

Tower Mounted Amplifier, Dual UMTS 2100 with AISG

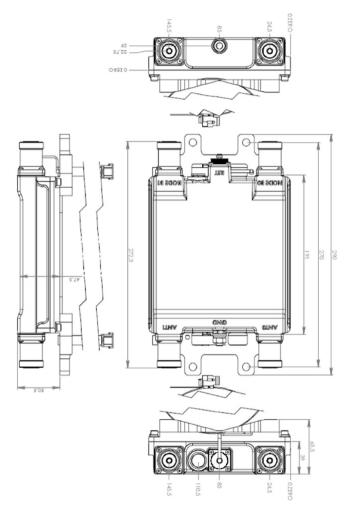
• Industry leading PIM performance

Product Classification	
Product Type	1-BTS:1-ANT (Uniplex) Tower mounted amplifier
General Specifications	
Color	Gray
Modularity	2-Twin
Mounting	Pole Wall
Mounting Pipe Hardware	Band clamps (2)
RF Connector Interface	7-16 DIN Female
RF Connector Interface Body Style	Long neck
Dimensions	
Height	191 mm 7.52 in
Width	170 mm 6.693 in
Depth	50.5 mm 1.988 in
Ground Screw Diameter	8 mm 0.315 in
Mounting Pipe Diameter Range	40-160 mm

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Outline Drawing



Electrical Specifications

License Band, LNA

IMT 2100

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	100 mA @ 12 V
Operating Current Tolerance	±15 mA
Voltage	7-30 Vdc

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Alarm Current, CWA Mode	185 mA ±10 mA
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
Branch	1
Port Designation	ANT
License Band	IMT 2100, LNA
Return Loss - Bypass Mode, typical, dB	19
TX Band Rejection, minimum, dB	80

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	1920-1980
Bandwidth, MHz	60
Gain, nominal, dB	12
Gain Tolerance, dB	±1
Noise Figure, maximum, dB	1.4
Noise Figure, typical, dB	1.2
Group Delay Variation, maximum, ns	12
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	60
Return Loss, minimum, dB	18
Insertion Loss - Bypass Mode, typical, dB	2

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	2110-2170
Bandwidth, MHz	60

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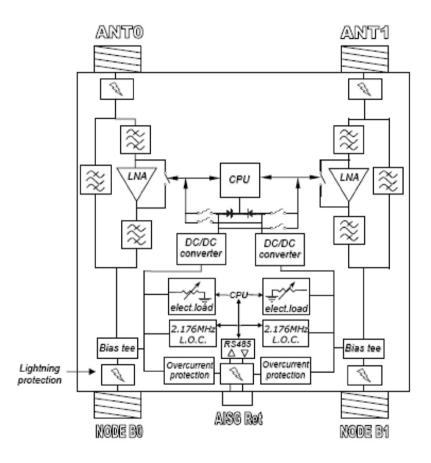


Insertion Loss, maximum, dB	0.4
Insertion Loss Ripple, maximum, dB	0.1
Group Delay Variation, maximum, ns	3
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	18
Return Loss, minimum, dB	18
Input Power, RMS, maximum, W	160
Input Power, PEP, maximum, W	2500
3rd Order PIM, typical, dBc	-165
3rd Order PIM Test Method	Two +43 dBm carriers

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Block Diagram



Material Specifications

 Finish
 Painted

 Mechanical Specifications
 Painted

Wind Speed, maximum

198 km/h | 123.031 mph

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

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Packaging and Weights

Included	Mounting hardware
Volume	1.6 L
Weight, net	3.3 kg 7.275 lb

* Footnotes

License Band, LNA License Bands that have RxUplink amplification

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