

ETW190VS12UB | E15S09P94



Tower Mounted Amplifier, Twin PCS with AISG

OBSOLETE

Replaced By:

TMAT19-11-43
E14R00P13

Tower Mounted Amplifier, Twin PCS with AISG, 4.3-10 Connectors

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

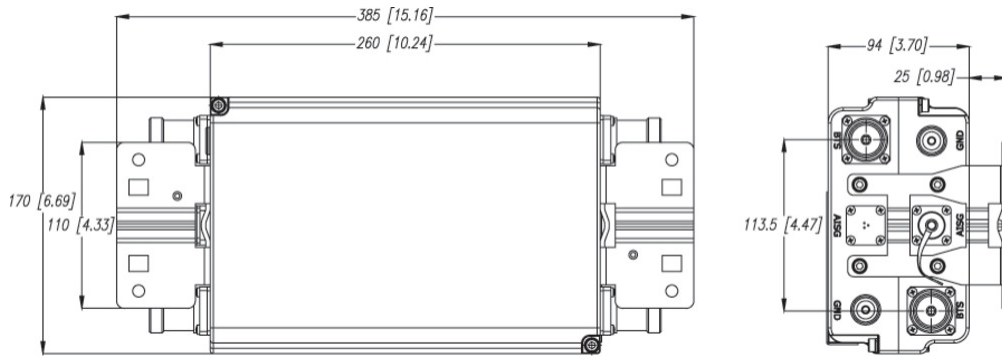
Depth 94 mm | 3.701 in

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
Port Designation	ANT
AISG 2.0 Device Subunit	E15S09P94 1/2

License Band PCS 1900, LNA

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	1850–1910
Bandwidth, MHz	60
Gain, nominal, dB	12
Gain Tolerance, dB	±1.0
Noise Figure, typical, dB	1.3
Group Delay Variation, maximum, ns	50
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	150
Output IP3, minimum, dBm	26
Return Loss, minimum, dB	18
Insertion Loss - Bypass Mode, typical, dB	1.7

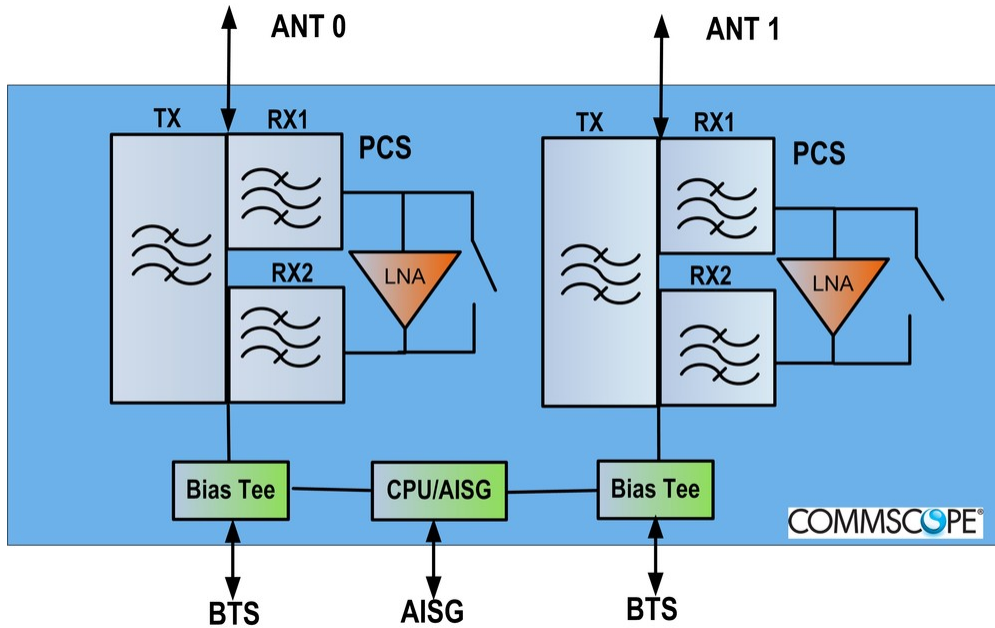
Electrical Specifications Tx (Downlink)

Frequency Range, MHz	1930–1990
Bandwidth, MHz	60
Insertion Loss, maximum, dB	0.7
Insertion Loss, typical, dB	0.3
Group Delay Variation, maximum, ns	15
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	50
Return Loss, minimum, dB	18
Input Power, RMS, maximum, W	500
Input Power, PEP, maximum, W	5000
3rd Order PIM, typical, dBc	-150
3rd Order PIM Test Method	2 x 20 W CW tones
VSWR Alarm Threshold, dB	9.54
VSWR Alarm Threshold	±2

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Tolerance, dB

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