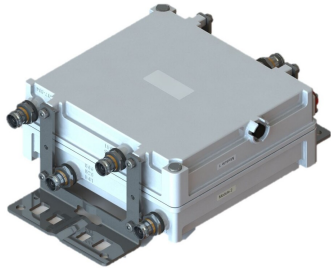


# TMAT19G21BL26-21 | E14R00P79



Tower Mounted Amplifier, Twin Triplexed PCS(B25), AWS 1–4 and B41 (bypass), with 617–894 MHz bypass, 4.3-10

- Supports 4 bands including 600MHz, AWS, PCS (B25) and 2496-2690MHz (B41)
- Bypass Band 41 on AWS-PCS port (triplexed)
- Low band 617-894 MHz bypass on a separate antenna port
- 1 device with 4 sub-units
- New 4.3-10 connectors for improved PIM performance and size reduction

## 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** 4.3-10 Female

## Dimensions

**Height** 235 mm | 9.252 in

**Width** 255 mm | 10.039 in

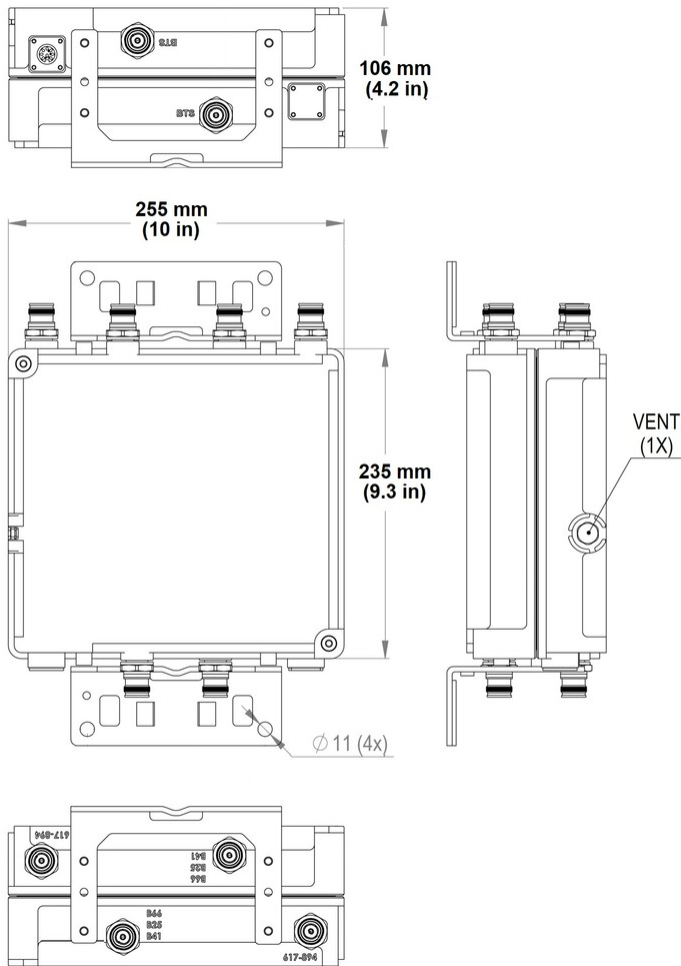
**Depth** 106 mm | 4.173 in

**Ground Screw Diameter** 5 mm | 0.197 in

**Mounting Pipe Diameter Range** 40–160 mm

## Outline Drawing

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## Electrical Specifications

### License Band, Band Pass

APT 700 | CEL 850 | EDD 800 | LMR 750 | LMR 800 | TDD 2600 | USA 700 | USA 750

### License Band, LNA

AWS 1700 | PCS 1900

## Electrical Specifications, dc Power/Alarm

### Lightning Surge Current

10 kA

### Lightning Surge Current Waveform

8/20 waveform

### Operating Current at Voltage

240 mA @ 12 V

### Voltage

7–30 Vdc

## Electrical Specifications, AISG

### AISG Carrier

2.176 MHz  $\pm$  100 ppm

<b>AISG Connector</b>	8-pin DIN Female
<b>AISG Connector Standard</b>	IEC 60130-9
<b>Default Protocol</b>	AISG 2.0
<b>Protocol</b>	AISG 1.1   AISG 2.0
<b>Voltage, AISG Mode</b>	10–30 Vdc

