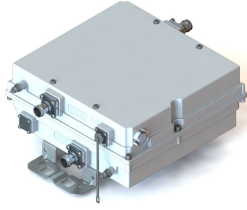


E14R00P43



Dual Band Tower Mounted Amplifier, 700//800 MHz, 12 dB, 2 BTS & 2 ANT ports, AISG with 2 RET connectors (1 device with 2 sub-units), with 4.3-10 connectors

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- 2 input ports and 2 output ports
- Designed to boost UP-Link Coverage and KPIs
- Automatic LNA by-pass function
- Connectors “in line”
- TMA is operating in AISG mode
- Dual AISG with 2 RET connectors
- 1 device with 2 sub-units
- Built in lightning protection

Product Classification

Product Type 1-BTS:1-ANT (Uniplex) | Tower mounted amplifier

General Specifications

Color Gray

Modularity 2-Twin

Mounting Pipe Hardware Band clamps (2)

RF Connector Interface 4.3-10 Female

Dimensions

Height 140 mm | 5.512 in

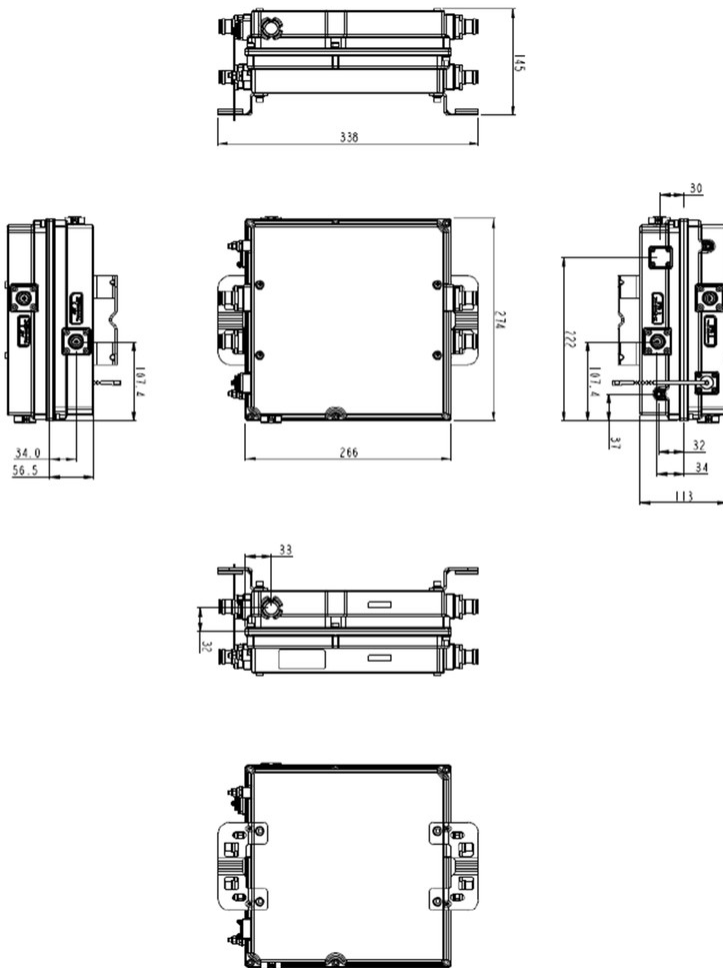
Width 177 mm | 6.969 in

Depth 260 mm | 10.236 in

Mounting Pipe Diameter Range 42.6–122 mm

E14R00P43

Outline Drawing



Electrical Specifications

| | |
|--------------------------------|-----------------------------|
| License Band, Band Pass | APT 700 |
| License Band, LNA | APT 700 CEL 900 EDD 800 |

Electrical Specifications, dc Power/Alarm

| | |
|---|---------------|
| dc Switching/Redundancy | Yes |
| Lightning Surge Current | 10 kA |
| Lightning Surge Current Waveform | 8/20 waveform |

Electrical Specifications, AISG

| | |
|-----------------------|------------------|
| AISG Connector | 8-pin DIN Female |
|-----------------------|------------------|

E14R00P43

| | |
|--------------------------------|-------------|
| AISG Connector Standard | IEC 60130-9 |
| Protocol | AISG 2.0 |
| Voltage, AISG Mode | 10–30 Vdc |

