

Quad Band TMA, 850/900/1800/2100, 3 devices - 2 subunits each

- Industry leading PIM performance
- Designed to boost UP-Link Coverage and KPIs
- 2 input ports and 6 output ports
- TMA is operating in AISG & CWA mode, Alarm Current consumption CWA mode 190 mA

OBSOLETE

This product was discontinued on: June 30, 2022

Product Classification

Product Type 1-BTS:3-ANT (Triplex) | Tower mounted amplifier

General Specifications

Color Gray
Modularity 2-Twin

MountingPole | WallMounting Pipe HardwareBand clamps (2)RF Connector Interface7-16 DIN Female

Dimensions

 Height
 281.5 mm | 11.083 in

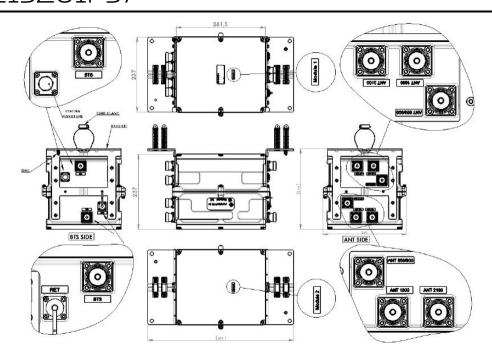
 Width
 237 mm | 9.331 in

 Depth
 237 mm | 9.331 in

 Mounting Pipe Diameter Range
 42.6-122 mm

Outline Drawing





Electrical Specifications

License Band, Band PassCEL 850 | CEL 900 | DCS 1800 | IMT 2100

License Band, LNA DCS 1800 | IMT 2100 | IMT 2600

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy Yes
Lightning Surge Current 10 kA

Lightning Surge Current Waveform 8/20 waveform

Alarm Current, CWA Mode 190 mA ±15 mA

Electrical Specifications, AISG

AISG Connector 8-pin DIN Female
AISG Connector Standard IEC 60130-9
Protocol AISG 2.0
Voltage, AISG Mode 7-30 Vdc

Electrical Specifications

Sub-module	1 2	1 2	1 2	1 2
Branch	1	2	3	4
Port Designation	ANT	ANT	ANT	ANT

Page 2 of 4



License Band	CEL 850, Band Pass	CEL 900, Band Pass	DCS 1800, Band Pass	IMT 2100, Band Pass
Return Loss, typical, dB	20	20	20	20
Return Loss - Bypass Mode, typical, dB	16	16	16	16

Electrical Specifications Rx (Uplink)

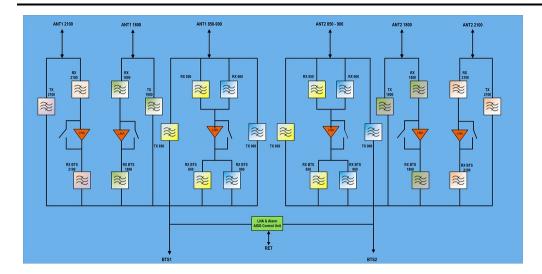
Frequency Range, MHz	825-835	906.8-915	1710-1785	1920-1980
Bandwidth, MHz	10	8.2	75	60
Gain, nominal, dB	12	12	12	12
Noise Figure, typical, dB	1.3	1.4	1.3	1.4
Total Group Delay, typical, ns	180	150	100	70
Insertion Loss - Bypass Mode, typical, dB	2.1	2.1	2.1	2

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	870-880	951.8-960	1805-1880	2110-2170
Bandwidth, MHz	10	8.2		60
Insertion Loss, typical, dB	0.35	0.5	0.5	0.4
Total Group Delay, typical, ns	60	180	50	25
Return Loss, typical, dB	20	20	20	20
Input Power, RMS, maximum, W	200	200		200
Input Power, PEP, maximum, W	2500	2500		2500
3rd Order PIM, typical, dBc	-160	-160	-160	-160
3rd Order PIM Test Method	2 x 20 W CW tones			

Block Diagram





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

Included Mounting hardware

Volume 15.8 L

Weight, net 22.8 kg | 50.265 lb

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



* Footnotes

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

License Band, LNALicense Bands that have RxUplink amplification

COMMSC PE°