

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

- Includes 600 MHz, Band 25 and AWS-3/4 bands
- New 4.3-10 connectors for improved PIM performance and size reduction

#### This product will be discontinued on: March 30, 2024

Replaced By:

TMAT19G21BL26-21 E14R00P79 Tower Mounted Amplifier, Twin Triplexed PCS(B25), AWS 1-4 and B41 (bypass), with 617-894 MHz bypass, 4.3-10

#### **Product Classification**

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

### General Specifications

Color Gray
Modularity 2-Twin

MountingPole | WallMounting Pipe HardwareBand clamps (2)RF Connector Interface4.3-10 Female

#### **Dimensions**

 Height
 231.5 mm | 9.114 in

 Width
 220.5 mm | 8.681 in

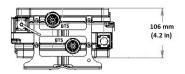
 Depth
 106 mm | 4.173 in

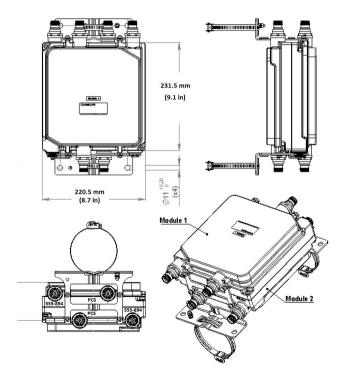
 Ground Screw Diameter
 5 mm | 0.197 in

 Mounting Pipe Diameter Range
 40–160 mm



#### Outline Drawing





### **Electrical Specifications**

License Band, Band Pass APT 700 | CEL 850 | EDD 800 | LMR 750 | LMR 800 | USA 700 | USA 750

License Band, LNA AWS 1700 | PCS 1900

#### Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy Yes

**Lightning Surge Current** 10 kA

Lightning Surge Current Waveform 8/20 waveform

Operating Current at Voltage 240 mA @ 12 V

Voltage 7–30 Vdc

**COMMSCOPE®** 

10-18 Vdc Voltage, CWA Mode

Alarm Current, CWA Mode 30-170 mA @ 10-18 V

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
Branch	1	2	2	2
Port Designation	555-894	AWS-PCS	AWS-PCS	AWS-PCS

**AISG 2.0 Device Subunit** E14R00P09 2/4 E14R00P09 1/3 E14R00P09 1/3

**License Band** AWS 1700, LNA PCS 1900, LNA PCS 1900, LNA APT 700, Band Pass

CEL 850, Band Pass EDD 800, Band Pass LMR 750, Band Pass LMR 800, Band Pass USA 750, Band Pass

22 22 Return Loss, typical, dB 22 16 16 16

Return Loss - Bypass Mode, typical,

60 55 TX Band Rejection, minimum, dB 55

#### 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
Noise Figure, typical, dB	1.3	1.3	1.6
Total Group Delay, typical, ns	60	100	110
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

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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, W	200	200	200
Input Power, PEP, maximum, W	3000	3000	3000
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

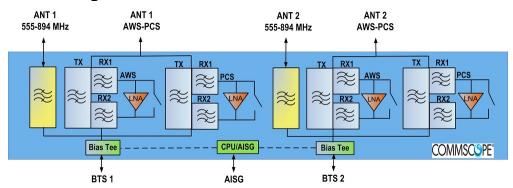
### Electrical Specifications, Band Pass

Frequency Range, MHz	555-894
Insertion Loss, typical, dB	0.1
Total Group Delay, typical, ns	4
Return Loss, typical, dB	22
Isolation, minimum, dB	50
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum, W	3000
3rd Order PIM, typical, dBc	-156

**3rd Order PIM Test Method**  $2 \times 20 \text{ W CW tones}$ 



#### Block Diagram



#### Material Specifications

**Finish** Painted

#### **Environmental Specifications**

**Operating Temperature**  $-40 \,^{\circ}\text{C} \text{ to } +65 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +149 \,^{\circ}\text{F})$ 

**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

IncludedMounting hardwareMounting Hardware Weight0.7 kg | 1.543 lbWeight, without mounting hardware6.8 kg | 14.991 lb

### Regulatory Compliance/Certifications

#### Agency Classification

CHINA-ROHS Above maximum concentration value

ROHS Compliant/Exempted UK-ROHS Compliant/Exempted



#### \* Footnotes

License Band, Band Pass License Bands that are to be passed through with no amplification

COMMSC PE°

License Band, LNA

License Bands that have RxUplink amplification