

TMA-T-21-A-V | E15S07P25



Tower Mounted Amplifier, Twin AWS with AISG and Variable Gain

OBSOLETE

Replaced By:

TMAT1921B68-21-43
E14R00P09

Tower Mounted Amplifier, Twin Diplexed PCS/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

Mounting Pole | Wall

Mounting Pipe Hardware Band clamps (2)

RF Connector Interface 7-16 DIN Female

RF Connector Interface Body Style Long neck

Dimensions

Height 160 mm | 6.299 in

Width 196 mm | 7.717 in

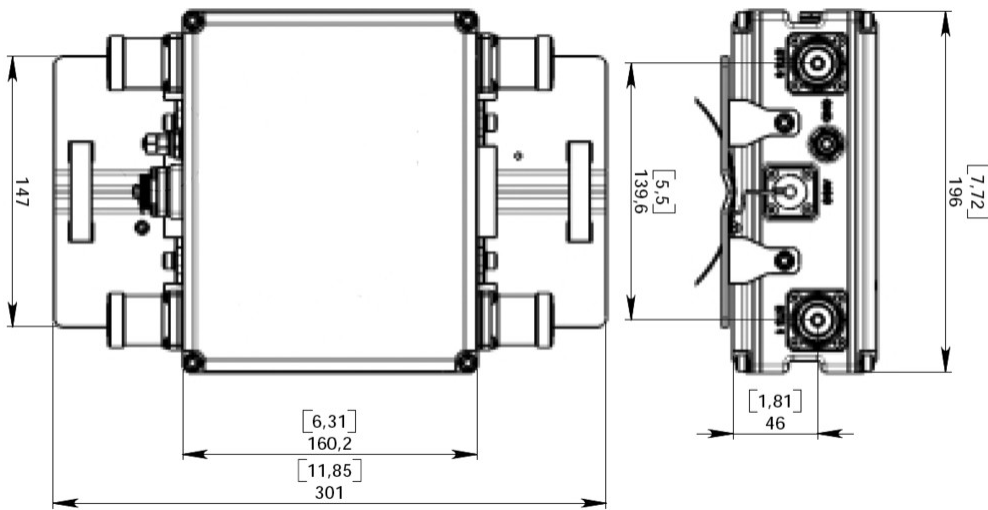
Depth 78 mm | 3.071 in

Ground Screw Diameter 6 mm | 0.236 in

Mounting Pipe Diameter Range 40–160 mm

Outline Drawing

TMA-T-21-A-V | E15S07P25



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	±20 mA
Voltage	7–30 Vdc
Voltage, CWA Mode	10–18 Vdc
Alarm Current, CWA Mode	180–200 mA @ 10–18 V

Electrical Specifications, AISG

AISG Carrier	2.176 MHz ± 100 ppm
AISG Connector	8-pin DIN Female
AISG Connector Standard	IEC 60130-9
Default Protocol	AISG 2.0
Protocol	AISG 2.0
Voltage, AISG Mode	10–30 Vdc

Electrical Specifications

TMA-T-21-A-V | E15S07P25

Sub-module	1 2
Branch	1
Port Designation	ANT
AISG 2.0 Device Subunit	E15S07P25 1
License Band	AWS 1700, LNA
Return Loss, typical, dB	22
Return Loss at 8 dB, typical, dB	19
Return Loss at 4 dB, typical, dB	19
Return Loss - Bypass Mode, typical, dB	18
TX Band Rejection, minimum, dB	60

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	1710–1755
Bandwidth, MHz	45
Gain, nominal, dB	12
Gain Tolerance, dB	±1.0
Gain Adjustment Range, dB	4-12
Gain Adjustment Range Increments, dB	1
Noise Figure at 8 dB, maximum, dB	1.8
Noise Figure at 4 dB, maximum, dB	2.7
Noise Figure, typical, dB	1.2
Noise Figure at 8 dB, typical, dB	1.5
Noise Figure at 4 dB, typical, dB	2.4
Total Group Delay, maximum, ns	60
Output IP3, minimum, dBm	22
Insertion Loss - Bypass Mode, typical, dB	1.5

Electrical Specifications Tx (Downlink)

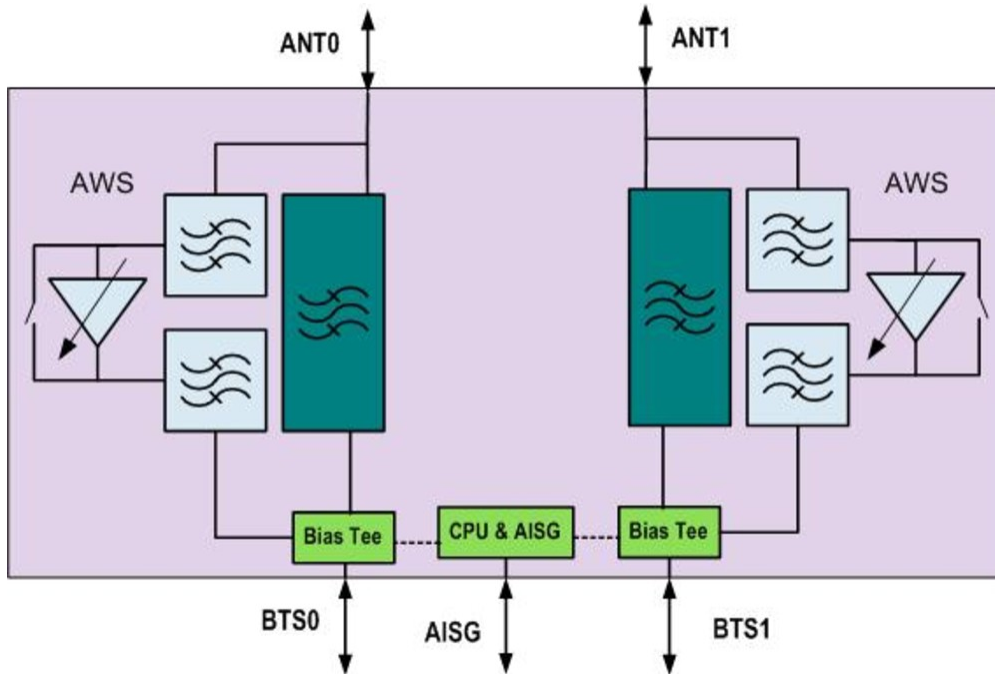
TMA-T-21-A-V | E15S07P25

Frequency Range, MHz	2110–2155
Bandwidth, MHz	45
Insertion Loss, maximum, dB	0.3
Total Group Delay, maximum, ns	10
Input Power, RMS, maximum, W	200

Electrical Specifications, Band Pass

Higher Order PIM, typical, dBc	-153
Higher Order PIM Test Method	1 x 20 W AWS CW tone 1 x 20 W PCS CW tone

Block Diagram



Material Specifications

Finish Painted

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

Weight, net 3 kg | 6.614 lb

Regulatory Compliance/Certifications

Agency
ISO 9001:2015

Classification
Designed, manufactured and/or distributed under this quality management system



* Footnotes

License Band, LNA License Bands that have RxUplink amplification