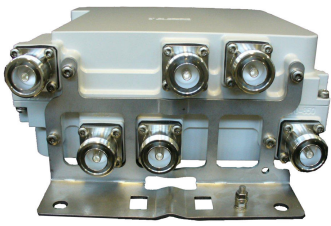


TMAT1921XB68-31A | E15Z01P34



Tower Mounted Amplifier, Twin Triplex BTS Port, Dual Band PCS/AWS 1–4, 555–894 MHz Bypass with AISG

OBSOLETE

Product Classification

Product Type 1-BTS:3-ANT (Triplex) | 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 237 mm | 9.331 in

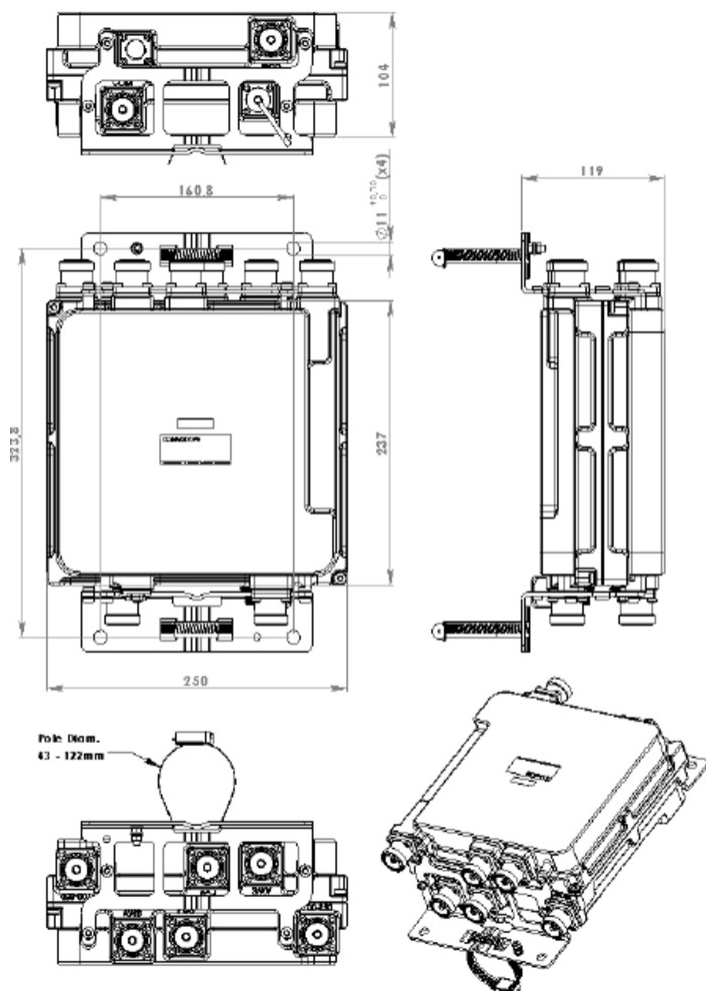
Width 250 mm | 9.843 in

Depth 104 mm | 4.094 in

Mounting Pipe Diameter Range 42.6–122 mm

Outline Drawing

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Electrical Specifications

License Band, Band Pass APT 700 | CEL 850 | LMR 750 | LMR 800 | USA 700 | USA 750

License Band, LNA AWS 1700 | PCS 1900

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy	Yes
Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform
Operating Current at Voltage	240 mA @ 12 V
Operating Current Tolerance	±20 mA
Voltage	7–30 Vdc
Voltage, CWA Mode	10–18 Vdc

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Alarm Current, CWA Mode 30–170 mA

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 1.1 | AISG 2.0

Voltage, AISG Mode 10–30 Vdc

Electrical Specifications

Sub-module	1 2	1 2	1 2
Branch	1	2	3
Port Designation	ANT 555-894	ANT AWS	ANT PCS
AISG 2.0 Device Subunit		E25A01P04 2/4	E25A01P04 1/3
License Band	APT 700, Band Pass CEL 850, Band Pass LMR 750, Band Pass LMR 800, Band Pass USA 700, Band Pass USA 750, Band Pass	AWS 1700, LNA	PCS 1900, LNA
Return Loss, typical, dB		22	22
Return Loss - Bypass Mode, typical, dB		16	16

Electrical Specifications Rx (Uplink)

	1695–1780	1850–1910
Frequency Range, MHz		
Bandwidth, MHz	85	60
Gain, nominal, dB	12	12
Gain Tolerance, dB	+/-1.2	+/-1.2
Noise Figure, typical, dB	1.3	1.3
Total Group Delay, maximum, ns	80	150
Insertion Loss - Bypass Mode, typical, dB	1.7	2.2

Electrical Specifications Tx (Downlink)

	2110–2200	1930–1990
Frequency Range, MHz		
Bandwidth, MHz	90	60
Insertion Loss, maximum, dB	0.3	0.6

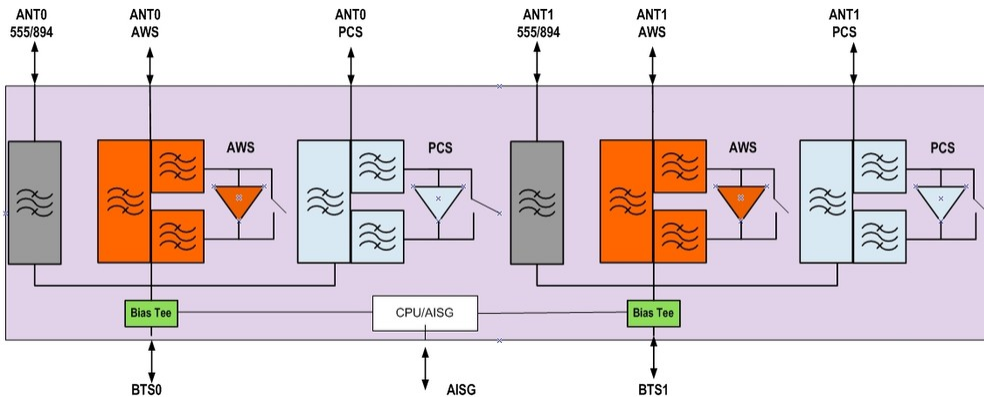
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Insertion Loss, typical, dB	0.2	0.45
Total Group Delay, maximum, ns	30	50
Return Loss, typical, dB	22	22
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	3000	3000
3rd Order PIM, typical, dBc	-153	-153
3rd Order PIM Test Method	1 x 20 W AWS CW tone 1 x 20 W PCS CW tone	2 x 20 W CW tones

Electrical Specifications, Band Pass

Frequency Range, MHz	555–894
Insertion Loss, maximum, dB	0.2
Insertion Loss, typical, dB	0.1
Total Group Delay, maximum, ns	8
Return Loss, typical, dB	22
Isolation, minimum, dB	60
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum, W	3000
3rd Order PIM, typical, dBc	-153
3rd Order PIM Test Method	2 x 20 W CW tones

Block Diagram



Material Specifications

Finish Painted

Mechanical Specifications

Wind Loading @ Velocity, maximum 72.0 N @ 115 km/h (16.2 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 8.5 kg | 18.739 lb

* 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