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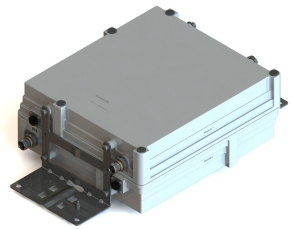

Dual Band Tower Mounted Amplifier, 700//900 MHz, 12 dB, 2 BTS & 2 ANT ports, AISG with 1 RET connector (1 device with 2 sub-units), with 4.3-10 connectors

- 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 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
- 1 device with 2 sub-units
- Built in lightning protection

Product Classification

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

General Specifications

Color	Gray
Modularity	2-Twin
Mounting Pipe Hardware	Band clamps (2)
RF Connector Interface	4.3-10 Female

Dimensions

Height	140 mm | 5.512 in
Width	320 mm | 12.598 in
Depth	359 mm | 14.134 in
Mounting Pipe Diameter Range	42.6–122 mm

Outline Drawing

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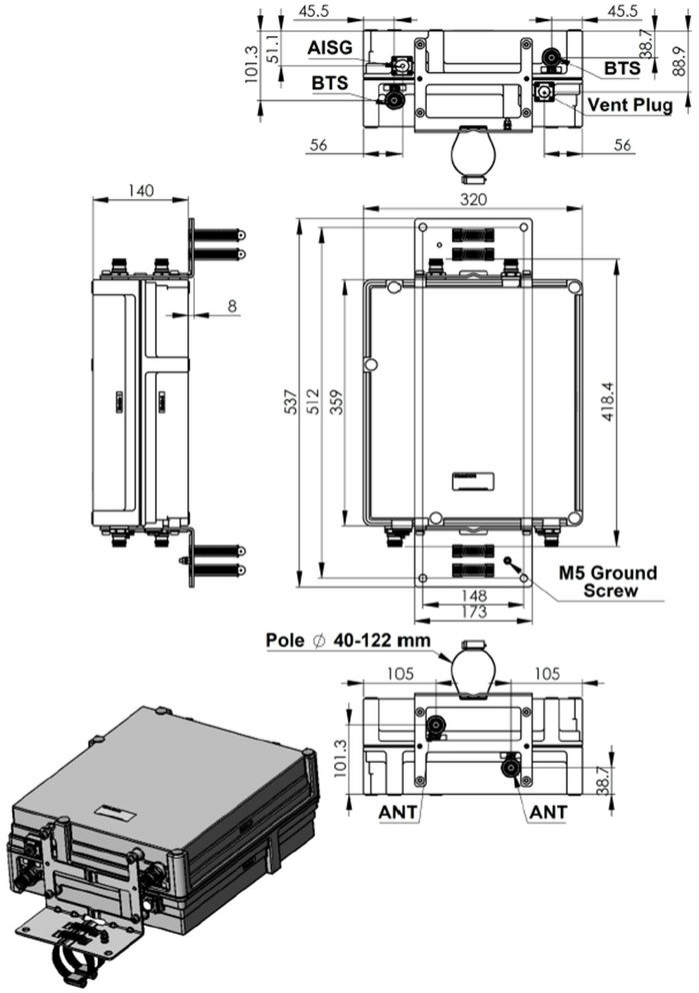

Electrical Specifications

License Band, LNA	APT 700 | CEL 900

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 ±10 mA

Electrical Specifications, AISG

AISG Connector	8-pin DIN Female
AISG Connector Standard	IEC 60130-9

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Protocol	AISG 2.0
Voltage, AISG Mode	10–30 Vdc

Electrical Specifications

Sub-module	**1 | 2**	**1 | 2**
Branch	1	2
Port Designation	ANT 700	ANT 900
License Band	APT 700, LNA	CEL 900, LNA
Return Loss, typical, dB	20	20
Return Loss - Bypass Mode, typical, dB	14	14

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	**703–748**	**890–915**
Bandwidth, MHz	45	25
Gain, nominal, dB	13	13
Gain Tolerance, dB	+0.75/-0.75	
Noise Figure, maximum, dB	2	2
Noise Figure, typical, dB	1.2	1.5
Group Delay Variation, maximum, ns	120	70
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	160	100
Return Loss, minimum, dB	16	16
Insertion Loss - Bypass Mode, typical, dB	1.5	2.2

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	**758–803**	**935–960**
Bandwidth, MHz	45	25
Insertion Loss, typical, dB	0.5	0.4
Total Group Delay, maximum, ns	65	55
Return Loss, minimum, dB	18	18
Return Loss, typical, dB	22	22
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	2500	2500
3rd Order PIM, typical, dBc	-153	-153
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers

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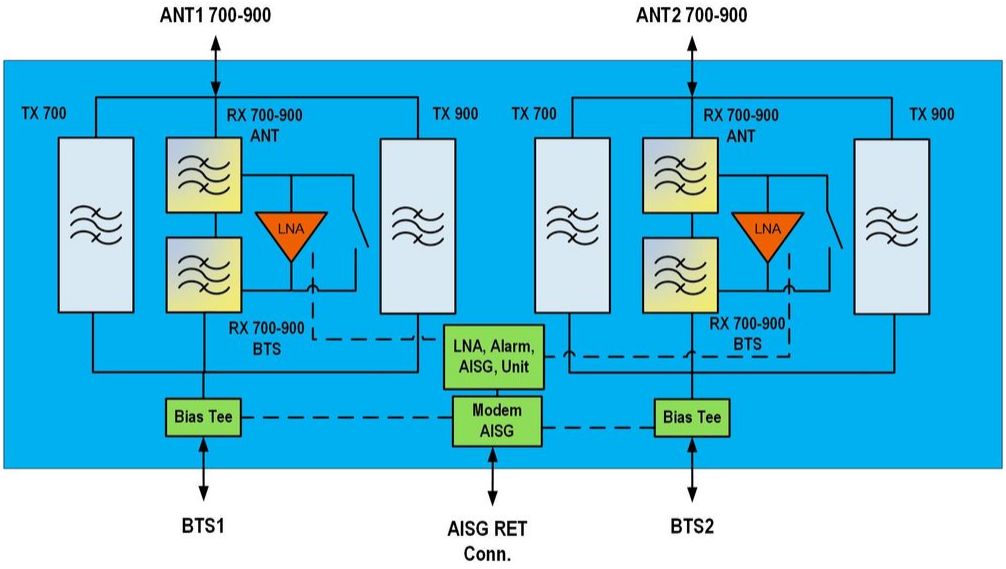
Block Diagram



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

Included	Mounting hardware
Volume	16.1 L
Weight, net	16.2 kg | 35.715 lb

Weight, without mounting hardware	15 kg | 33.069 lb

* Footnotes

License Band, LNA	License Bands that have RxUplink amplification