

E15Z09P94



Tower Mounted Amplifier, Twin Duplicated AWS/700–750 Bypass with AISG

OBSOLETE

This product was discontinued on: July 27, 2021

Replaced By:

TMAT1921B68-21-43 Tower Mounted Amplifier, Twin Duplicated PCS/AWS 1–4, 555–894 MHz bypass 4.3-10
E14R00P09

Product Classification

Product Type 1-BTS:2-ANT (Diplex) | Tower mounted amplifier

General Specifications

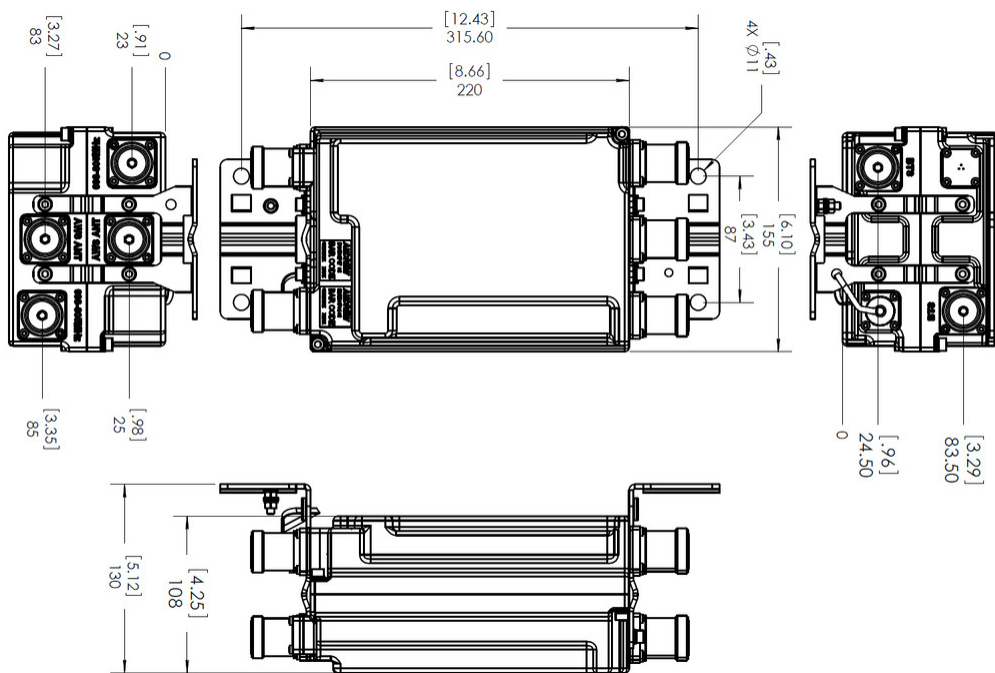
Color Gray
Modularity 2-Twin
Mounting Pole | Wall
Mounting Pipe Hardware Band clamps (2)
RF Connector Interface 7-16 DIN Female
RF Connector Interface Body Style Long neck

Dimensions

Height 220 mm | 8.661 in
Width 155 mm | 6.102 in
Depth 108 mm | 4.252 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, Band Pass APT 700 | LMR 750 | USA 700 | USA 750

License Band, LNA AWS 1700

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy	No
Lightning Surge Current	5 kA
Lightning Surge Current Waveform	8/20 waveform
Operating Current at Voltage	135 mA @ 12 V 75 mA @ 24 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 \pm 100 ppm
AISG Connector	8-pin DIN Female
AISG Connector Standard	IEC 60130-9
Default Protocol	AISG 2.0

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Protocol	AISG 1.1 AISG 2.0
Voltage, AISG Mode	10–30 Vdc

Electrical Specifications

Sub-module	1 2	1 2
Branch	1	2
Port Designation	698–805	AWS ANT
License Band	APT 700, Band Pass LMR 750, Band Pass USA 700, Band Pass USA 750, Band Pass	AWS 1700, LNA

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	1710–1770
Bandwidth, MHz	60
Gain, nominal, dB	13
Gain Tolerance, dB	±1.0
Noise Figure, typical, dB	1.3
Output IP3, minimum, dBm	25
Return Loss, minimum, dB	18
Insertion Loss - Bypass Mode, typical, dB	1.5

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	2110–2170
Bandwidth, MHz	60
Insertion Loss, typical, dB	0.3
Return Loss, minimum, dB	20
Input Power, RMS, maximum, W	500
Input Power, PEP, maximum, W	5000

Electrical Specifications, Band Pass

Frequency Range, MHz	698–805
Insertion Loss, maximum, dB	0.3
Return Loss, minimum, dB	22
Input Power, RMS, maximum, W	500
Input Power, PEP, maximum, W	5000
3rd Order PIM, typical, dBc	-153

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3rd Order PIM Test Method

2 x 20 W CW tones

Higher Order PIM, typical, dBc

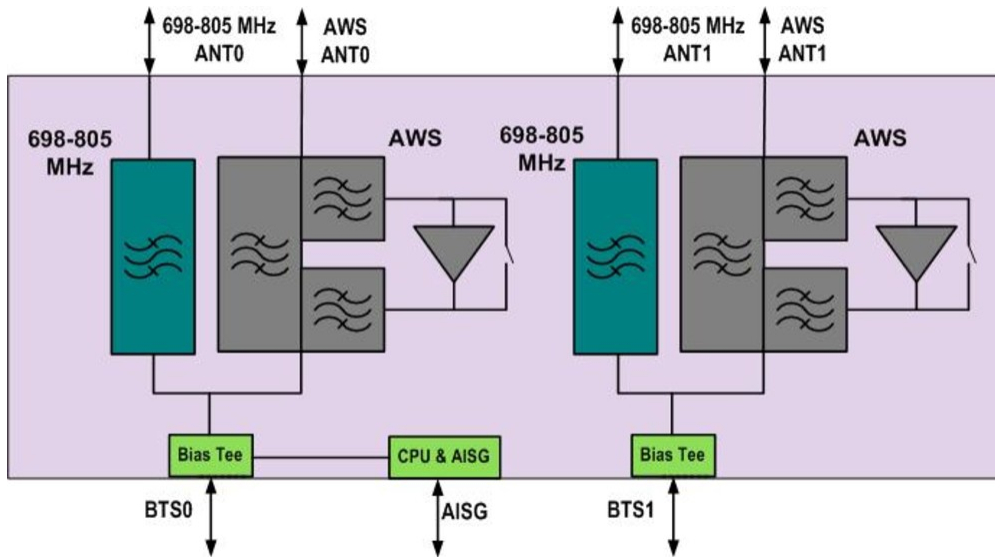
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Higher Order PIM Test Method

1 x 20 W AWS CW tone
1 x 20 W PCS CW tone

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Block Diagram



Material Specifications

Finish Painted

Mechanical Specifications

Wind Loading @ Velocity, maximum 33.0 N @ 115 km/h (7.4 lbf @ 115 km/h)

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 5.4 kg | 11.905 lb

Regulatory Compliance/Certifications

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



* Footnotes

License Band, Band Pass License Bands that are to be passed through with no amplification

License Band, LNA License Bands that have RxUplink amplification