TMAT7UC8-11V | E15R02P57

Twin Compact TMA 700uC/850MHz, Diplexed BTS/ANT, Variable Gain and AISG

- Support DC/AISG antenna Auto-forward

Product Classification

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

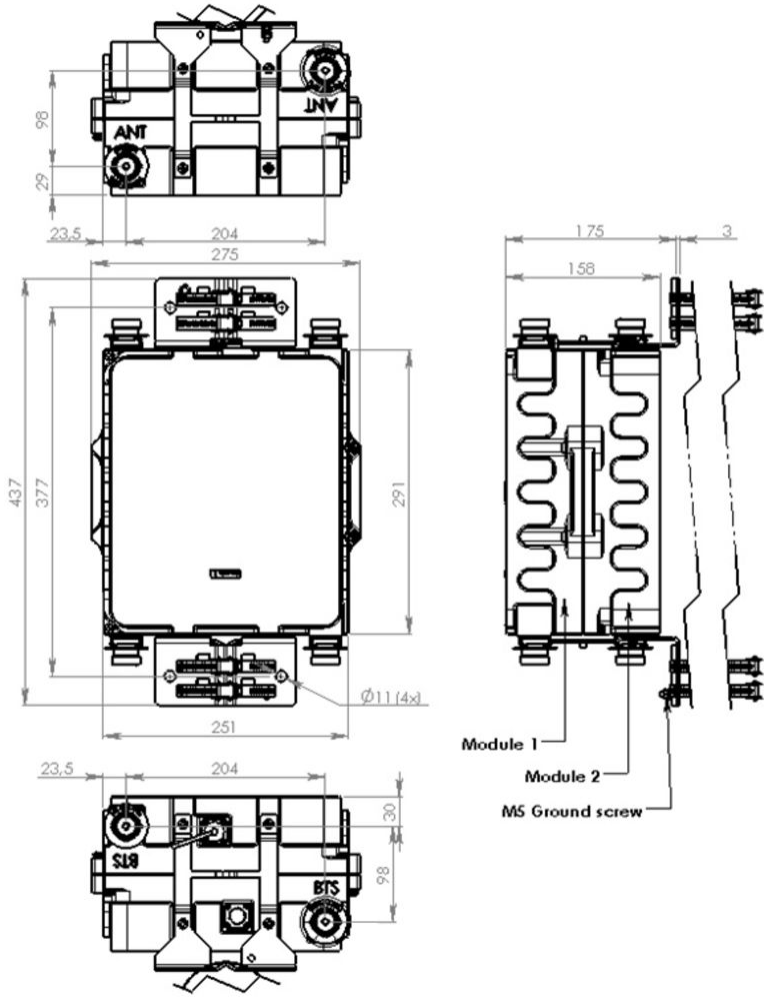
General Specifications

Color	Gray
Modularity	2-Twin
Mounting	Pole | Wall
Mounting Pipe Hardware	Band clamps (4)
RF Connector Interface	7-16 DIN Female
RF Connector Interface Body Style	Long neck

Dimensions

Height	291 mm | 11.457 in
Width	251 mm | 9.882 in
Depth	158 mm | 6.22 in
Ground Screw Diameter	6 mm | 0.236 in
Mounting Pipe Diameter Range	40–160 mm

Outline Drawing



Electrical Specifications

License Band, LNA	CEL 850 | USA 750

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
Operating Current Tolerance	±20 mA
Voltage	7–30 Vdc
Voltage, CWA Mode	10–18 Vdc

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
Protocol	AISG 2.0
Voltage, AISG Mode	10–30 Vdc

Electrical Specifications

Sub-module	**1 | 2**	**1 | 2**
Branch	1	2
Port Designation	ANT	ANT
AISG 2.0 Device Subunit	E15R02P57 1/2	E15R02P57 1/2
License Band	USA 750, LNA	CEL 850, LNA

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	**777.5–787**	**824–849**
Gain, nominal, dB	13	13
Gain Tolerance, dB	±1.0	+1.3/-1.0
Gain Adjustment Range, dB	4-13	4-13
Gain Adjustment Range Increments, dB	1	1
Noise Figure, typical, dB	1.4	1.4
Noise Figure at 8 dB, typical, dB	1.7	1.7
Noise Figure at 4 dB, typical, dB	2.4	2.4
Group Delay Variation, maximum, ns	160	150
Group Delay Variation Bandwidth, MHz	5	5
Return Loss, typical, dB	24	24
Return Loss at 8 dB, typical, dB	22	22
Return Loss at 4 dB, typical, dB	20	20
Insertion Loss - Bypass Mode, typical, dB	2	2.2
Return Loss - Bypass Mode, typical, dB	18	18

Electrical Specifications Tx (Downlink)

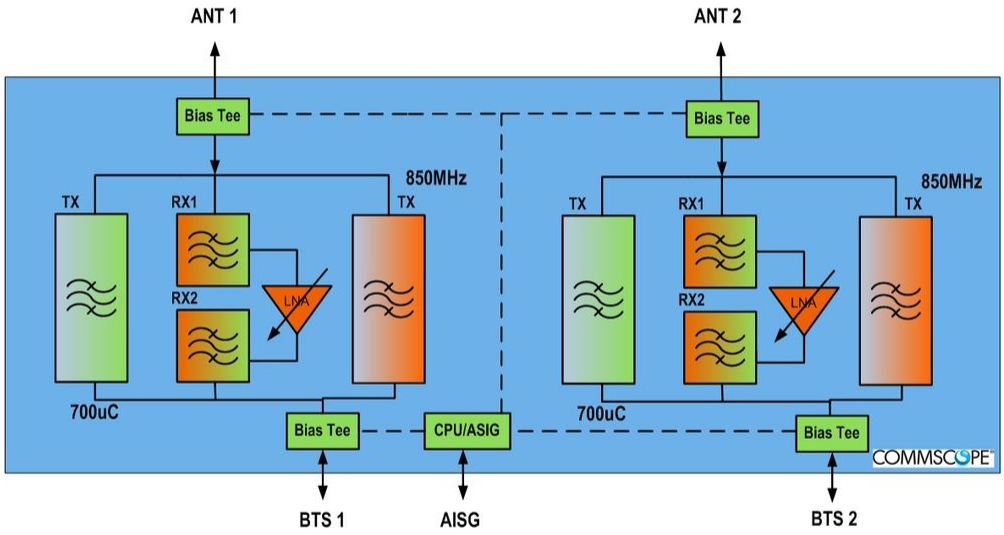
Frequency Range, MHz	**746–756**	**869–894**
Insertion Loss, typical, dB	0.35	0.35

Return Loss, typical, dB	24	24
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	2000	2000
3rd Order PIM, typical, dBc		-161
3rd Order PIM Test Method		2 x 20 W CW tones
7th Order PIM, minimum, dBc	-161	

Electrical Specifications, Band Reject

Frequency Range, MHz	**763–775**	**851–856**
Attenuation, minimum, dB	27	20

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
Weight, net	12.5 kg | 27.558 lb

* Footnotes

License Band, LNA	License Bands that have RxUplink amplification