## Electrical Specifications

Sub-module	1   2	1   2	1   2	1   2	1   2
<b>Branch</b>	1	2	2	2	2
<b>Port Designation</b>	617-894	B66-B25-B41	B66-B25-B41	B66-B25-B41	B66-B25-B41
<b>License Band</b>	APT 700, Band Pass CEL 850, Band Pass EDD 800, Band Pass LMR 750, Band Pass LMR 800, Band Pass USA 750, Band Pass	TDD 2600, Band Pass	AWS 1700, LNA	PCS 1900, LNA	PCS 1900, LNA
<b>Return Loss, typical, dB</b>			22	22	22
<b>Return Loss - Bypass Mode, typical, dB</b>			16	16	16

## Electrical Specifications Rx (Uplink)

	1695–1780	1850–1910	1910–1915
<b>Frequency Range, MHz</b>			
<b>Bandwidth, MHz</b>	85	60	5
<b>Gain, nominal, dB</b>	12	12	12
<b>Gain Tolerance, dB</b>	±1.2	±1.2	+1.2 / -1.5
<b>Noise Figure, typical, dB</b>	1.3	1.3	1.6
<b>Total Group Delay, typical, ns</b>	60	100	100
<b>Insertion Loss - Bypass Mode, typical, dB</b>	1.7	2.2	2.5

## Electrical Specifications Tx (Downlink)

	2110–2200	1930–1990	1990–1995
<b>Frequency Range, MHz</b>			
<b>Bandwidth, MHz</b>	90	60	5
<b>Insertion Loss, typical, dB</b>	0.15	0.4	0.4
<b>Total Group Delay, typical, ns</b>	15	35	35
<b>Return Loss, typical, dB</b>	22	22	22
<b>RX Band Rejection, minimum, dB</b>	55	40	40
<b>Input Power, RMS, maximum,</b>	200	200	200

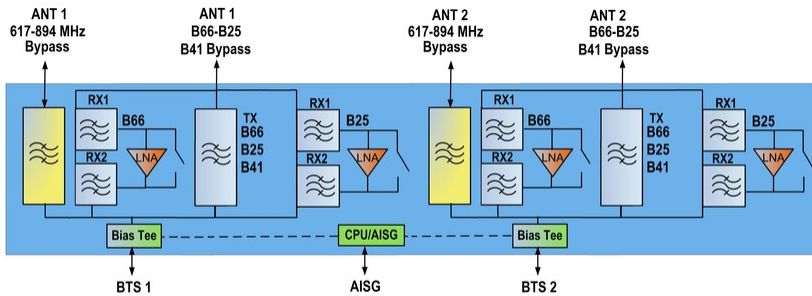
W

<b>Input Power, PEP, maximum, W</b>	2000	2000	2000
<b>3rd Order PIM, typical, dBc</b>	-156	-156	-156
<b>3rd Order PIM Test Method</b>	1 x 20 W AWS CW tone 1 x 20 W PCS CW tone	2 x 20 W CW tones	2 x 20 W CW tones

## Electrical Specifications, Band Pass

Frequency Range, MHz	617-894	2496-2690
<b>Insertion Loss, typical, dB</b>	0.2	0.1
<b>Total Group Delay, typical, ns</b>	4	4
<b>Return Loss, typical, dB</b>	22	22
<b>Isolation, minimum, dB</b>	50	40
<b>Input Power, RMS, maximum, W</b>	200	200
<b>Input Power, PEP, maximum, W</b>	2000	2000
<b>3rd Order PIM, typical, dBc</b>	-156	-156
<b>3rd Order PIM Test Method</b>	2 x 20 W CW tones	2 x 20 W CW tones

## 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

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**Ingress Protection Test Method** IEC 60529:2001, IP67

## Packaging and Weights

**Included** Mounting hardware

**Mounting Hardware Weight** 0.7 kg | 1.543 lb

**Weight, without mounting hardware** 7.65 kg | 16.865 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Above maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



## \* 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