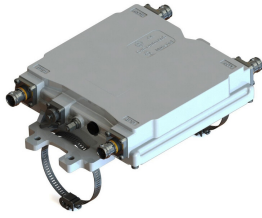


E14R00P02



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

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- TMA is operating in AISG & CWA mode, Alarm Current consumption CWA mode 190 mA
- Designed to boost UP-Link Coverage and KPIs
- RET interface to control antenna RET actuators with AISG standard
- Single AISG with 1 RET connector
- Automatic LNA by-pass function
- Built in lightning protection
- 1 device with 2 sub-units
- Connectors "in line"
- 2 input ports and 2 output ports

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 4.3-10 Female

Dimensions

Height 225 mm | 8.858 in

Width 227 mm | 8.937 in

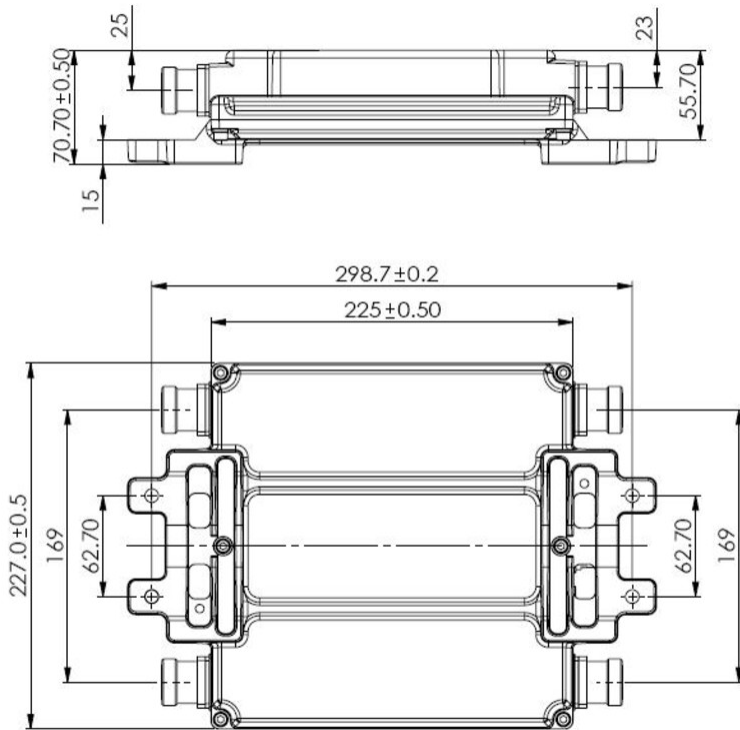
Depth 56 mm | 2.205 in

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 |
| Voltage | 9 Vdc |

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 |
| Voltage, CWA Mode | 10–18 Vdc |
| Alarm Current, CWA Mode | 195 mA ±15 mA |

Electrical Specifications, AISG

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| | |
|--------------------------------|------------------|
| 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 | 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 |
| Return Loss, minimum, dB | 18 |
| Insertion Loss - Bypass Mode, typical, dB | 3 |

Electrical Specifications Tx (Downlink)

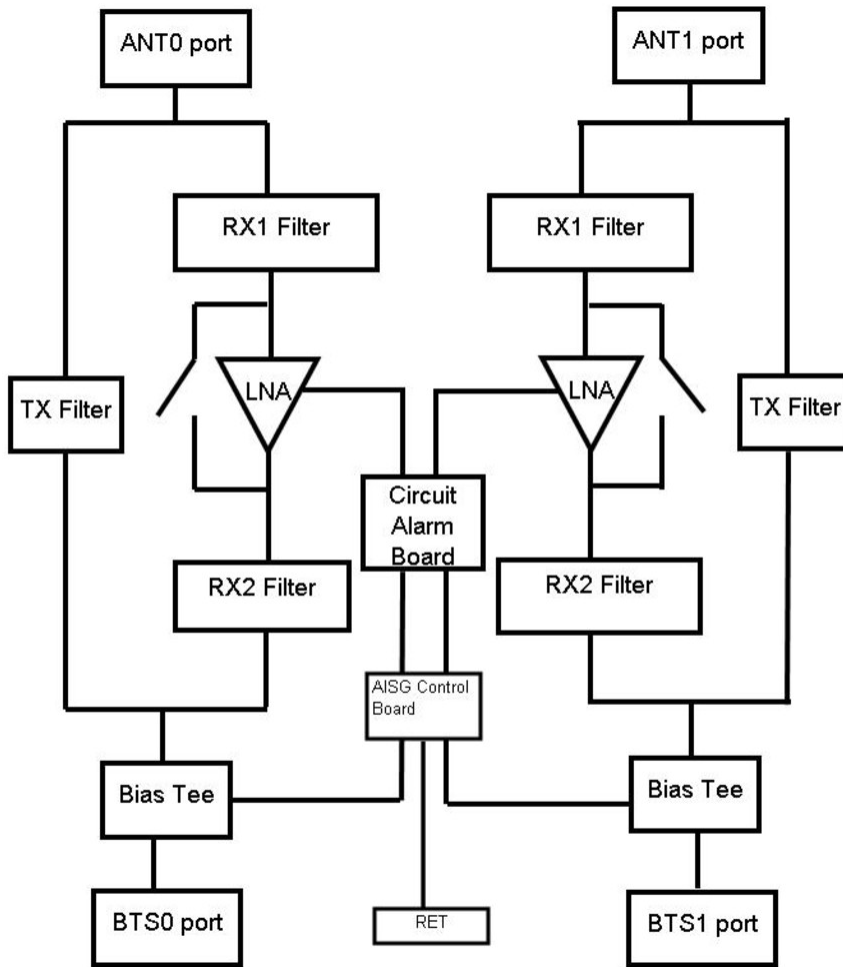
| | |
|------------------------------------|------------------|
| Frequency Range, MHz | 1805–1880 |
| Bandwidth, MHz | 75 |
| Insertion Loss, maximum, dB | 0.7 |
| Insertion Loss, typical, dB | 0.4 |

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| | |
|---|----------------------|
| 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, typical, dBc | -163 |
| 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

E14R00P02

Volume 2.8 L
Weight, net 4.5 kg | 9.921 lb

Regulatory Compliance/Certifications

| 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