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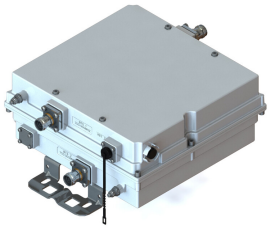

Dual Band Tower Mounted Amplifier, 700//900 MHz, 12 dB, 2 BTS & 2 ANT ports, AISG with 1 RET connector (1 device with 2 sub-units), with 4.3-10 connectors

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- 2 input ports and 2 output ports
- Designed to boost UP-Link Coverage and KPIs
- Automatic LNA by-pass function
- Connectors “in line”
- TMA is operating in AISG mode
- 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	266 mm | 10.472 in
Width	276 mm | 10.866 in
Depth	113 mm | 4.449 in
Mounting Pipe Diameter Range	42.6–122 mm

Outline Drawing

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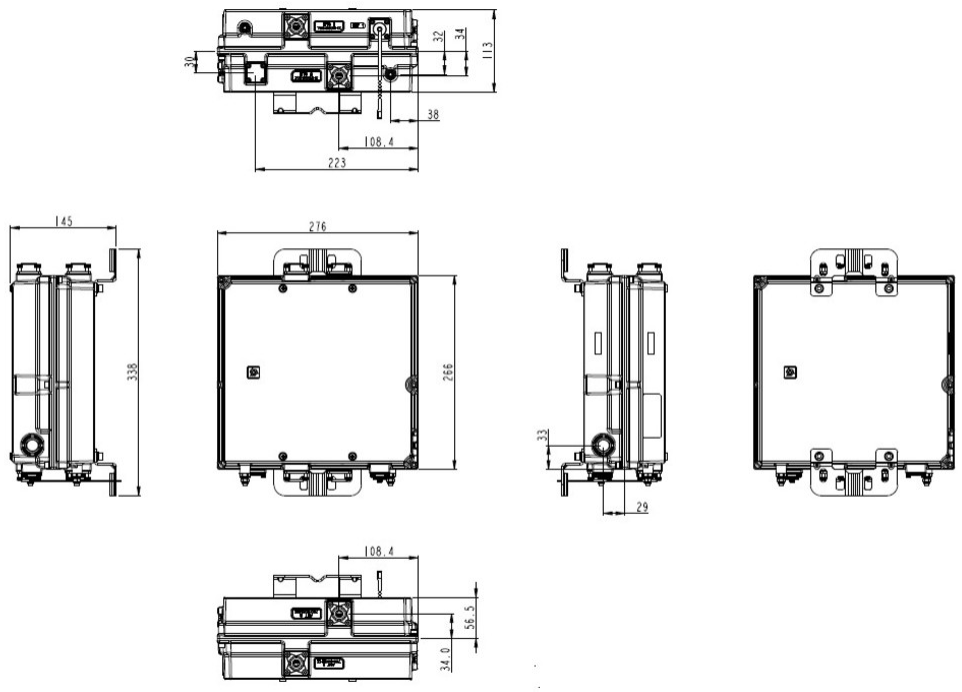

Electrical Specifications

License Band, Band Pass	APT 700
License Band, LNA	APT 700 | CEL 900 | EDD 800

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy	Yes
Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform

Electrical Specifications, AISG

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 700	ANT 900

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License Band	APT 700, Band Pass APT 700, LNA	CEL 900, LNA
Return Loss, typical, dB	20	20
Return Loss - Bypass Mode, typical, dB	18	18

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	**703–733**	**880–915**
Bandwidth, MHz	30	35
Gain, nominal, dB	12	12
Noise Figure, typical, dB	1.3	1.4
Group Delay Variation, maximum, ns	90	100
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	200	225
Total Group Delay, typical, ns	150	200
Return Loss, minimum, dB	18	18
Insertion Loss - Bypass Mode, typical, dB	1.5	2.3

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	**758–788**	**925–960**
Bandwidth, MHz	30	35
Insertion Loss, maximum, dB	0.6	0.75
Insertion Loss, typical, dB	0.4	0.6
Group Delay Variation, maximum, ns	35	35
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	80	85
Total Group Delay, typical, ns	70	60
Return Loss, minimum, dB	18	18
Return Loss, typical, dB	20	20
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	2500	2500
3rd Order PIM, typical, dBc	-162	-162
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers

Block Diagram

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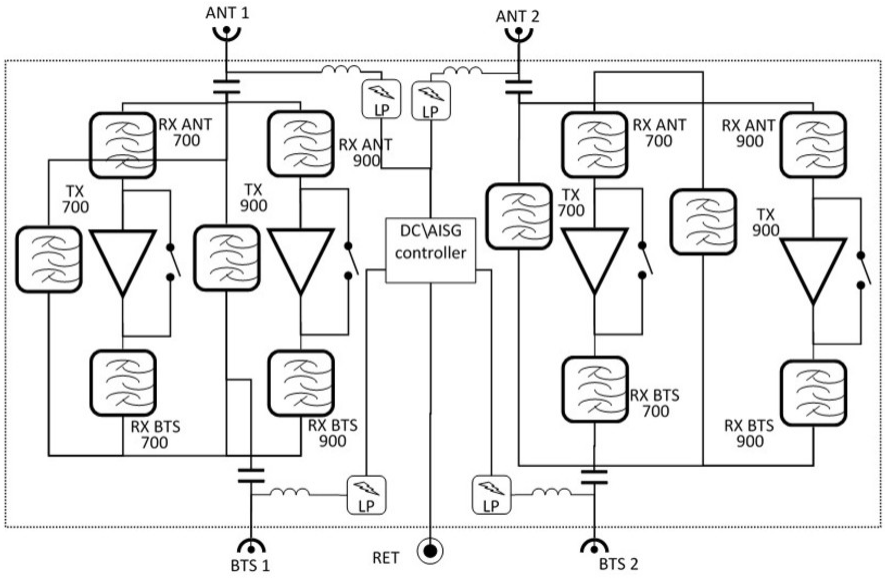

Environmental Specifications

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Corrosion Test Method	IEC 60068-2-11, 30 days
Ingress Protection Test Method	IEC 60529:2001, IP67

Packaging and Weights

Included	Mounting hardware
Volume	8.3 L
Weight, net	9 kg | 19.842 lb
Weight, without mounting hardware	8.5 kg | 18.739 lb

* Footnotes

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