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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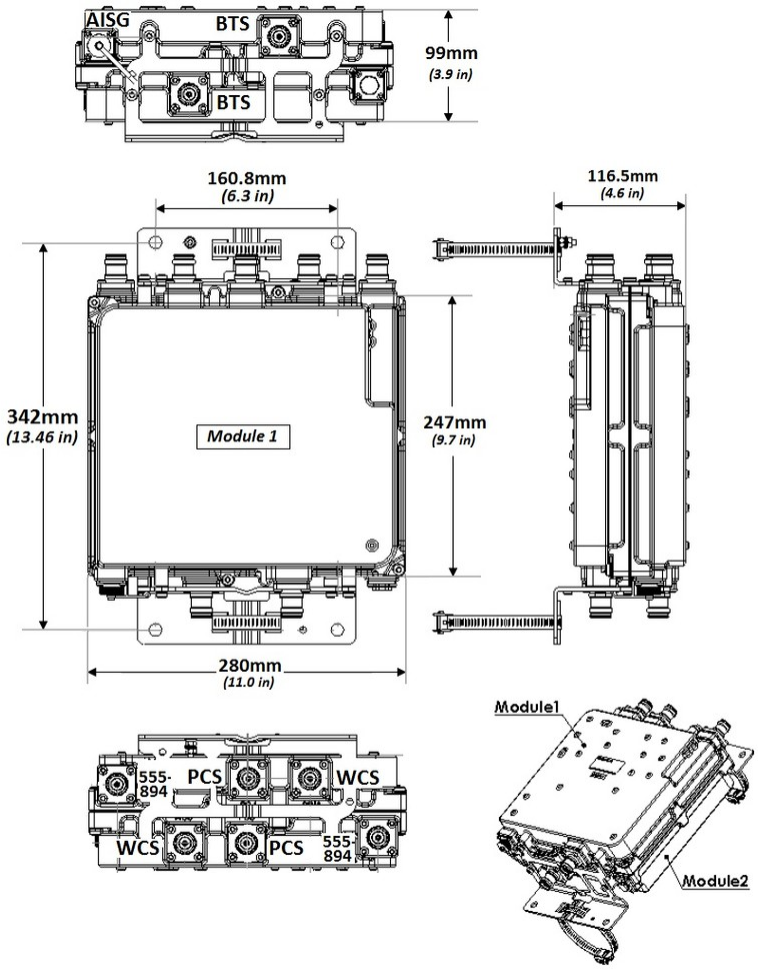
Outline Drawing



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)

Electrical Specifications, AISG

AISG Carrier	2.176 MHz ± 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

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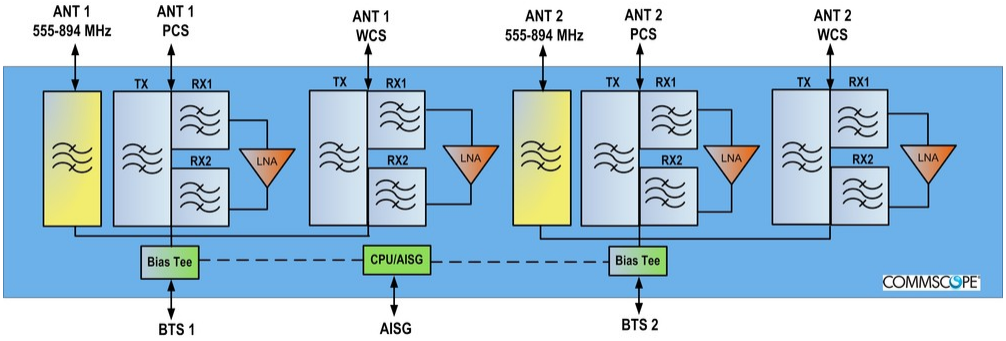
Return Loss, minimum, dB	20
Isolation, minimum, dB	60
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum, W	2000
3rd Order PIM, maximum, dBc	-153

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

* 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