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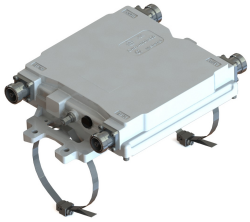

Tower Mounted Amplifier, Dual DCS 1800

OBSOLETE

This product was discontinued on: June 30, 2022

Replaced By:

E14R00P02	Tower Mounted Amplifier, Dual DCS 1800 with AISG 2.0, with 4.3-10 connectors

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

Dimensions

Height	225 mm | 8.858 in
Width	227 mm | 8.937 in
Depth	56 mm | 2.205 in
Ground Screw Diameter	8 mm | 0.315 in
Mounting Pipe Diameter Range	40–160 mm

Outline Drawing

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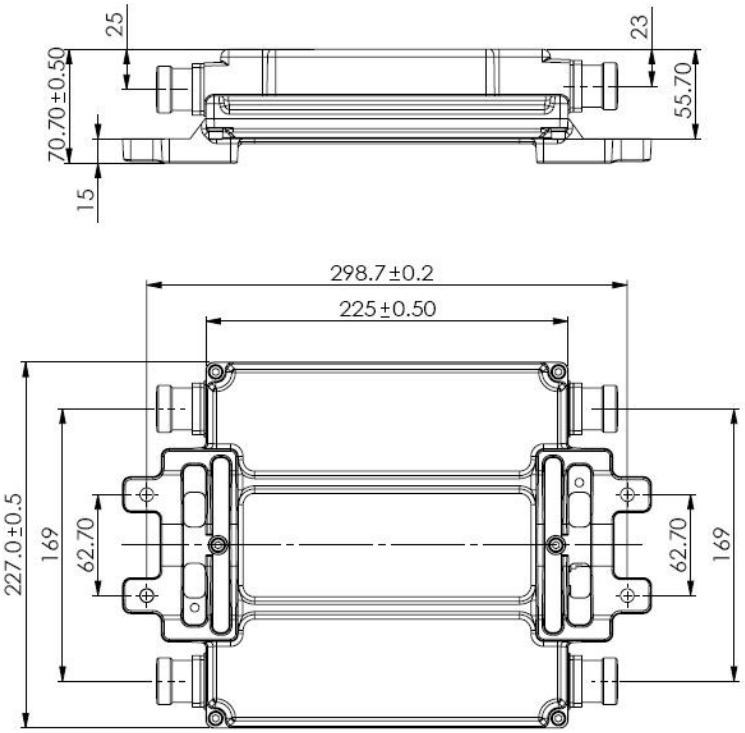

Electrical Specifications

License Band, LNA	DCS 1800

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	110 mA @ 12 V
Operating Current Tolerance	±20 mA
Voltage	7–18 Vdc
Voltage, CWA Mode	10–18 Vdc
Alarm Current, CWA Mode	195 mA ±15 mA

Electrical Specifications

Sub-module	**1 | 2**

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Branch	1
Port Designation	ANT
License Band	DCS 1800, LNA
Return Loss - Bypass Mode, typical, dB	14
TX Band Rejection, minimum, dB	75

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	**1710–1785**
Bandwidth, MHz	75
Gain, nominal, dB	12
Gain Tolerance, dB	±1
Noise Figure, maximum, dB	1.8
Noise Figure, typical, dB	1.4
Group Delay Variation, maximum, ns	50
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	150
Output IP3, minimum, dBm	23
Return Loss, minimum, dB	18
Insertion Loss - Bypass Mode, typical, dB	3

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	**1805–1880**
Bandwidth, MHz	75
Insertion Loss, maximum, dB	0.7
Insertion Loss Ripple, maximum, dB	0.5
Group Delay Variation, maximum, ns	13
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	45
Return Loss, minimum, dB	18

RX Band Rejection, minimum, dB	45
Input Power, RMS, maximum, W	200
Input Power, PEP, maximum, W	5000
3rd Order PIM, maximum, dBc	-153
3rd Order PIM Test Method	Two +43 dBm carriers

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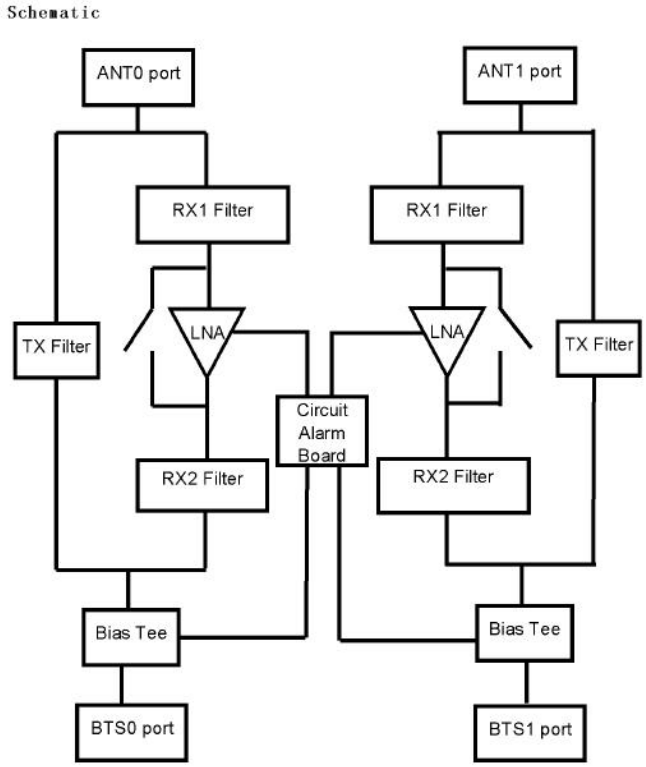
Block Diagram



Material Specifications

Finish	Painted

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	2.8 L
Weight, net	4.5 kg | 9.921 lb

Regulatory Compliance/Certifications

E15S09P81

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

* Footnotes

License Band, LNA	License Bands that have RxUplink amplification