

Dual Band Tower Mounted Amplifier, 700//850 MHz, 13 dB, 2 BTS & 2 ANT ports, AISG with 1 RET connector (2 devices with 2 sub-units), with 4.3-10 connectors

- New 4.3-10 connectors for improved PIM performance and size reduction
- TMA is operating in AISG & CWA mode, Alarm Current consumption CWA mode 190 mA
- 2 input ports and 2 output ports
- Designed to boost UP-Link Coverage and KPIs
- Automatic LNA by-pass function
- Connectors "in line"
- Single AISG with 1 RET connector
- 2 devices with 2 sub-units
- Built in lightning protection

This product will be discontinued on: December 31, 2024

Product Classification

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

General Specifications

Color Gray
Modularity 2-Twin

MountingPole | WallMounting Pipe HardwareBand clamps (4)RF Connector Interface4.3-10 FemaleRF Connector Interface Body StyleLong neck

Dimensions

 Height
 150 mm | 5.906 in

 Width
 302 mm | 11.89 in

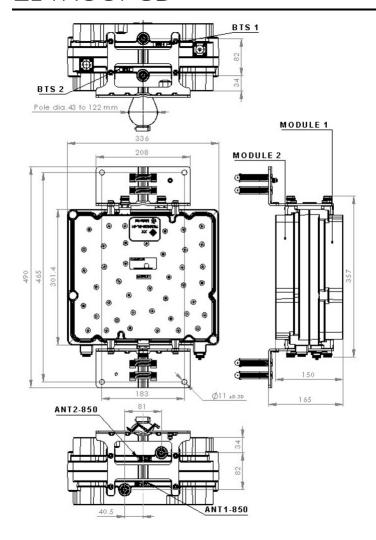
 Depth
 336 mm | 13.228 in

 Ground Screw Diameter
 6 mm | 0.236 in

 Mounting Pipe Diameter Range
 43-122 mm

Outline Drawing

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Electrical Specifications

License Band, LNA APT 700 | CEL 850

Electrical Specifications, dc Power/Alarm

Lightning Surge Current 10 kA

Lightning Surge Current Waveform 8/20 waveform

Voltage 7–30 Vdc

Electrical Specifications, AISG

AISG Carrier 2.176 MHz ± 100 ppm

AISG Connector 8-pin DIN Female

AISG Connector Standard IEC 60130-9

COMMSCOPE®

Default Protocol AISG 2.0

Protocol AISG 1.1 | AISG 2.0

Electrical Specifications

Sub-module	1 2	1 2
Branch	1	2
Port Designation	ANT	ANT
License Band	APT 700, LNA CEL 850, LNA	APT 700, LNA CEL 850, LNA
Return Loss, typical, dB	20	20
Return Loss - Bypass Mode, typical, dB	16	16

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	703-748	825-840
Bandwidth, MHz	45	15
Gain, nominal, dB	13	13
Gain Tolerance, dB	+/-1.0	+/-1.0
Noise Figure, maximum, dB	1.7	2
Noise Figure, typical, dB	1.2	1.4
Total Group Delay, typical, ns	280	340
Insertion Loss - Bypass Mode, typical,	2	2.8

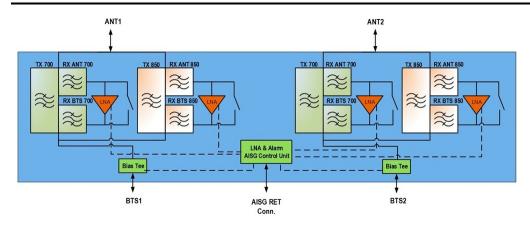
Electrical Specifications Tx (Downlink)

Frequency Range, MHz	758-803	870-885	
Bandwidth, MHz	45	15	
Insertion Loss, typical, dB	0.35	0.3	
Total Group Delay, typical, ns	95	75	
Return Loss, typical, dB	20	20	
RX Band Rejection, minimum, dB	40	40	
Input Power, RMS, maximum, W	120	120	
Input Power, PEP, maximum, W	1500	1500	
3rd Order PIM, typical, dBc	-159	-159	
2nd Onder DIM Teet Method	Two I 42 dDm o	Two 142 dDm corriers Two 142	

3rd Order PIM Test Method Two +43 dBm carriers Two +43 dBm carriers

Block Diagram





Material Specifications

Finish Painted

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C}$ 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
Environmental Test Method ETSI EN 300 019-1-4
Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

Included Mounting hardware

Volume 15.2 L

Weight, net $16.5 \text{ kg} \mid 36.376 \text{ lb}$ Weight, without mounting hardware $14.7 \text{ kg} \mid 32.408 \text{ lb}$

* Footnotes

License Band, LNALicense Bands that have RxUplink amplification

