

TMAT21X-11A | E15S07P29



Tower Mounted Amplifier, Twin AWS 1-4 with AISG

OBSOLETE

This product was discontinued on: June 7, 2019

Replaced By:

TMAT21-11-43
E14R00P14

Tower Mounted Amplifier, Twin AWS 1-4 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 160 mm | 6.299 in

Width 196 mm | 7.717 in

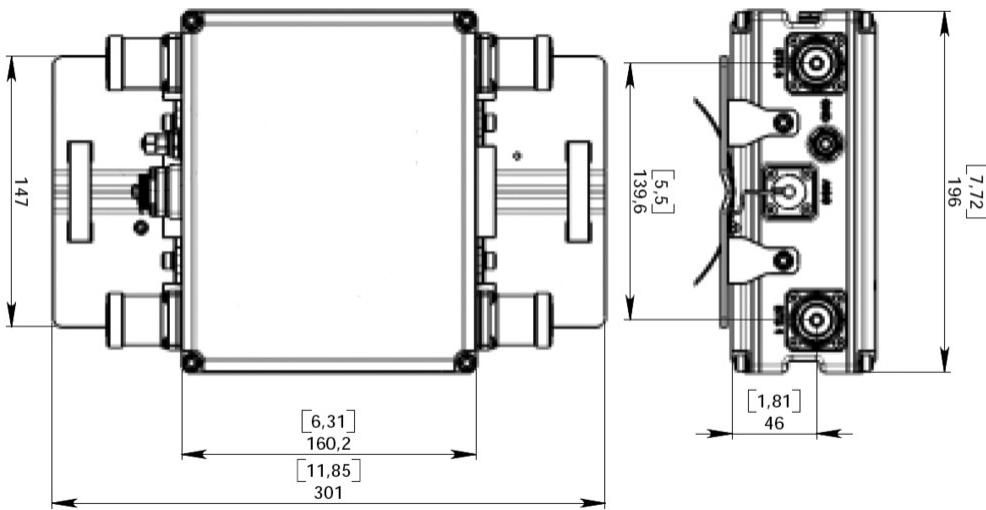
Depth 78 mm | 3.071 in

Ground Screw Diameter 6 mm | 0.236 in

Mounting Pipe Diameter Range 40–160 mm

Outline Drawing

TMAT21X-11A | E15S07P29



Electrical Specifications

License Band, LNA AWS 1700

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	100 mA @ 12 V
Operating Current Tolerance	±20 mA
Voltage	7–30 Vdc
Voltage, CWA Mode	10–18 Vdc
Alarm Current, CWA Mode	190 mA ±10 mA

Electrical Specifications, AISG

AISG Connector	8-pin DIN Female
AISG Connector Standard	IEC 60130-9
Protocol	AISG 2.0
Voltage, AISG Mode	10–30 Vdc

Electrical Specifications

Sub-module	1 2
Branch	1

TMAT21X-11A | E15S07P29

Port Designation	ANT
AISG 2.0 Device Subunit	E15S07P29 1/2
License Band	AWS 1700, LNA
Return Loss, typical, dB	20
Return Loss - Bypass Mode, typical, dB	17

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	1695–1780
Gain, nominal, dB	12
Gain Tolerance, dB	±1
Noise Figure, maximum, dB	1.3
Noise Figure, typical, dB	1.1
Total Group Delay, maximum, ns	40
Output IP3, minimum, dBm	22
Insertion Loss - Bypass Mode, typical, dB	1.7

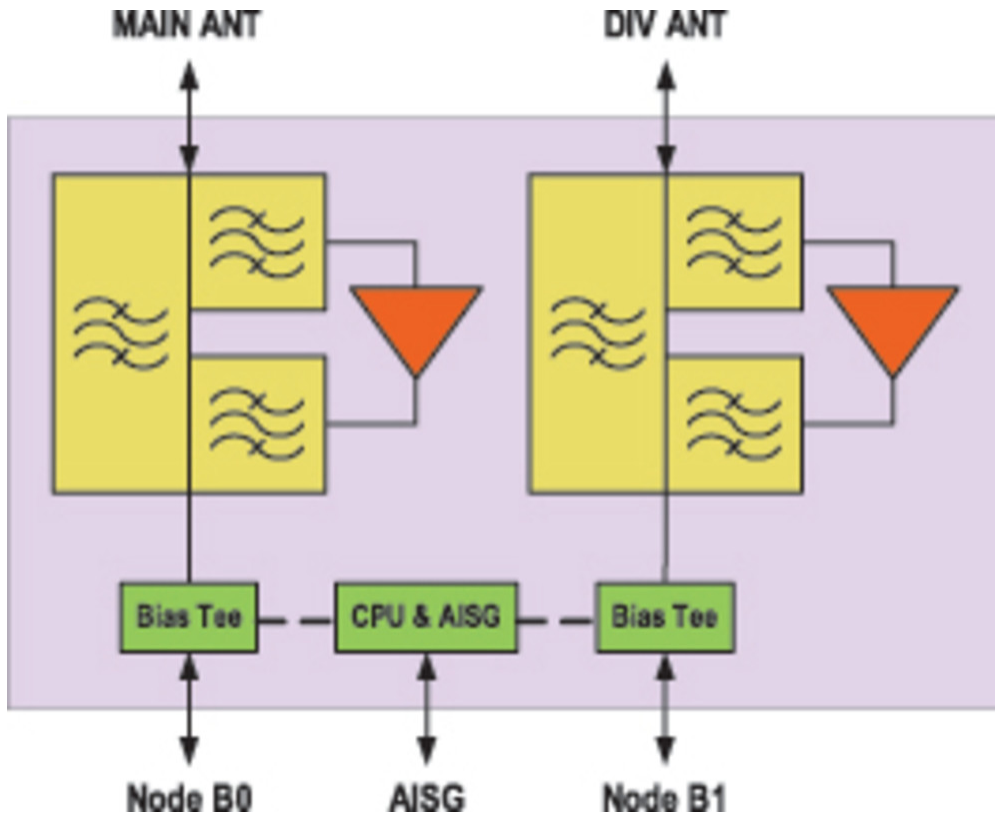
Electrical Specifications Tx (Downlink)

Frequency Range, MHz	2110–2200
Insertion Loss, maximum, dB	0.25
Total Group Delay, maximum, ns	10
Return Loss, typical, dB	20
Input Power, RMS, maximum, W	200
VSWR Alarm Threshold, dB	9.54
VSWR Alarm Threshold Tolerance, dB	±2

Electrical Specifications, Band Pass

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, without mounting hardware 3.7 kg | 8.157 lb

Regulatory Compliance/Certifications

Agency **Classification**

TMAT21X-11A | E15S07P29

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



* Footnotes

License Band, LNA

License Bands that have RxUplink amplification