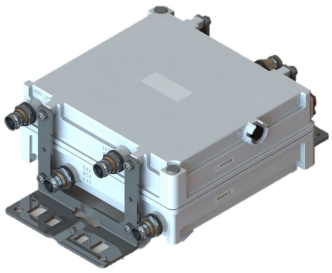
TMAT19G21BL26-21 | E14R00P79



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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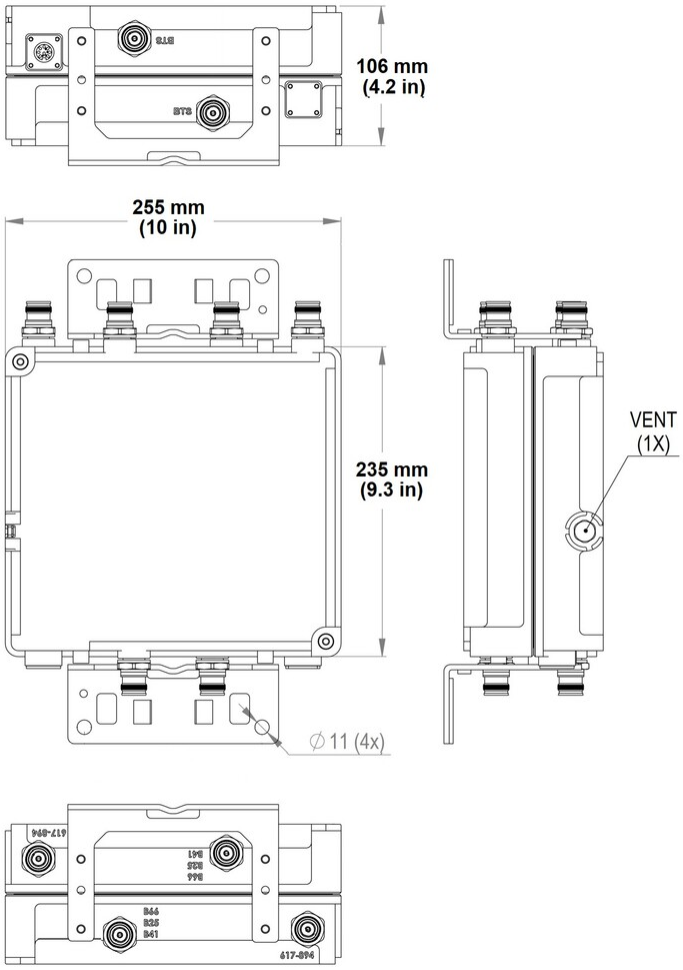


Electrical Specifications

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 ± 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**	**1 | 2**	**1 | 2**
Branch	1	2	2	2	2
Port Designation	617-894	B66-B25-B41	B66-B25-B41	B66-B25-B41	B66-B25-B41
License Band	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
Return Loss, typical, dB			22	22	22
Return Loss - Bypass Mode, typical, dB			16	16	16

Electrical Specifications Rx (Uplink)

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

Electrical Specifications Tx (Downlink)

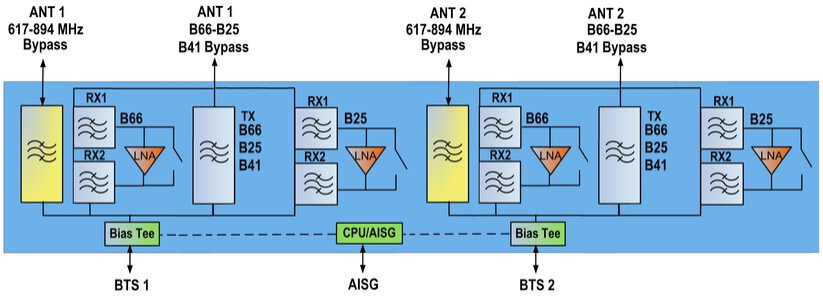
Frequency Range, MHz	**2110–2200**	**1930–1990**	**1990–1995**
Bandwidth, MHz	90	60	5
Insertion Loss, typical, dB	0.15	0.4	0.4
Total Group Delay, typical, ns	15	35	35
Return Loss, typical, dB	22	22	22
RX Band Rejection, minimum, dB	55	40	40
Input Power, RMS, maximum,	200	200	200

W			
Input Power, PEP, maximum, W	2000	2000	2000
3rd Order PIM, typical, dBc	-156	-156	-156
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	2 x 20 W CW tones

Electrical Specifications, Band Pass

Frequency Range, MHz	**617–894**	**2496–2690**
Insertion Loss, typical, dB	0.2	0.1
Total Group Delay, typical, ns	4	4
Return Loss, typical, dB	22	22
Isolation, minimum, dB	50	40
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	2000	2000
3rd Order PIM, typical, dBc	-156	-156
3rd Order PIM Test Method	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

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

Agency	Classification
CHINA-ROHS	Above maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.andrew.com/ProductCompliance
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