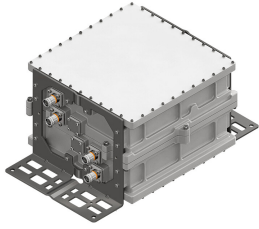


E16Z01P68



Penta Band Tower Mounted Amplifier, 700/850/900/1800/2100, 3 devices - 2 subunits each, with 4.3-10 connectors

- New 4.3-10 connectors for improved PIM performance and size reduction
- Industry leading PIM performance
- 2 input ports and 4 output ports
- Designed to boost UP-Link Coverage and KPIs
- 3 devices with 2 sub-units
- Single AISG with 1 RET connector
- RET interface to control antenna RET actuators with AISG standard

This product will be discontinued on: December 31, 2024

Product Classification

Product Type 1-BTS:2-ANT (Diplex) | 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 314 mm | 12.362 in

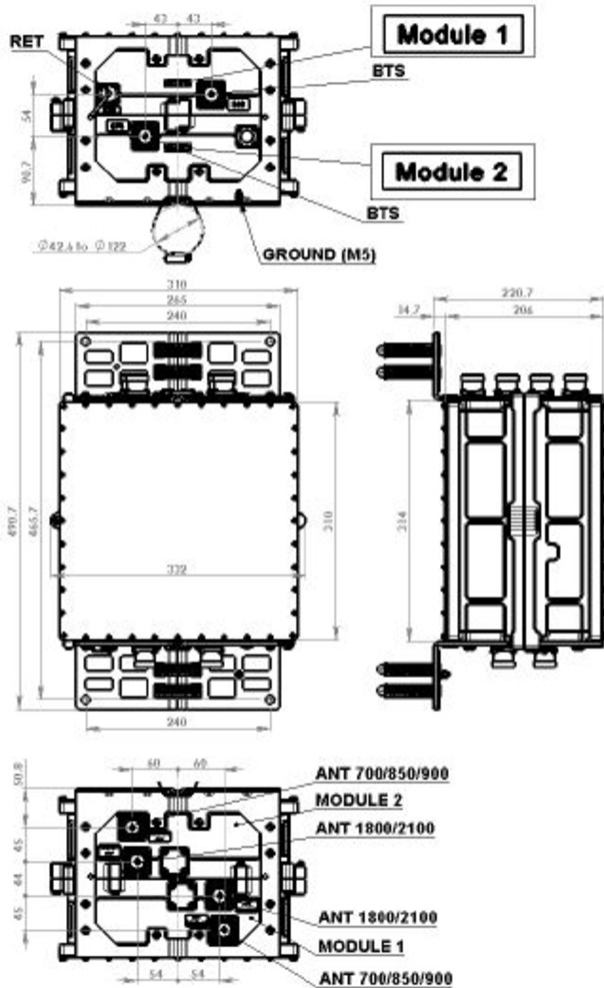
Width 310 mm | 12.205 in

Depth 206 mm | 8.11 in

Mounting Pipe Diameter Range 42.6–122 mm

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Outline Drawing



Electrical Specifications

License Band, Band Pass APT 700 | CEL 850 | CEL 900 | DCS 1800 | IMT 2100

License Band, LNA DCS 1800 | IMT 2100 | IMT 2600

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

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| | |
|--------------------------------|-------------|
| AISG Connector Standard | IEC 60130-9 |
| Protocol | AISG 2.0 |
| Voltage, AISG Mode | 7–30 Vdc |

Electrical Specifications

| Sub-module | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 |
|---|--|--------------|--------------|---------------------|---------------------|
| Branch | 1 | 2 | 3 | 4 | 5 |
| Port Designation | ANT1 | ANT | ANT | ANT | ANT |
| License Band | APT 700, Band Pass CEL 850, Band Pass CEL 900, Band Pass | | | DCS 1800, Band Pass | IMT 2100, Band Pass |
| Return Loss, typical, dB | 20 | 20 | 20 | 20 | 20 |
| Return Loss - Bypass Mode, typical, dB | 20 | 16 | 16 | 16 | 16 |

Electrical Specifications Rx (Uplink)

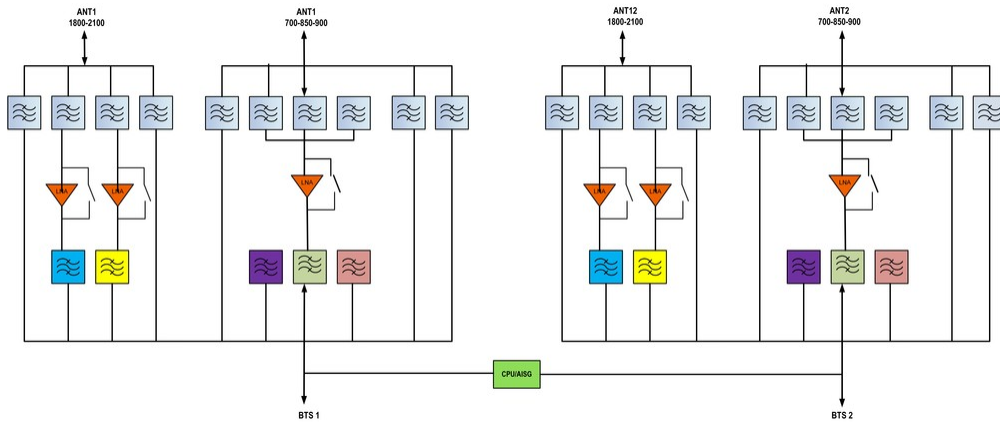
| Frequency Range, MHz | 723–748 | 825–835 | 906.8–915 | 1710–1785 | 1920–1980 |
|--|----------------|----------------|------------------|------------------|------------------|
| Bandwidth, MHz | 25 | 10 | 8.2 | 75 | 60 |
| Gain, nominal, dB | 12 | 12 | 12 | 12 | 12 |
| Noise Figure, typical, dB | 1.3 | 1.3 | 1.4 | 1.3 | 1.4 |
| Total Group Delay, typical, ns | 120 | 180 | 150 | 100 | 70 |
| Insertion Loss - Bypass Mode, typical, dB | 2.1 | 2.1 | 2.1 | 2.1 | 2 |

Electrical Specifications Tx (Downlink)

| Frequency Range, MHz | 778–803 | 870–880 | 951.8–960 | 1805–1880 | 2110–2170 |
|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Bandwidth, MHz | 25 | 10 | 8.2 | | 60 |
| Insertion Loss, typical, dB | 0.5 | 0.35 | 0.5 | 0.5 | 0.4 |
| Total Group Delay, typical, ns | 70 | 60 | 180 | 50 | 25 |
| Return Loss, typical, dB | 21 | 20 | 20 | 20 | 20 |
| Input Power, RMS, maximum, W | 200 | 200 | 200 | | 200 |
| Input Power, PEP, maximum, W | 2500 | 2500 | 2500 | | 2500 |
| 3rd Order PIM, typical, dBc | -160 | -160 | -160 | -160 | -160 |
| 3rd Order PIM Test Method | 2 x 20 W CW tones | 2 x 20 W CW tones | 2 x 20 W CW tones | 2 x 20 W CW tones | 2 x 20 W CW tones |

Block Diagram

E16Z01P68



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 | 19.8 L |
| Weight, net | 25.8 kg 56.879 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 |