

TMAT1923B68-31-43 | E14R00P03



Twin TMA PCS/WCS with 555-894 MHz bypass, 4.3-10 connectors

Product Classification

Product Type Tower mounted amplifier

General Specifications

RF Connector Interface 4.3-10 Female

RF Connector Interface Body Style Long neck

Dimensions

Height 247 mm | 9.724 in

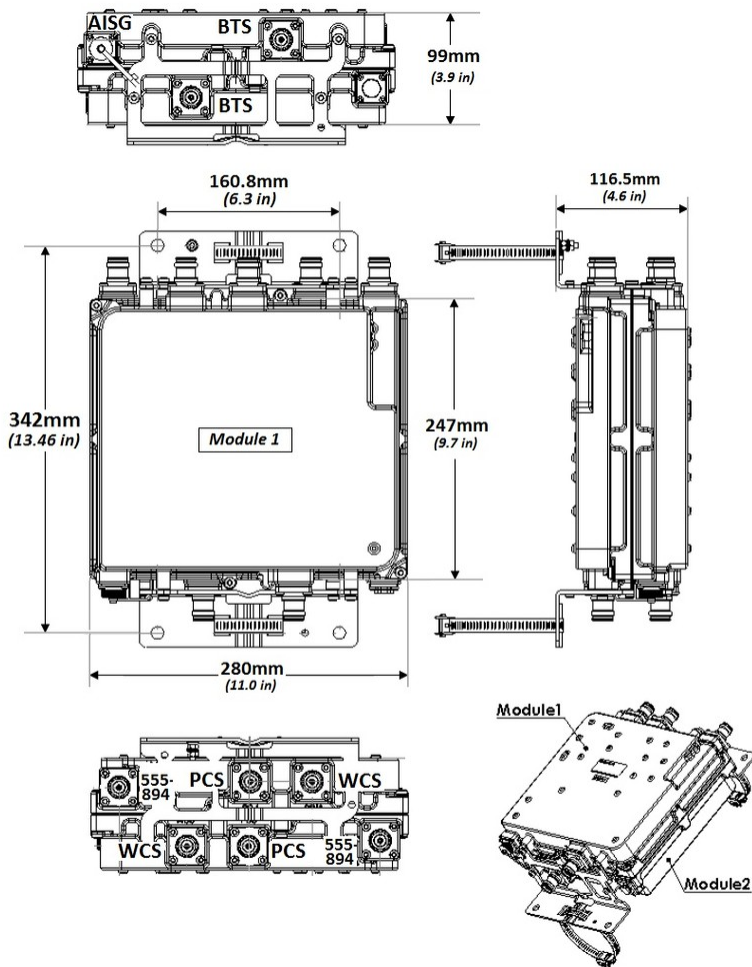
Width 280 mm | 11.024 in

Depth 99 mm | 3.898 in

Ground Screw Diameter 5 mm | 0.197 in

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Outline Drawing



Electrical Specifications

License Band, Band Pass CEL 850 | PCS 1900 | USA 700 | USA 750

License Band, LNA PCS 1900 | WCS 2300

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	210 mA @ 12 Vdc
Alarm Current, CWA Mode	150 mA +/- 10 mA (10-18 VDC)

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Electrical Specifications, AISG

AISG Carrier	2.176 MHz \pm 100 ppm
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	1 2	1 2
Branch	1	2	3
Port Designation	ANT 555-894	ANT PCS	ANT WCS
AISG 2.0 Device Subunit		E25A01P11 1/3	E25A01P11 3/4
License Band	CEL 850, Band Pass USA 700, Band Pass USA 750, Band Pass	PCS 1900, LNA	WCS 2300, LNA
Return Loss - Bypass Mode, typical, dB		18	18

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	1850–1910	2305–2315
Gain, nominal, dB	13	13
Noise Figure, typical, dB	1.4	1.4
Return Loss, minimum, dB	20	20
Insertion Loss - Bypass Mode, typical, dB	2.4	2.4

Electrical Specifications Tx (Downlink)

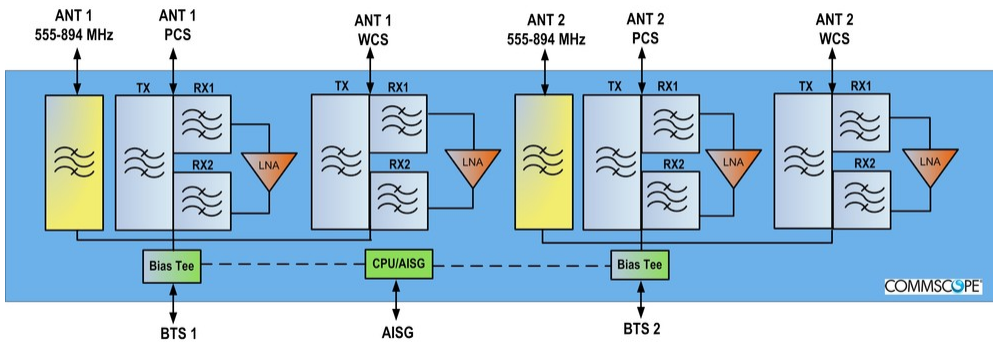
Frequency Range, MHz	1930–1990	2350–2360
Insertion Loss, typical, dB	0.45	0.45
Return Loss, minimum, dB	20	20
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	2000	2000
3rd Order PIM, maximum, dBc	-153	-153
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones

Electrical Specifications, Band Pass

Frequency Range, MHz	555–894
Insertion Loss, maximum, dB	0.2

Return Loss, minimum, dB	20
Isolation, minimum, dB	60
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum, W	2000
3rd Order PIM, maximum, dBc	-153

Block Diagram



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

Weight, net	9.7 kg 21.385 lb
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* 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