

TMA-T-19-A-V | E15S09P90



Tower Mounted Amplifier, Twin Dual Duplex PCS, with variable gain and AISG

OBSOLETE

Replaced By:

TMAT1921B68-21-43
E14R00P09

Tower Mounted Amplifier, Twin Duplexed 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 260 mm | 10.236 in

Width 170 mm | 6.693 in

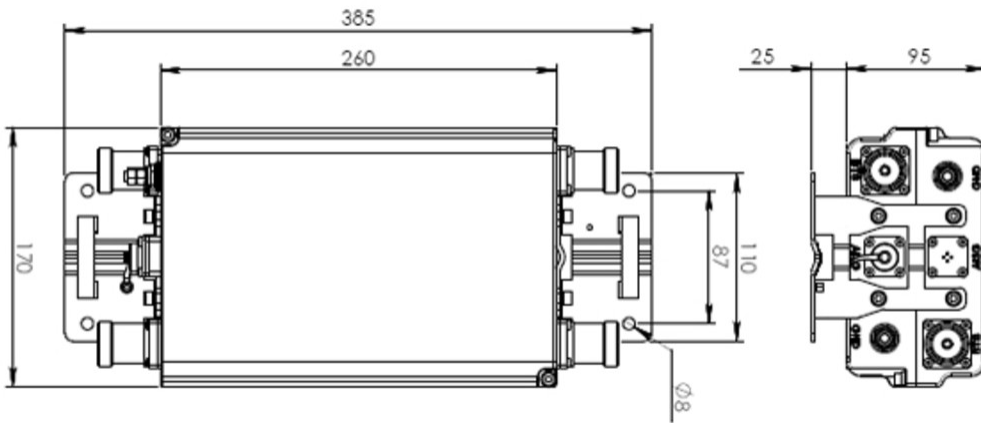
Depth 94 mm | 3.701 in

Ground Screw Diameter 6 mm | 0.236 in

Mounting Pipe Diameter Range 40-160 mm

Outline Drawing

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Electrical Specifications

License Band, LNA PCS 1900

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	135 mA @ 12 V
Operating Current Tolerance	±15 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

Sub-module	1 2
Branch	1

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Port Designation	ANT
AISG 2.0 Device Subunit	E15S09P90 1
License Band	PCS 1900, LNA
Return Loss, typical, dB	22
Return Loss at 8 dB, typical, dB	20
Return Loss at 4 dB, typical, dB	18
Return Loss - Bypass Mode, typical, dB	14

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	1850–1910
Bandwidth, MHz	60
Gain, nominal, dB	12
Gain Tolerance, dB	±1.0
Gain Adjustment Range, dB	4-12
Gain Adjustment Range Increments, dB	1
Noise Figure, typical, dB	1.2
Noise Figure at 8 dB, typical, dB	1.7
Noise Figure at 4 dB, typical, dB	2.5
Group Delay Variation, maximum, ns	50
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	150
Insertion Loss - Bypass Mode, typical, dB	2.1

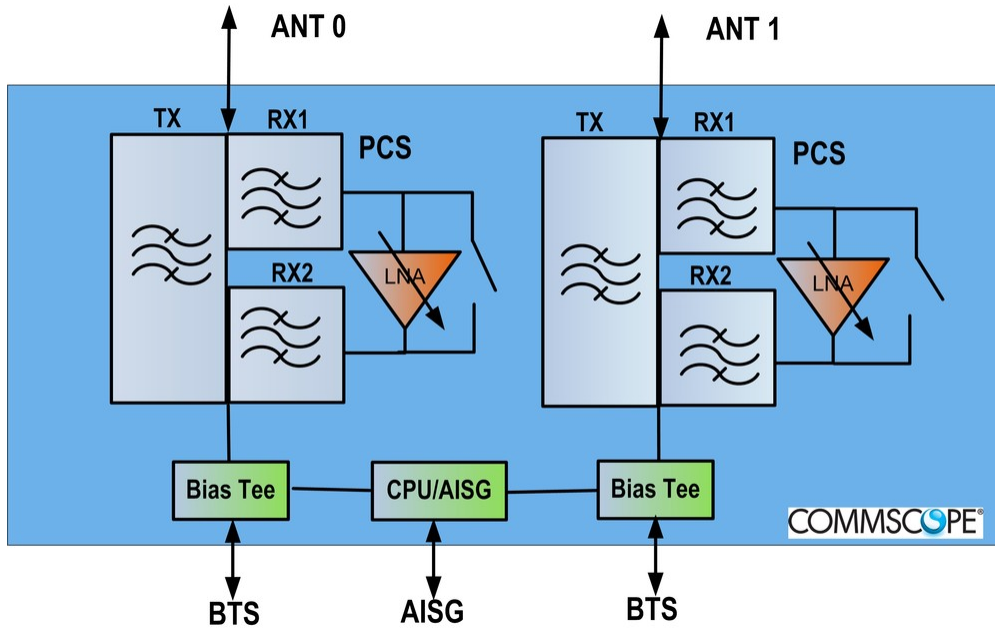
Electrical Specifications Tx (Downlink)

Frequency Range, MHz	1930–1990
Bandwidth, MHz	60
Insertion Loss, maximum, dB	0.7
Group Delay Variation, maximum, ns	15

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Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	50
Input Power, RMS, maximum, W	500
Input Power, PEP, maximum, W	5000
3rd Order PIM, typical, dBc	-153
3rd Order PIM Test Method	2 x 20 W CW tones

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

Volume 4.1 L

Weight, net 6.6 kg | 14.55 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