

# E15S09P65

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## Tower Mounted Amplifier, Dual DCS 1800 with AISG 1.1

### **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

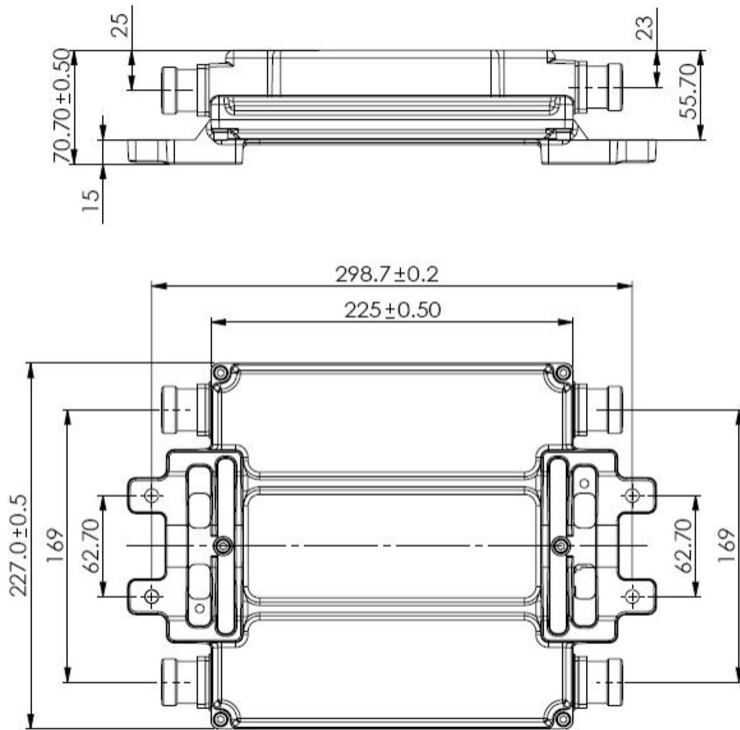
**Color** Gray  
**Modularity** 2-Twin  
**Mounting** Pole | Wall  
**Mounting Pipe Hardware** Band clamps (2)  
**RF Connector Interface** 7-16 DIN Female

## 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** 7–30 Vdc  
**Alarm Current, CWA Mode** 250 mA ±10 mA

## Electrical Specifications, AISG

**AISG Connector** 8-pin DIN Female  
**AISG Connector Standard** IEC 60130-9

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<b>Protocol</b>	AISG 1.1
<b>Voltage, AISG Mode</b>	10–30 Vdc

## Electrical Specifications

<b>Sub-module</b>	1   2
<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>	75

## Electrical Specifications Rx (Uplink)

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

## Electrical Specifications Tx (Downlink)

<b>Frequency Range, MHz</b>	1805–1880
<b>Bandwidth, MHz</b>	75
<b>Insertion Loss, maximum, dB</b>	0.7
<b>Insertion Loss Ripple, maximum, dB</b>	0.5
<b>Group Delay Variation,</b>	13

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maximum, ns

**Group Delay Variation** 5

**Bandwidth, MHz**

**Total Group Delay, maximum, ns** 45

**Return Loss, minimum, dB** 18

**RX Band Rejection, minimum, dB** 45

**Input Power, RMS, maximum, W** 200

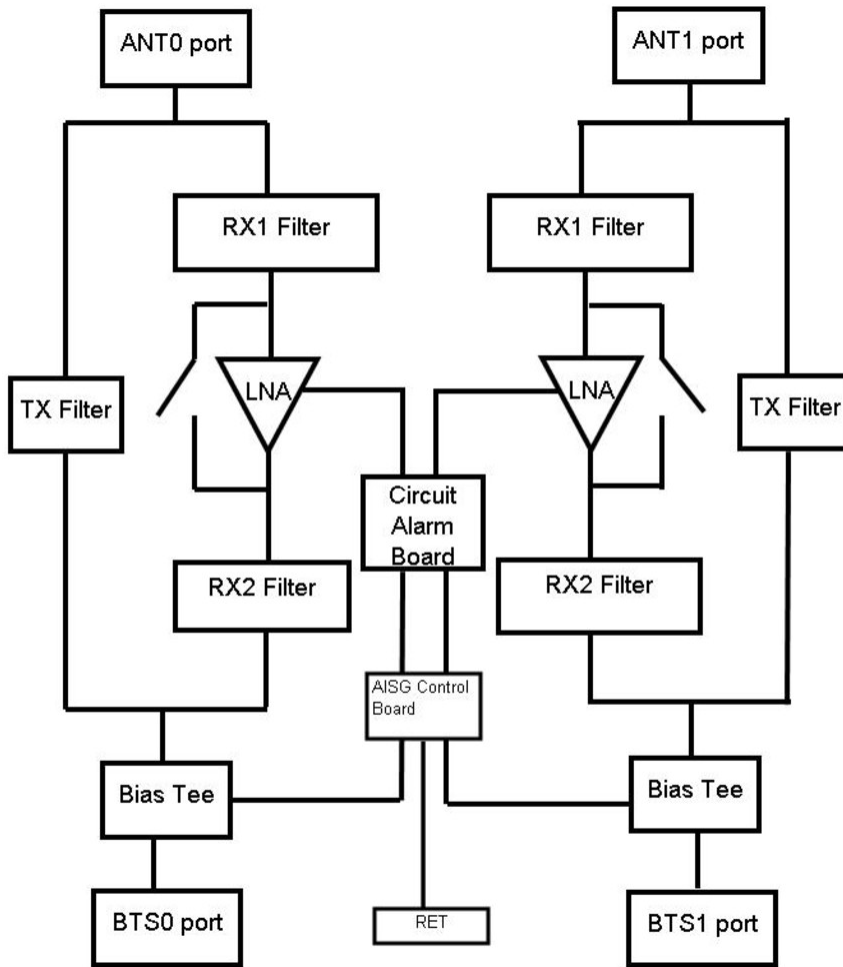
**Input Power, PEP, maximum, W** 5000

**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

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**Volume** 2.8 L  
**Weight, net** 4.5 kg | 9.921 lb

## Regulatory Compliance/Certifications

**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