

# E15S09P55



## Tower Mounted Amplifier, Dual UMTS 2100 with AISG

- Industry leading PIM performance

**OBSOLETE**

This product was discontinued on: December 30, 2024

**Replaced By:**

E14R00P07      Tower Mounted Amplifier, Dual UMTS 2100 with AISG, 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**      191 mm | 7.52 in

**Width**      170 mm | 6.693 in

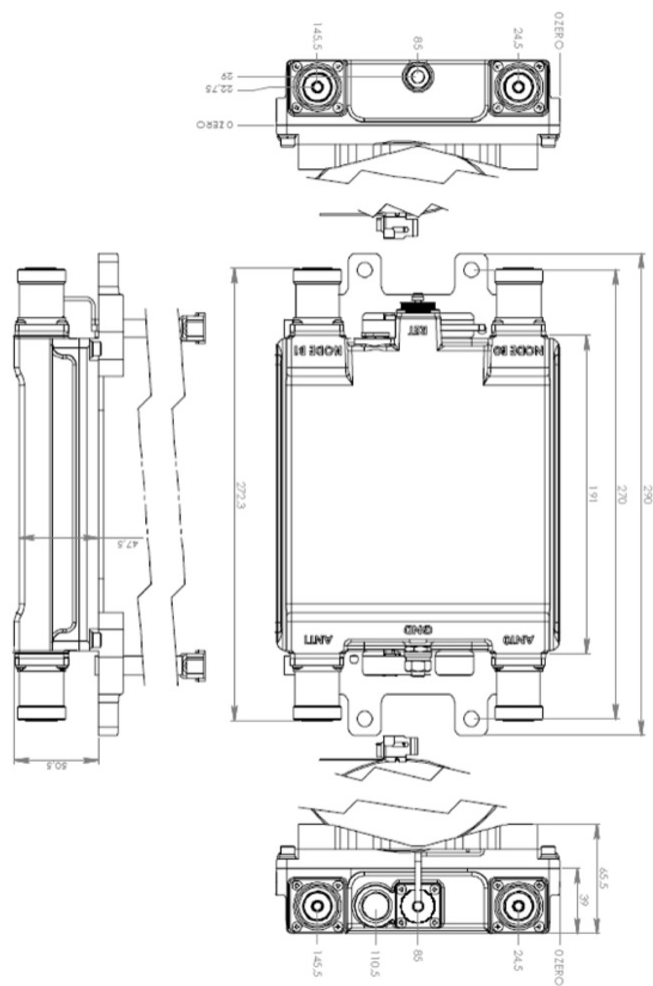
**Depth**      50.5 mm | 1.988 in

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

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

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## Outline Drawing



## Electrical Specifications

**License Band, LNA** IMT 2100

## 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>	100 mA @ 12 V
<b>Operating Current Tolerance</b>	±15 mA
<b>Voltage</b>	7–30 Vdc

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**Alarm Current, CWA Mode** 185 mA ±10 mA

## Electrical Specifications, AISG

**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  
**Branch** 1  
**Port Designation** ANT  
**License Band** IMT 2100, LNA  
**Return Loss - Bypass Mode, typical, dB** 19  
**TX Band Rejection, minimum, dB** 80

## Electrical Specifications Rx (Uplink)

**Frequency Range, MHz** 1920–1980  
**Bandwidth, MHz** 60  
**Gain, nominal, dB** 12  
**Gain Tolerance, dB** ±1  
**Noise Figure, maximum, dB** 1.4  
**Noise Figure, typical, dB** 1.2  
**Group Delay Variation, maximum, ns** 12  
**Group Delay Variation Bandwidth, MHz** 5  
**Total Group Delay, maximum, ns** 60  
**Return Loss, minimum, dB** 18  
**Insertion Loss - Bypass Mode, typical, dB** 2

## Electrical Specifications Tx (Downlink)

**Frequency Range, MHz** 2110–2170  
**Bandwidth, MHz** 60

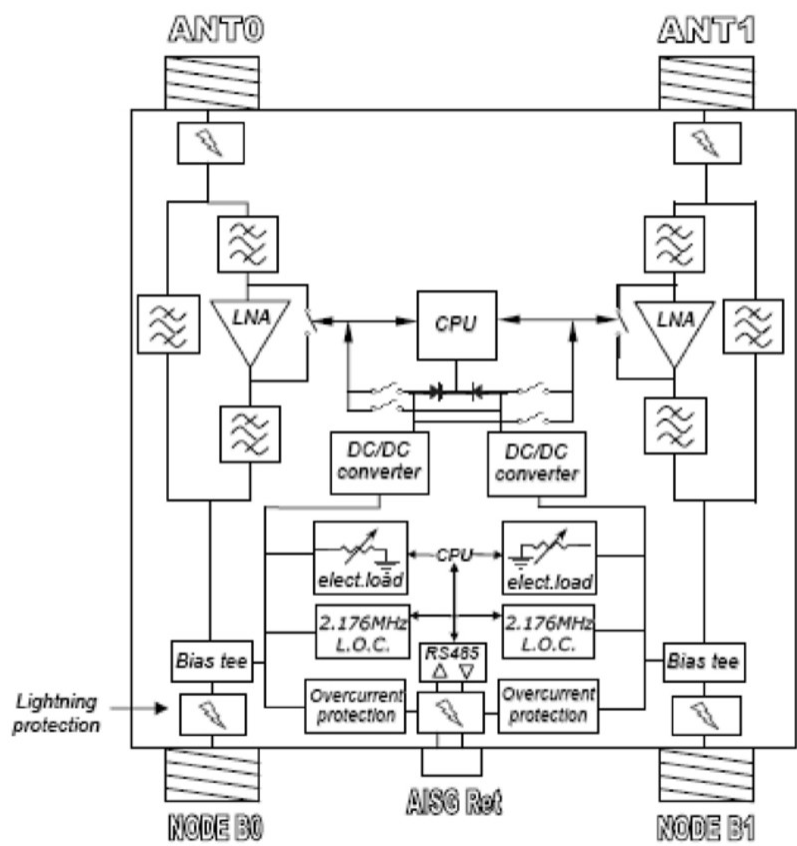
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Insertion Loss, maximum, dB	0.4
Insertion Loss Ripple, maximum, dB	0.1
Group Delay Variation, maximum, ns	3
Group Delay Variation Bandwidth, MHz	5
Total Group Delay, maximum, ns	18
Return Loss, minimum, dB	18
Input Power, RMS, maximum, W	160
Input Power, PEP, maximum, W	2500
3rd Order PIM, typical, dBc	-165
3rd Order PIM Test Method	Two +43 dBm carriers

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## Block Diagram



## Material Specifications

**Finish** Painted

## Mechanical Specifications

**Wind Speed, maximum** 198 km/h (123 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

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## Packaging and Weights

Included	Mounting hardware
Volume	1.6 L
Weight, net	3.3 kg   7.275 lb

## \* Footnotes

License Band, LNA	License Bands that have RxUplink amplification
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