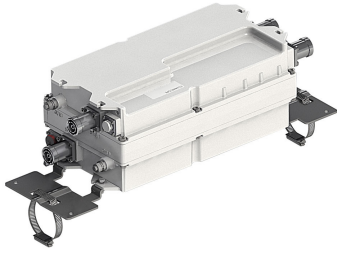


E15Z01P13



Tower Mounted Amplifier, Twin Diplexed Dual Band 850/1900 with AISG

Product Classification

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

General Specifications

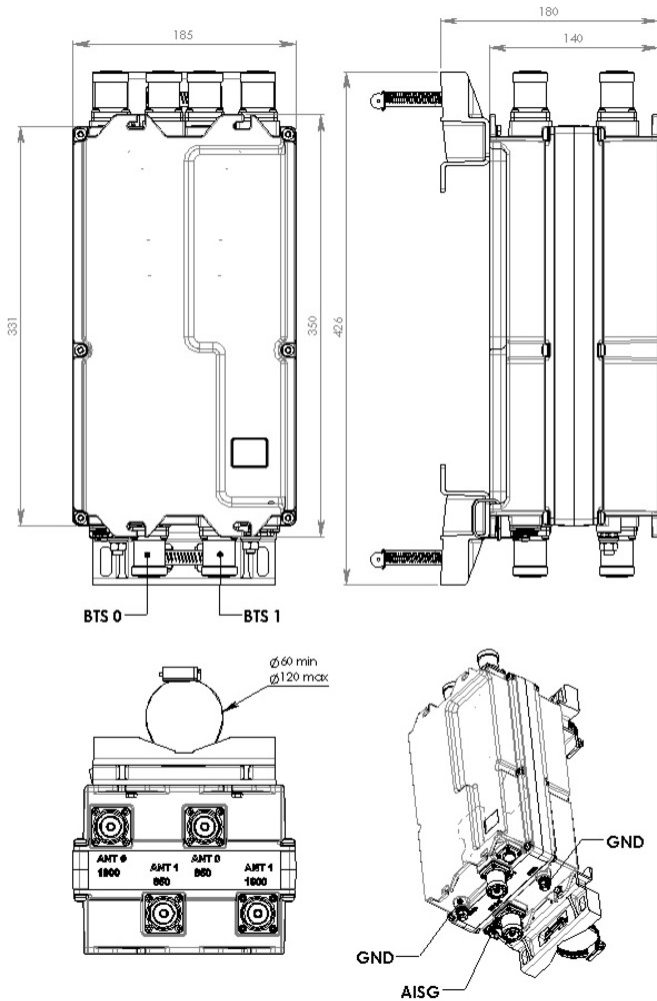
Color Gray
Modularity 2-Twin
Mounting Pipe Hardware Band clamps (2)
RF Connector Interface 7-16 DIN Female
RF Connector Interface Body Style Long neck

Dimensions

Height 330 mm | 12.992 in
Width 184 mm | 7.244 in
Depth 140 mm | 5.512 in
Ground Screw Diameter 6 mm | 0.236 in
Mounting Pipe Diameter Range 50–120 mm

E15Z01P13

Outline Drawing



Electrical Specifications

License Band, LNA

CEL 850 | PCS 1900

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy

No

Lightning Surge Current

5 kA

Lightning Surge Current Waveform

8/20 waveform

Operating Current at Voltage

240 mA @ 12 V | 70 mA @ 24 V

Operating Current Tolerance

$\pm 30 \text{ mA}$

Voltage

7–30 Vdc

E15Z01P13

Voltage, CWA Mode	10–18 Vdc
Alarm Current, CWA Mode	30–170 mA @ 10–18 V

Electrical Specifications, AISG

AISG Carrier	2.176 MHz ± 100 ppm
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	1 2
Branch	1	2
Port Designation	ANT 850	ANT 1900
License Band	CEL 850, LNA	PCS 1900, LNA
Return Loss - Bypass Mode, typical, dB	18	18
TX Band Rejection, minimum, dB	80	80

Electrical Specifications Rx (Uplink)

Frequency Range, MHz	824–849	1850–1910
Bandwidth, MHz	25	60
Gain, nominal, dB	12	12
Gain Tolerance, dB	+1.3/-1.0	+1.3/-1.0
Noise Figure, typical, dB	1.1	1.5
Group Delay Variation, maximum, ns	270	50
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	370	180
Output IP3, minimum, dBm	25	21
Return Loss, minimum, dB	18	18
Insertion Loss - Bypass Mode, typical, dB	2	3

Electrical Specifications Tx (Downlink)

Frequency Range, MHz	869–894	1930–1990
Bandwidth, MHz	25	60

E15Z01P13

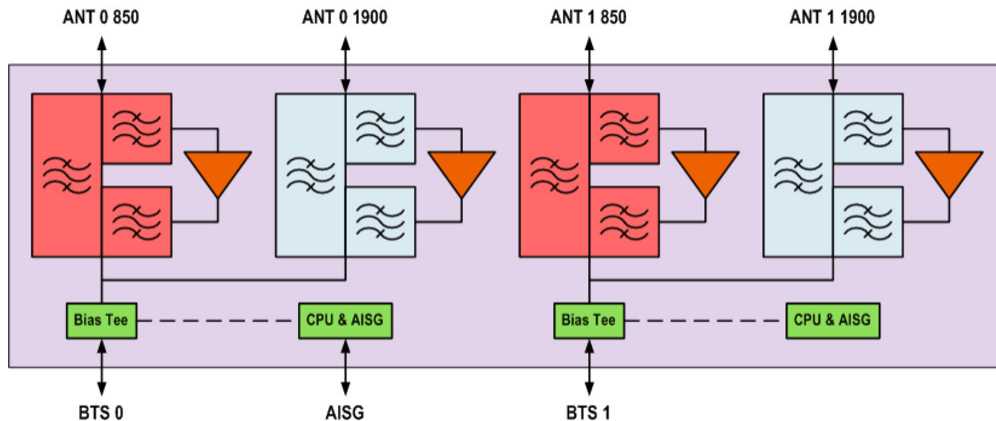
Insertion Loss, maximum, dB	0.5	0.9
Group Delay Variation, maximum, ns	25	20
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	65	60
Return Loss, minimum, dB	18	18
Input Power, RMS, maximum, W	500	300
Input Power, PEP, maximum, W	5000	3000
3rd Order PIM, typical, dBc	-155	-155
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones

Electrical Specifications, Band Reject

Frequency Range, MHz	851–856
Attenuation, minimum, dB	30

E15Z01P13

Block Diagram



Material Specifications

Finish Painted

Mechanical Specifications

Wind Loading @ Velocity, maximum 60.0 N @ 115 km/h (13.5 lbf @ 115 km/h)

Wind Speed, maximum 200 km/h (124 mph)

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

Weight, net 10.9 kg | 24.03 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