Electrical Specifications

| | | |
|---|------------------------------------|--------------|
| Sub-module | 1 2 | 1 2 |
| Branch | 1 | 2 |
| Port Designation | ANT 700 | ANT 800 |
| License Band | APT 700, Band Pass APT 700, LNA | EDD 800, LNA |
| Return Loss, typical, dB | 20 | 20 |
| Return Loss - Bypass Mode, typical, dB | 14 | 14 |

Electrical Specifications Rx (Uplink)

| | | |
|--|----------------|----------------|
| Frequency Range, MHz | 703–733 | 832–862 |
| Bandwidth, MHz | 30 | 30 |
| Gain, nominal, dB | 12 | 12 |
| Noise Figure, typical, dB | 1.25 | 1.3 |
| Group Delay Variation, maximum, ns | 30 | 60 |
| Group Delay Variation Bandwidth, MHz | 5 | 5 |
| Total Group Delay, maximum, ns | 120 | 220 |
| Total Group Delay, typical, ns | 90 | 180 |
| Return Loss, minimum, dB | 16 | 16 |
| Insertion Loss - Bypass Mode, typical, dB | 1.8 | 1.7 |

Electrical Specifications Tx (Downlink)

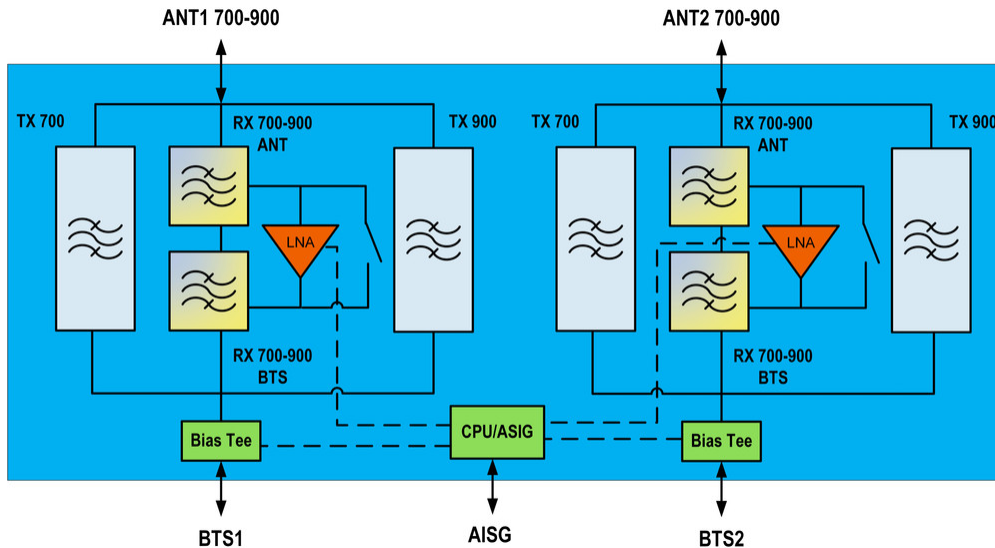
| | | |
|---|----------------|----------------|
| Frequency Range, MHz | 758–788 | 791–821 |
| Bandwidth, MHz | 30 | 30 |
| Insertion Loss, maximum, dB | 0.7 | 0.7 |
| Insertion Loss, typical, dB | 0.5 | 0.5 |
| Group Delay Variation, maximum, ns | 10 | 18 |
| Group Delay Variation Bandwidth, MHz | 5 | 5 |
| Total Group Delay, maximum, ns | 45 | 55 |
| Total Group Delay, typical, ns | 35 | 45 |
| Return Loss, minimum, dB | 18 | 18 |
| Return Loss, typical, dB | 20 | 20 |

E14R00P43

| | | |
|-------------------------------------|----------------------|----------------------|
| Input Power, RMS, maximum, W | 200 | 200 |
| Input Power, PEP, maximum, W | 1000 | 1000 |
| 3rd Order PIM, typical, dBc | -162 | -162 |
| 3rd Order PIM Test Method | Two +43 dBm carriers | Two +43 dBm carriers |

E14R00P43

Block Diagram



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 | 7 L |
| Weight, net | 11 kg 24.251 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

* Footnotes

| | |
|--------------------------------|---|
| License Band, Band Pass | License Bands that are to be passed through with no amplification |
| License Band, LNA | License Bands that have RxUplink amplification |