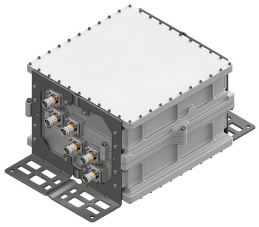
E16Z01P63



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 6 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

OBSOLETE

This product was discontinued on: December 31, 2024

Product Classification

Product Type	1-BTS:2-ANT (Diplex) | Tower mounted amplifier

General Specifications

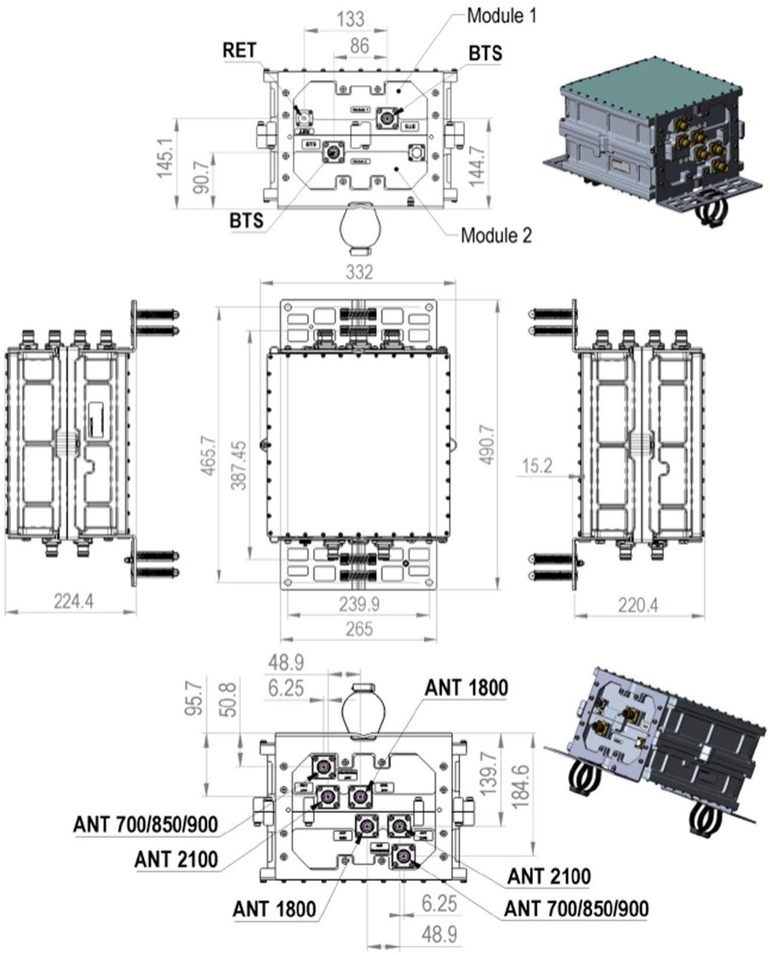
Color	Gray
Modularity	2-Twin
Mounting	Pole | Wall
Mounting Pipe Hardware	Band clamps (2)
RF Connector Interface	4.3-10 Female

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

Outline Drawing

E16Z01P63



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
AISG Connector Standard	IEC 60130-9

E16Z01P63

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)

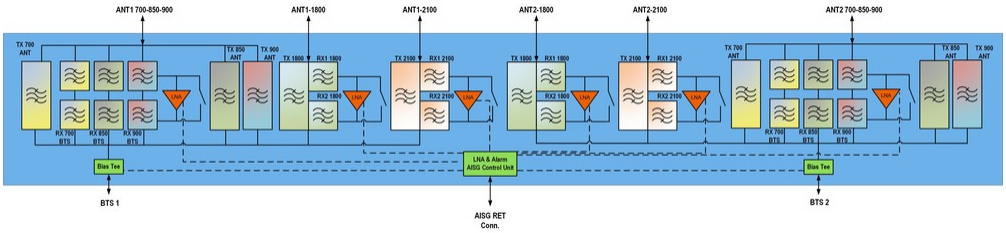
Frequency Range, MHz	**723–748**	**825–835**	**906.8–915**	**1710–1785**	**1920–1980**
Bandwidth, MHz	25	10	8.2	75	60
Gain, nominal, dB	12	12	12	12	12
Noise Figure, typical, dB	1.3	1.3	1.4	1.3	1.4
Total Group Delay, typical, ns	120	180	150	100	70
Insertion Loss - Bypass Mode, typical, dB	2.1	2.1	2.1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

E16Z01P63



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