

TMAT7L1921X-21A | E15Z01P65



Twin TMA PCS/AWS/700 ABC

OBSOLETE

Replaced By:

TMAT19G21B68-21
E14R00P71

Tower Mounted Amplifier, Twin Duplicated PCS(B25)/AWS 1-4, 555-894 MHz bypass 4.3-10

Product Classification

Product Type Tower mounted amplifier

General Specifications

Color Gray

RF Connector Interface 7-16 DIN Female

RF Connector Interface Body Style Long neck

Dimensions

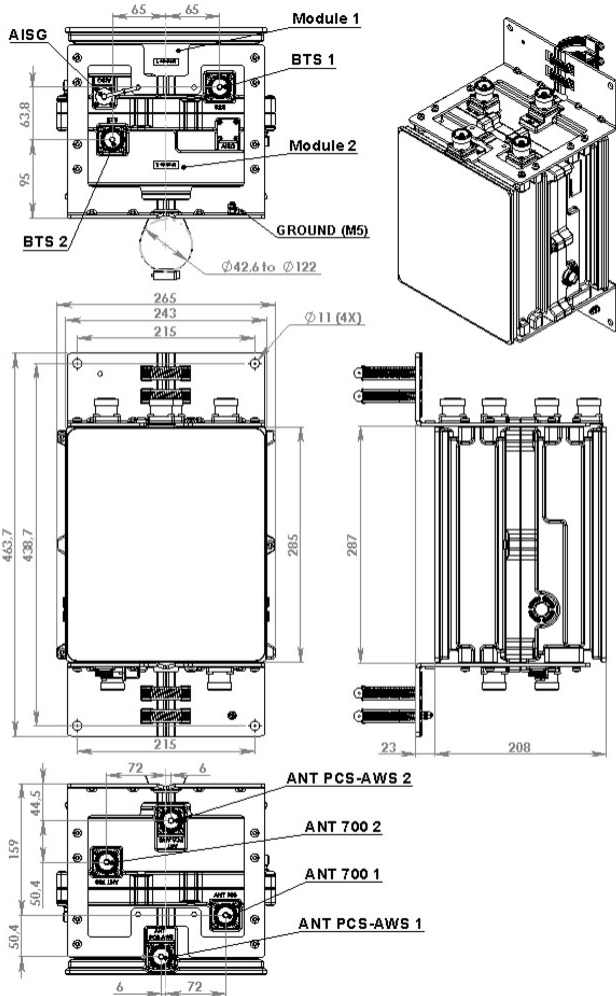
Height 285 mm | 11.22 in

Width 265 mm | 10.433 in

Depth 208 mm | 8.189 in

TMAT7L1921X-21A | E15Z01P65

Outline Drawing



Electrical Specifications

License Band, LNA AWS 1700 | PCS 1900 | USA 700 | USA 750

Electrical Specifications, dc Power/Alarm

Lightning Surge Current 10 kA

Lightning Surge Current Waveform 8/20 waveform

Electrical Specifications, AISG

AISG Carrier 2.176 MHz \pm 100 ppm

AISG Connector Standard IEC 60130-9

Voltage, AISG Mode 10–30 Vdc

Electrical Specifications

Sub-module	1 2	1 2	1 2
Branch	1	2	3
Port Designation	ANT	ANT	ANT
AISG 2.0 Device Subunit	E15Z01P65 1/4	E15Z01P65 2/5	E15Z01P65 3/6
License Band	USA 700, LNA	AWS 1700, LNA	PCS 1900, LNA
Return Loss, typical, dB	20	20	20
Return Loss - Bypass Mode, typical, dB	18	16	20

Electrical Specifications Rx (Uplink)

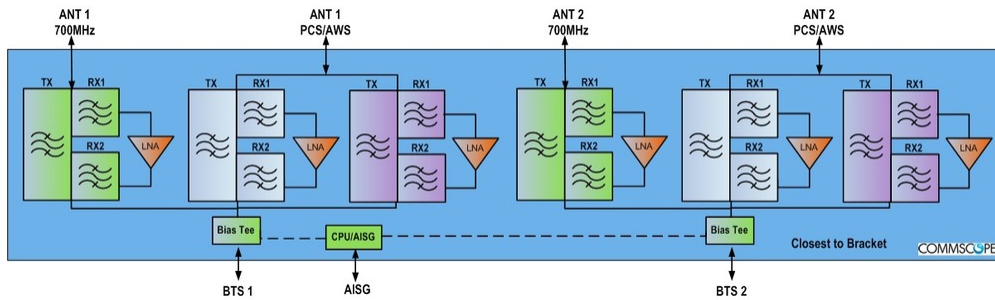
Frequency Range, MHz	698–716	1695–1780	1850–1910
Gain, nominal, dB	12	12	12
Noise Figure, typical, dB	1.3	1.1	1.5
Group Delay Variation, maximum, ns	80	15	70
Total Group Delay, maximum, ns	180	40	120
Insertion Loss - Bypass Mode, typical, dB	1.4	1.2	2.2

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	728–746	2110–2200	1930–1990
Insertion Loss, maximum, dB	0.45	0.25	0.6
Total Group Delay, maximum, ns	90	15	50
Input Power, RMS, maximum, W	200	200	200
Input Power, PEP, maximum, W	2000	3000	3000
3rd Order PIM, typical, dBc		-155	-155
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
Higher Order PIM, typical, dBc	-155		
Higher Order PIM Test Method	2 x 20 W CW tones		

Block Diagram

TMAT7L1921X-21A | E15Z01P65



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

Mounting Hardware Weight 2.5 kg | 5.512 lb

Weight, without mounting hardware 17.1 kg | 37.699 lb

* Footnotes

License Band, LNA License Bands that have RxUplink amplification