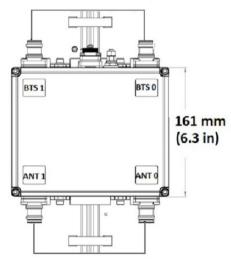
 Ground Screw Diameter
 5 mm | 0.197 in

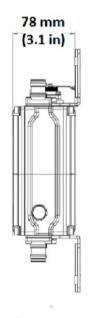
 Mounting Pipe Diameter Range
 40−160 mm

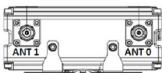


Outline Drawing









Electrical Specifications

License Band, LNA AWS 1700

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy Yes

Lightning Surge Current 20 kA

Lightning Surge Current Waveform 8/20 waveform

Operating Current at Voltage 100 mA @ 12 V

Operating Current Tolerance $\pm 20 \text{ mA}$ Voltage 7-30 Vdc

COMMSCOPE®

Voltage, CWA Mode 10–18 Vdc

Alarm Current, CWA Mode 190 mA ±10 mA

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

Electrical Specifications

Sub-module 1 | 2

Branch 1

Port Designation ANT

License Band AWS 1700, LNA

Return Loss, typical, dB 21 Return Loss - Bypass Mode, 17

typical, dB

Electrical Specifications Rx (Uplink)

Frequency Range, MHz 1695-1780

Gain, nominal, dB 12
Gain Tolerance, dB ±1

Noise Figure, typical, dB 1.2

Total Group Delay, maximum,

ns

Output IP3, minimum, dBm 22

Insertion Loss - Bypass Mode, typical, dB 1.7

35

Electrical Specifications Tx (Downlink)

Frequency Range, MHz 2110-2200

Insertion Loss, typical, dB 0.2

Total Group Delay, maximum, 10

ns

Return Loss, typical, dB 21 Input Power, RMS, maximum, 200

w

COMMSCOPE®

Input Power, PEP, maximum,

2000

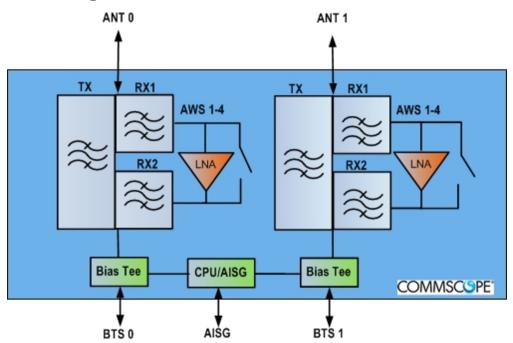
W

Electrical Specifications, Band Pass

Higher Order PIM, typical, dBc -161

Higher Order PIM Test Method 2 x 20 W CW tones

Block Diagram



Material Specifications

Finish Painted

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

IncludedMounting hardwareWeight, without mounting hardware3.4 kg | 7.496 lb

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Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant



* Footnotes

License Band, LNA License Bands that have RxUplink amplification

