

TMA-S-DB1921-DD-A | E15S09P45



Tower Mounted Amplifier, Twin Duplicated ANT/BTS Ports, Dual Band PCS /AWS with AISG

OBSOLETE

Replaced By:

TMAT1921B68-21-43
E14R00P09

Tower Mounted Amplifier, Twin Duplicated PCS/AWS 1-4, 555-894 MHz bypass 4.3-10

Product Classification

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

General Specifications

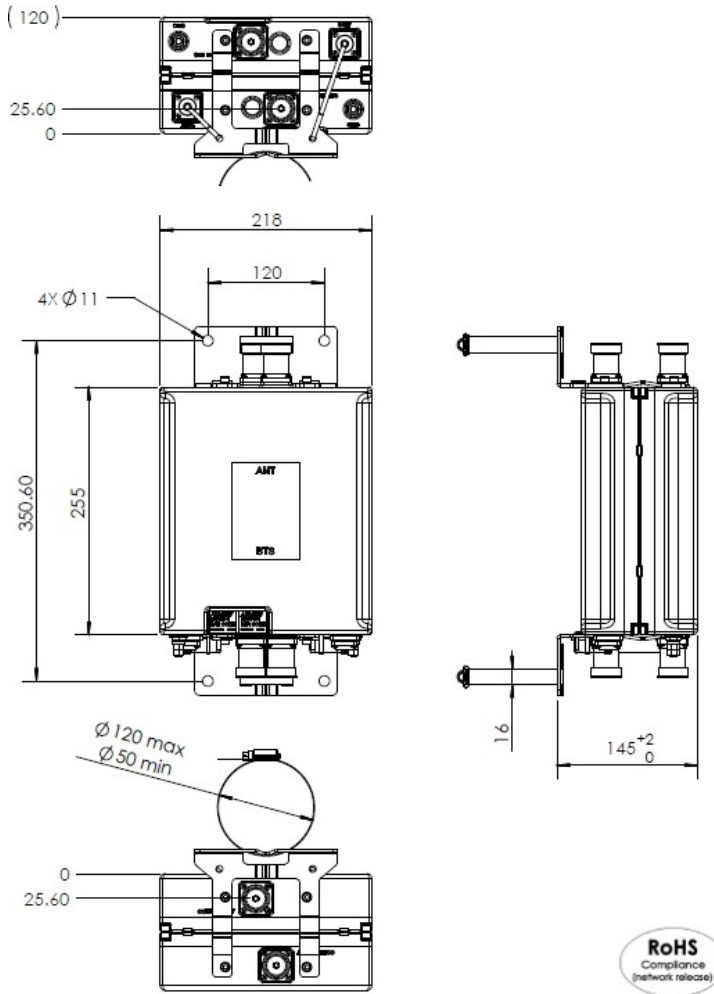
Color Gray
Modularity 2-Twin
Mounting Pole | Wall
Mounting Pipe Hardware Band clamps (2)
RF Connector Interface 7-16 DIN Female
RF Connector Interface Body Style Long neck

Dimensions

Height 255 mm | 10.039 in
Width 218 mm | 8.583 in
Depth 120 mm | 4.724 in
Ground Screw Diameter 6 mm | 0.236 in
Mounting Pipe Diameter Range 40-160 mm

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Outline Drawing



Electrical Specifications

License Band, LNA

AWS 1700 | PCS 1900

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy	No
Lightning Surge Current	20 kA
Lightning Surge Current Waveform	8/20 waveform
Operating Current at Voltage	130 mA @ 12 V
Operating Current Tolerance	±20 mA
Voltage	7–30 Vdc

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Voltage, CWA Mode	10–18 Vdc
Alarm Current, CWA Mode	180–200 mA @ 10–18 V

Electrical Specifications, AISG

AISG Carrier	2.176 MHz ± 100 ppm
AISG Connector	8-pin DIN Female (2)
AISG Connector Standard	IEC 60130-9
Default Protocol	AISG 2.0
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
AISG 2.0 Device Subunit	E15S09P45 1	E15S09P45 2
License Band	AWS 1700, LNA	PCS 1900, LNA
Return Loss - Bypass Mode, typical, dB	16	16

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	1710–1755	1850–1910
Bandwidth, MHz	45	60
Gain, nominal, dB	12	12
Gain Tolerance, dB	±1.0	±1.0
Noise Figure, typical, dB	1.3	1.7
Group Delay Variation, maximum, ns	10	10
Group Delay Variation Bandwidth, MHz	5	0.24
Total Group Delay, maximum, ns	50	150
Output IP3, minimum, dBm	20	20
Return Loss, minimum, dB	18	18
Insertion Loss - Bypass Mode, typical, dB	1.9	2.9

Electrical Specifications Tx (Downlink)

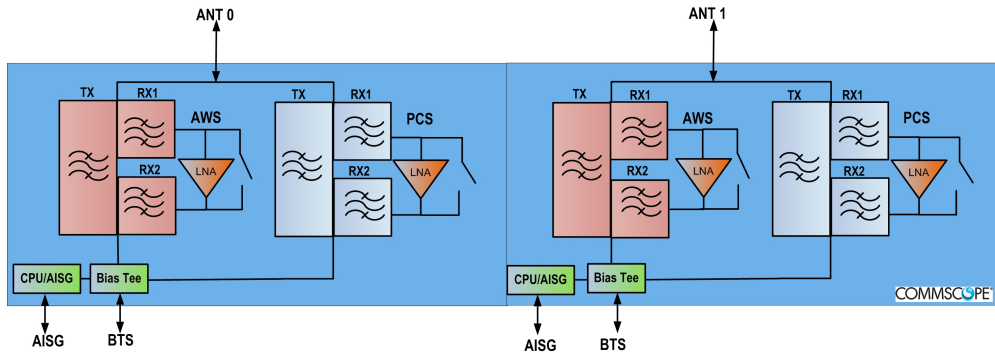
Frequency Range, MHz	2110–2155	1930–1990
Bandwidth, MHz	45	60

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Insertion Loss, maximum, dB	0.3	0.7
Group Delay Variation, maximum, ns	8	18
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	15	55
Return Loss, minimum, dB	18	18
Higher Order PIM, typical, dBc	-153	-153
Higher Order PIM Test Method	1 x 20 W AWS CW tone 1 x 20 W PCS CW tone	1 x 20 W AWS CW tone 1 x 20 W PCS CW tone

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Block Diagram



Material Specifications

Finish Painted

Mechanical Specifications

Wind Speed, maximum 200 km/h (124 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

Packaging and Weights

Included Mounting hardware

Volume 6.6 L

Weight, net 10 kg | 22.046 lb

* Footnotes

License Band, LNA License Bands that have RxUplink amplification