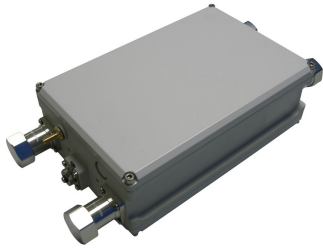


# E15S09P98



## Tower Mounted Amplifier, Dual DCS 1800 with AISG

### OBSOLETE

This product was discontinued on: December 31, 2023

#### 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

**RF Connector Interface Body Style** Long neck

## Dimensions

**Height** 260 mm | 10.236 in

**Width** 170 mm | 6.693 in

**Depth** 90 mm | 3.543 in

**Ground Screw Diameter** 8 mm | 0.315 in

**Mounting Pipe Diameter Range** 40–160 mm

## Electrical Specifications

**License Band, LNA** DCS 1800

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## Electrical Specifications, dc Power/Alarm

<b>dc Switching/Redundancy</b>	Yes
<b>Lightning Surge Current</b>	10 kA
<b>Lightning Surge Current Waveform</b>	8/20 waveform
<b>Operating Current at Voltage</b>	120 mA @ 12 V
<b>Operating Current Tolerance</b>	±20 mA
<b>Voltage</b>	7–30 Vdc
<b>Alarm Current, CWA Mode</b>	190 mA ±10 mA

## Electrical Specifications, AISG

<b>AISG Connector</b>	8-pin DIN Female
<b>AISG Connector Standard</b>	IEC 60130-9
<b>Protocol</b>	AISG 1.1
<b>Voltage, AISG Mode</b>	10–30 Vdc

## Electrical Specifications

<b>Sub-module</b>	<b>1   2</b>
<b>Branch</b>	1
<b>Port Designation</b>	ANT
<b>License Band</b>	DCS 1800, LNA
<b>Return Loss - Bypass Mode, typical, dB</b>	14
<b>TX Band Rejection, minimum, dB</b>	85

## Electrical Specifications Rx (Uplink)

<b>Frequency Range, MHz</b>	<b>1710–1785</b>
<b>Bandwidth, MHz</b>	75
<b>Gain, nominal, dB</b>	12
<b>Gain Tolerance, dB</b>	±1
<b>Noise Figure, maximum, dB</b>	1.4
<b>Noise Figure, typical, dB</b>	1.3
<b>Group Delay Variation, maximum, ns</b>	50
<b>Group Delay Variation</b>	5

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## Bandwidth, MHz

Total Group Delay, maximum, ns 150

Output IP3, minimum, dBm 22

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 11

Group Delay Variation Bandwidth, MHz 5

Total Group Delay, maximum, ns 45

Return Loss, minimum, dB 18

RX Band Rejection, minimum, dB 40

Input Power, RMS, maximum, W 200

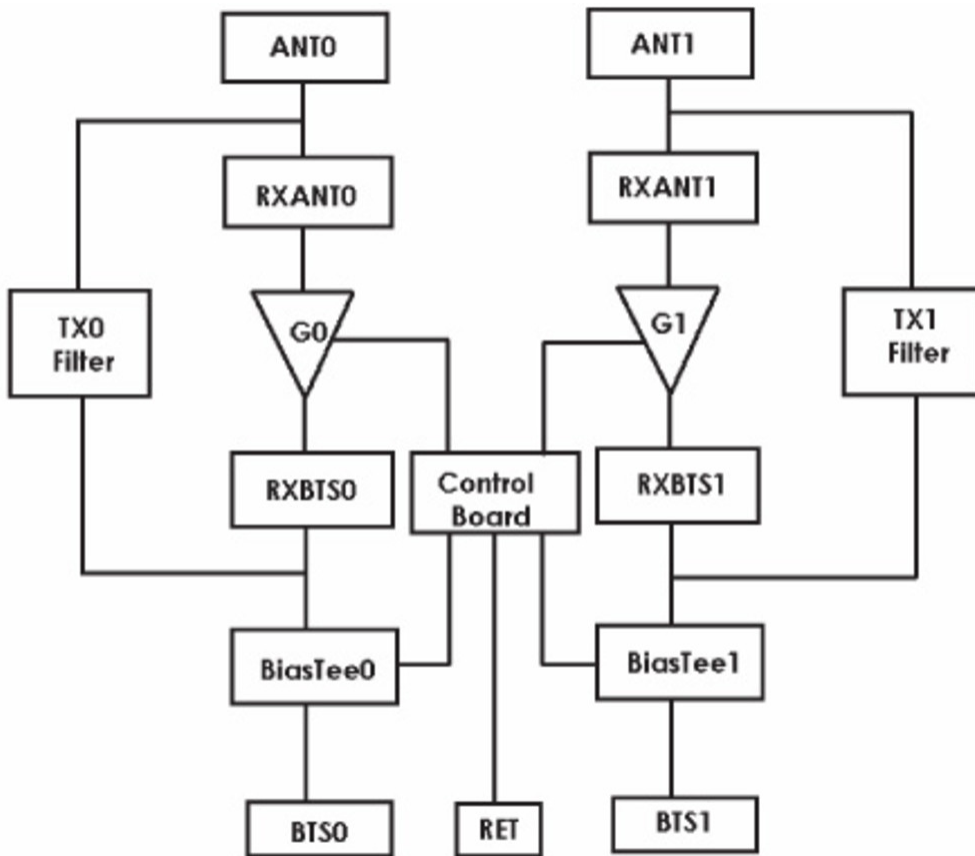
Input Power, PEP, maximum, W 5000

3rd Order PIM, maximum, dBc -155

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

**Weight, net** 5 kg | 11.023 lb

## Regulatory Compliance/Certifications

# E15S09P98

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**Agency**

ISO 9001:2015

**Classification**

Designed, manufactured and/or distributed under this quality management system

**\* Footnotes****License Band, LNA**

License Bands that have RxUplink amplification