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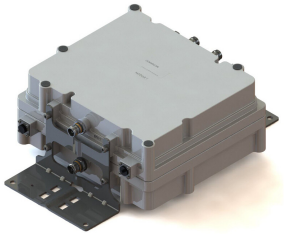

Dual Band Tower Mounted Amplifier, 700//850 MHz, 16 dB, 2 BTS & 4 ANT ports, AISG with 1 RET connector (1 device with 2 sub-units), with 4.3-10 connectors

- 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 4 output ports
- Designed to boost UP-Link Coverage and KPIs
- Automatic LNA by-pass function
- Connectors “in line”
- Single AISG with 1 RET connector
- 1 device with 2 sub-units
- Built in lightning protection

This product will be discontinued on: December 31, 2024

Product Classification

Product Type	1-BTS:2-ANT (Diplex) | Tower mounted amplifier

General Specifications

Color	Gray
Modularity	2-Twin
Mounting	Pole | Wall
Mounting Pipe Hardware	Band clamps (4)
RF Connector Interface	4.3-10 Female
RF Connector Interface Body Style	Long 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	40–160 mm

Outline Drawing

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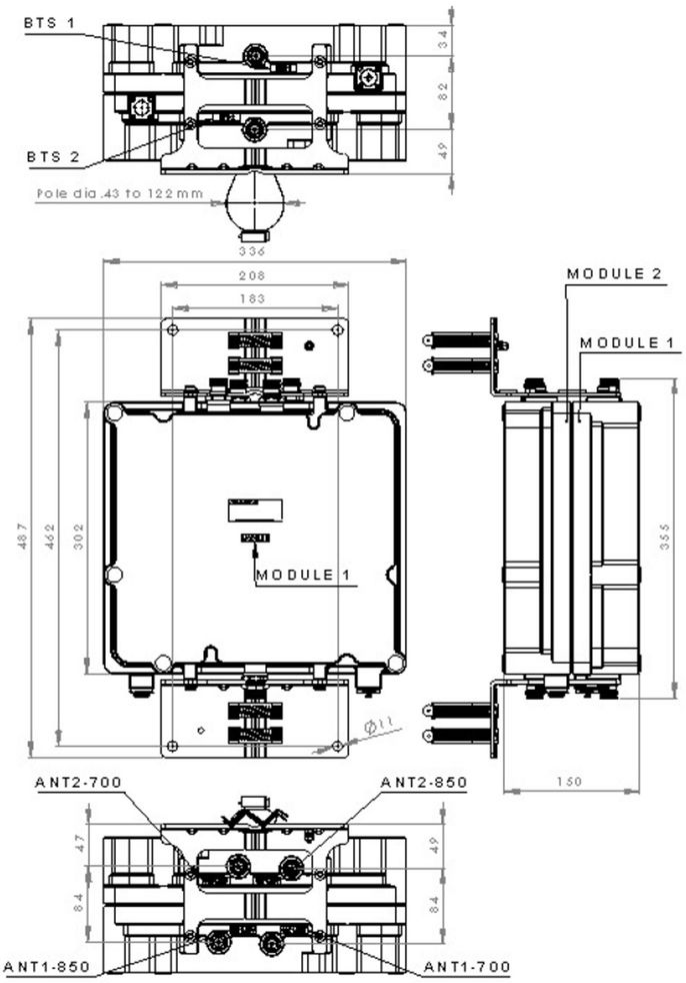

Electrical Specifications

License Band, LNA	APT 700 | 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

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Electrical Specifications, AISG

AISG Carrier	2.176 MHz ± 100 ppm
AISG Connector	8-pin DIN Female
AISG Connector Standard	IEC 60130-9
Default Protocol	AISG 2.0
Protocol	AISG 1.1 | 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	E15R02P25 2/4	E15R02P25 1/3
License Band	APT 700, LNA USA 750, 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**	**824–845**
Bandwidth, MHz	45	21
Gain, nominal, dB	16.5	15.5
Gain Tolerance, dB	±1.0	+1.0/-1.0
Gain Adjustment Range Increments, dB	1	
Noise Figure, maximum, dB	1.7	2.2
Noise Figure, typical, dB	1.2	1.4
Total Group Delay, typical, ns	280	340
Insertion Loss - Bypass Mode, typical, dB	2	2.8

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	**758–803**	**859–890**
Bandwidth, MHz	45	31
Insertion Loss, typical, dB	0.35	0.35
Total Group Delay, typical, ns	95	75

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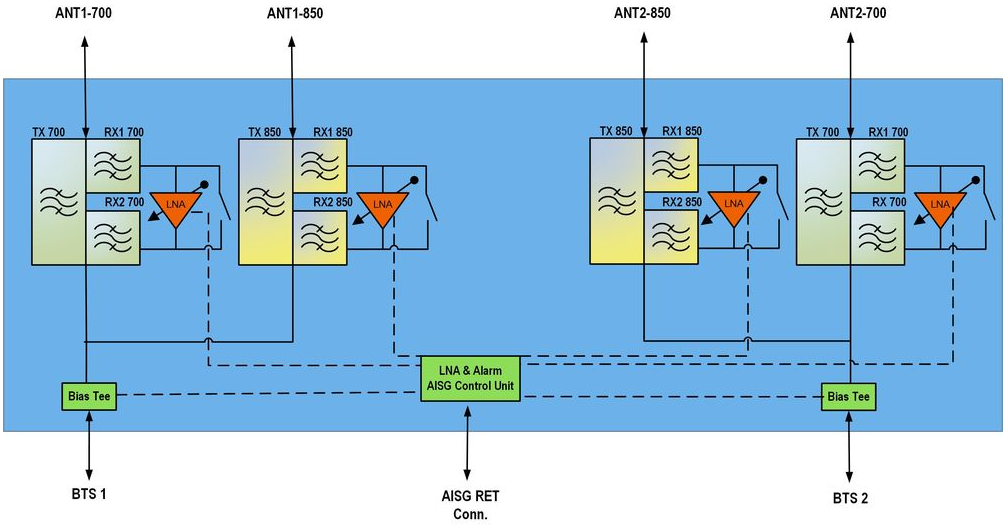
Return Loss, typical, dB	20	20
RX Band Rejection, minimum, dB	40	40
Input Power, RMS, maximum, W	120	120
Input Power, PEP, maximum, W	1500	1500
3rd Order PIM, typical, dBc	-159	-159
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers

Electrical Specifications, Band Reject

Frequency Range, MHz	**763–775**	**851–856**
Attenuation, minimum, dB	40	30

Block Diagram



Material Specifications

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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
Volume	15.2 L
Weight, net	16.5 kg | 36.376 lb
Weight, without mounting hardware	14.7 kg | 32.408 lb

* Footnotes

License Band, LNA	License Bands that have RxUplink amplification