

Dual Band Tower Mounted Amplifier, 1800//2100 MHz, 12 dB, 2 BTS & 2 ANT ports, Dual AISG with 2 RET connectors (1 device with 2 sub-units)

- Industry leading PIM performance
- 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"
- Dual AISG with 2 RET connectors
- 1 device with 2 sub-units
- Built in lightning protection

OBSOLETE

This product was discontinued on: June 30, 2022

Product Classification

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

General Specifications

Color Gray
Modularity 2-Twin

Mounting Pole | Wall

Mounting Pipe HardwareBand clamps (2)RF Connector Interface7-16 DIN Female

Dimensions

 Height
 280 mm | 11.024 in

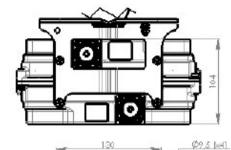
 Width
 225 mm | 8.858 in

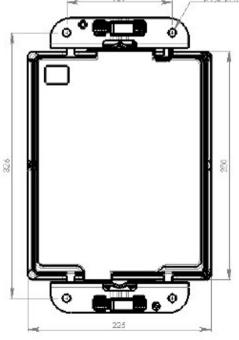
 Depth
 104 mm | 4.094 in

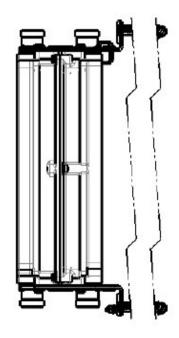
Mounting Pipe Diameter Range 50–120 mm



Outline Drawing







Electrical Specifications

License Band, LNA DCS 1800 | IMT 2100

Electrical Specifications, dc Power/Alarm

dc Switching/RedundancyYesLightning Surge Current10 kA

Lightning Surge Current Waveform 8/20 waveform

Voltage 7–30 Vdc

Alarm Current, CWA Mode 190 mA ±15 mA

Electrical Specifications, AISG

COMMSCOPE®

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	1
Port Designation	ANT	ANT
License Band	DCS 1800, LNA	IMT 2100, LNA

Return Loss - Bypass Mode, typical, dB 15 15

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	1710-1785	1920-1980
Bandwidth, MHz	75	60
Gain, nominal, dB	12	12
Noise Figure, typical, dB	1.5	1.5
Group Delay Variation, maximum, ns	30	16
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	100	80
Output IP3, minimum, dBm	20	
Output IP3 at 8 dB, minimum, dBm		20
Return Loss, minimum, dB	18	18
Insertion Loss - Bypass Mode, typical,	2	2

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	1805-1880	2110-2170
Bandwidth, MHz	75	60
Insertion Loss, typical, dB	0.4	0.4
Group Delay Variation, maximum, ns	10	4
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	45	25
Return Loss, minimum, dB	18	18
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	2000	2000

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3rd Order PIM, typical, dBc

-160

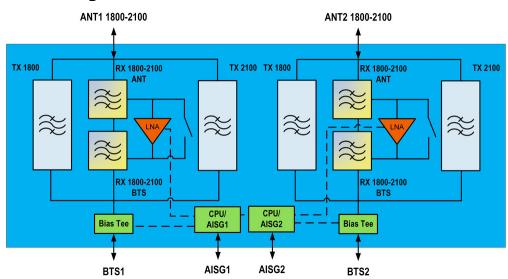
3rd Order PIM Test Method

Two +43 dBm carriers Two +43 dBm carriers

-160



Block Diagram



Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C} \text{ to } +65 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +149 \,^{\circ}\text{F})$

Relative Humidity Up to 100%

Corrosion Test Method IEC 60068-2-11, 30 days
Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

Included Mounting hardware

Volume 6.5 L

Weight, net 7 kg | 15.432 lb

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



* Footnotes

License Band, LNALicense Bands that have RxUplink amplification

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