

TMAS7LABC21-21A | E15Z01P31

Tower Mounted Amplifier, Diplexed BTS Port, Dual Band Lower ABC 700 MHz/AWS, with AISG

This product will be discontinued on: March 30, 2024

Product Classification

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

General Specifications

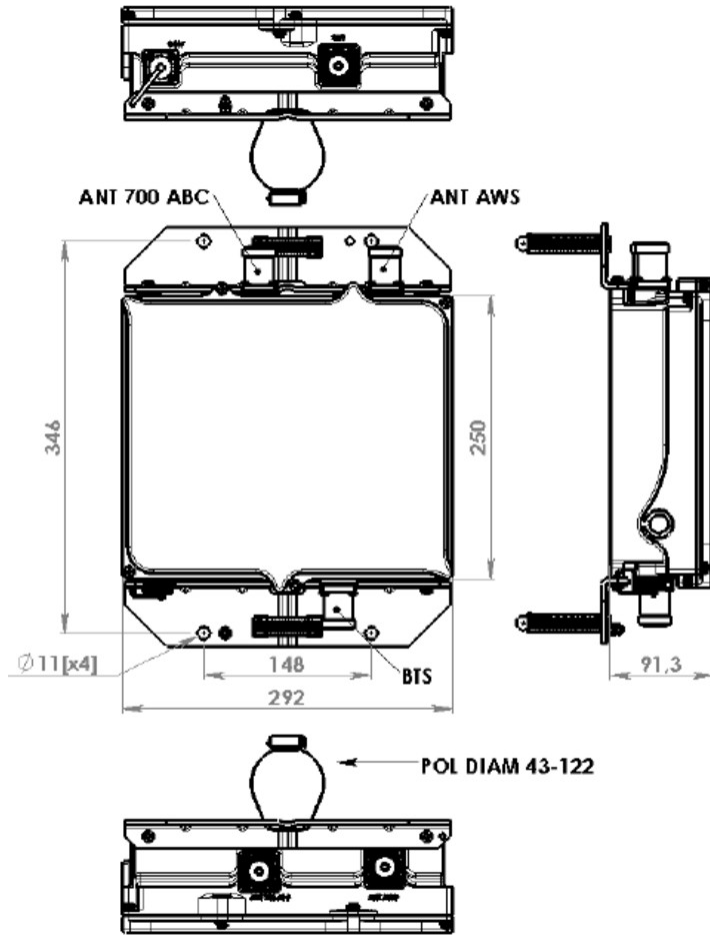
Color Gray
Modularity 1-Single
Mounting Pole | Wall
Mounting Pipe Hardware Band clamps (2)
RF Connector Interface 7-16 DIN Female
RF Connector Interface Body Style Long neck

Dimensions

Height 250 mm | 9.843 in
Width 292 mm | 11.496 in
Depth 91.3 mm | 3.594 in
Mounting Pipe Diameter Range 42.6–122 mm

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Outline Drawing



Electrical Specifications

License Band, LNA AWS 1700 | USA 700

Electrical Specifications, dc Power/Alarm

Operating Current at Voltage	210 mA @ 12 Vdc
Operating Current Tolerance	±20 mA
Voltage	7–30 Vdc
Voltage, CWA Mode	10–18 Vdc
Alarm Current, CWA Mode	30–170 mA

Electrical Specifications, AISG

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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	1
Branch	1	2
Port Designation	ANT 700 ABC	ANT AWS
License Band	USA 700, LNA	AWS 1700, LNA
Return Loss, typical, dB	20	20
Return Loss - Bypass Mode, typical, dB	17	17
TX Band Rejection, minimum, dB	60	80

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	698–716	1710–1755
Bandwidth, MHz	18	45
Gain, nominal, dB	12	12
Gain Tolerance, dB	±1	+1.3/-1.0
Noise Figure, typical, dB	1.7	1.5
Total Group Delay, maximum, ns	200	50
Insertion Loss - Bypass Mode, typical, dB	1.7	1.7

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	728–746	2110–2155
Bandwidth, MHz	18	45
Insertion Loss, typical, dB	0.3	0.15
Total Group Delay, maximum, ns	60	20
Return Loss, minimum, dB	18	18
Input Power, RMS, maximum, W	300	300
Input Power, PEP, maximum, W	3000	3000
3rd Order PIM, typical, dBc	-153	
3rd Order PIM Test Method	2 x 20 W CW tones	

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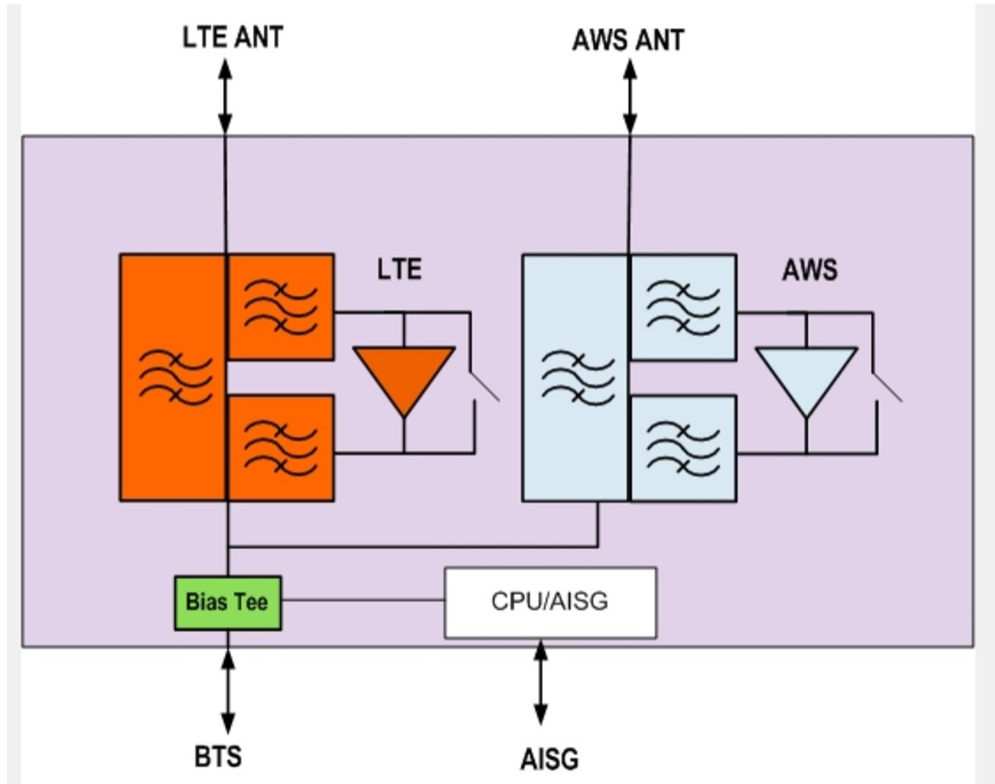
Higher Order PIM, typical, dBc

-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 6.5 kg | 14.33 lb

* Footnotes

License Band, LNA License Bands that have RxUplink amplification