

E15S09P40



Tower Mounted Amplifier, Twin PCS A-G with Variable Gain AISG

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

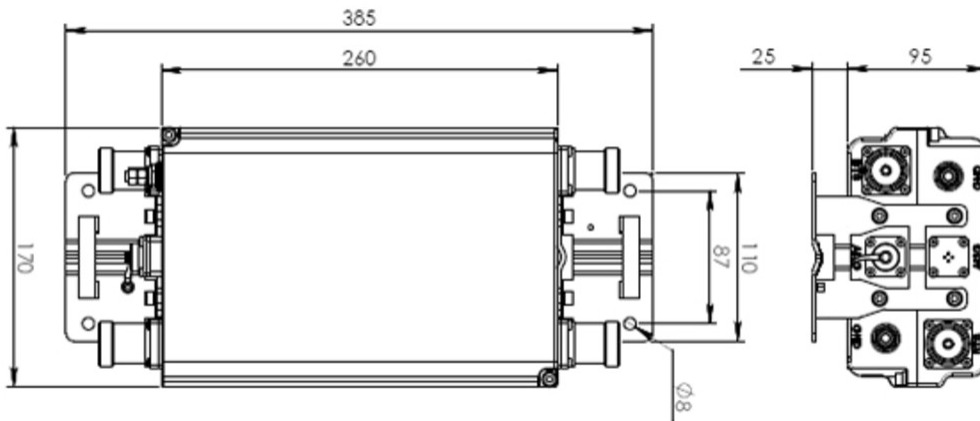
Depth 94 mm | 3.701 in

Ground Screw Diameter 6 mm | 0.236 in

Mounting Pipe Diameter Range 42.6–122 mm

Outline Drawing

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Electrical Specifications

License Band, LNA PCS 1900

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 | 135 mA @ 12 V |
| Operating Current Tolerance | ±10 mA |
| Voltage | 7–30 Vdc |
| Voltage, CWA Mode | 10–18 Vdc |
| Alarm Current, CWA Mode | 185 mA ±10 mA |

Electrical Specifications, AISG

| | |
|--------------------------------|---------------------|
| AISG Connector | 8-pin DIN Female |
| AISG Connector Standard | IEC 60130-9 |
| Default Protocol | AISG 2.0 |
| Protocol | AISG 1.1 AISG 2.0 |
| Voltage, AISG Mode | 10–30 Vdc |

Electrical Specifications

| | |
|-------------------------|-------|
| Sub-module | 1 2 |
| Branch | 1 |
| Port Designation | ANT |

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License Band PCS 1900, LNA

Electrical Specifications Rx (Uplink)

| | |
|---------------------------------------------|------------------|
| Frequency Range, MHz | 1850–1915 |
| Bandwidth, MHz | 65 |
| Gain, nominal, dB | 12 |
| Gain Tolerance, dB | ±1 |
| Gain Adjustment Range, dB | 12-4 |
| Gain Adjustment Range Increments, dB | 1 |
| Noise Figure, maximum, dB | 2 |
| Noise Figure at 8 dB, maximum, dB | 2.4 |
| Noise Figure at 4 dB, maximum, dB | 3 |
| Noise Figure, typical, dB | 1.3 |
| Noise Figure at 8 dB, typical, dB | 1.6 |
| Noise Figure at 4 dB, typical, dB | 2.3 |
| Group Delay Variation, maximum, ns | 50 |
| Group Delay Variation Bandwidth, MHz | 5 |
| Total Group Delay, maximum, ns | 150 |
| Output IP3, minimum, dBm | 26 |
| Output IP3 at 8 dB, minimum, dBm | 22 |
| Output IP3 at 4 dB, minimum, dBm | 18 |
| Return Loss, minimum, dB | 18 |

Electrical Specifications Tx (Downlink)

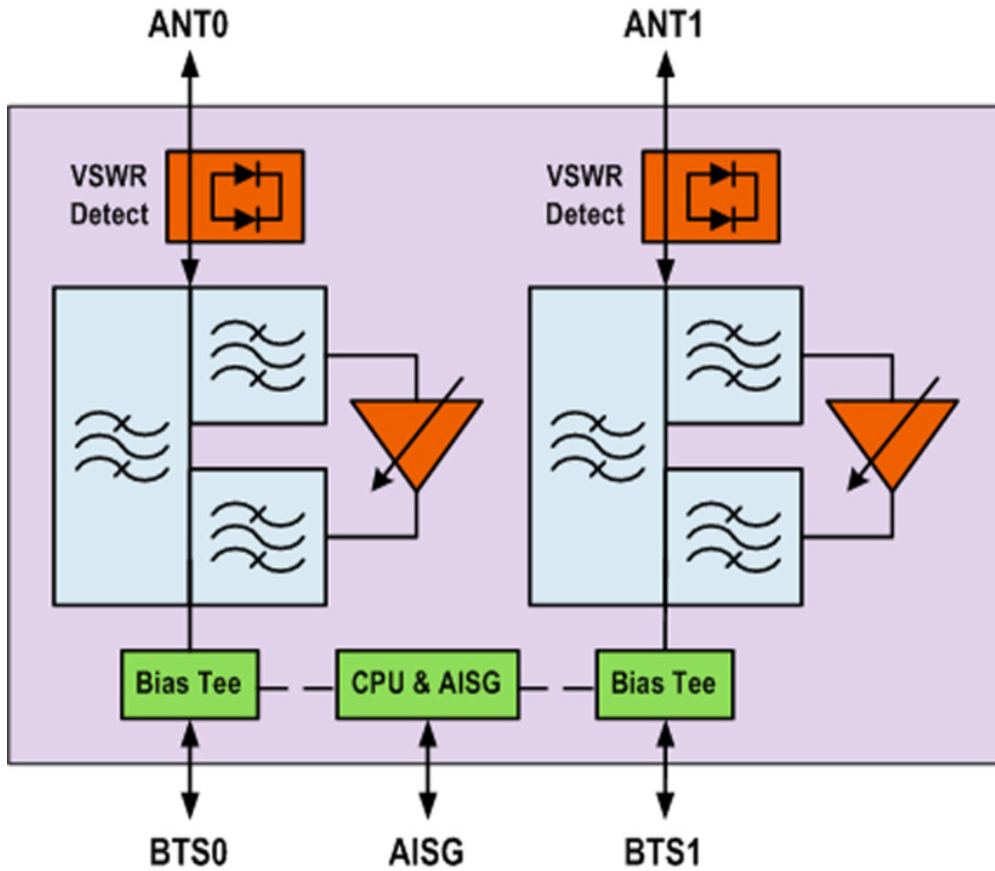
| | |
|-------------------------------------------|------------------|
| Frequency Range, MHz | 1930–1995 |
| Bandwidth, MHz | 65 |
| Insertion Loss, maximum, dB | 0.7 |
| Group Delay Variation, maximum, ns | 20 |

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| | |
|-------------------------------------------------|----------------------|
| Group Delay Variation Bandwidth, MHz | 5 |
| Total Group Delay, maximum, ns | 50 |
| Return Loss, minimum, dB | 18 |
| Input Power, RMS, maximum, W | 500 |
| Input Power, PEP, maximum, W | 5000 |
| 3rd Order PIM, maximum, dBc | -153 |
| 3rd Order PIM Test Method | Two +43 dBm carriers |
| VSWR Alarm Threshold, dB | 9.54 |
| VSWR Alarm Threshold Tolerance, dB | ±2 |

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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 4.1 L

Weight, net 6.6 kg | 14.55 lb

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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