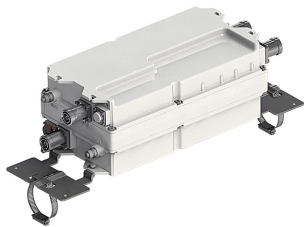


# E15Z01P13



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

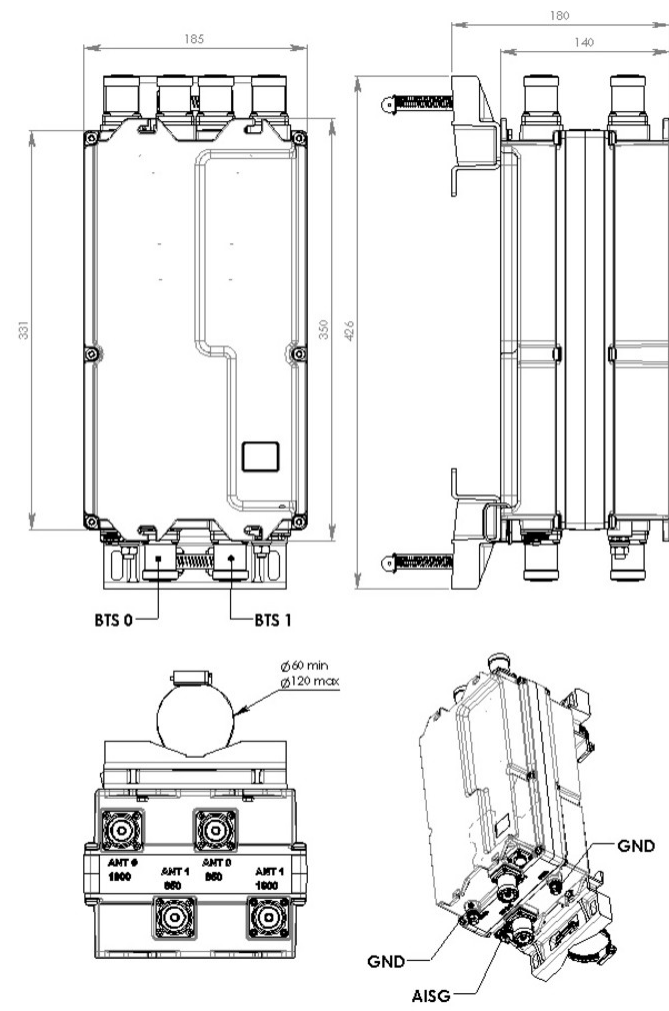
**Depth** 140 mm | 5.512 in

**Ground Screw Diameter** 6 mm | 0.236 in

**Mounting Pipe Diameter Range** 50–120 mm

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## Outline Drawing



## Electrical Specifications

**License Band, LNA** CEL 850 | PCS 1900

## Electrical Specifications, dc Power/Alarm

<b>dc Switching/Redundancy</b>	No
<b>Lightning Surge Current</b>	5 kA
<b>Lightning Surge Current Waveform</b>	8/20 waveform
<b>Operating Current at Voltage</b>	240 mA @ 12 V   70 mA @ 24 V
<b>Operating Current Tolerance</b>	±30 mA
<b>Voltage</b>	7–30 Vdc

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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

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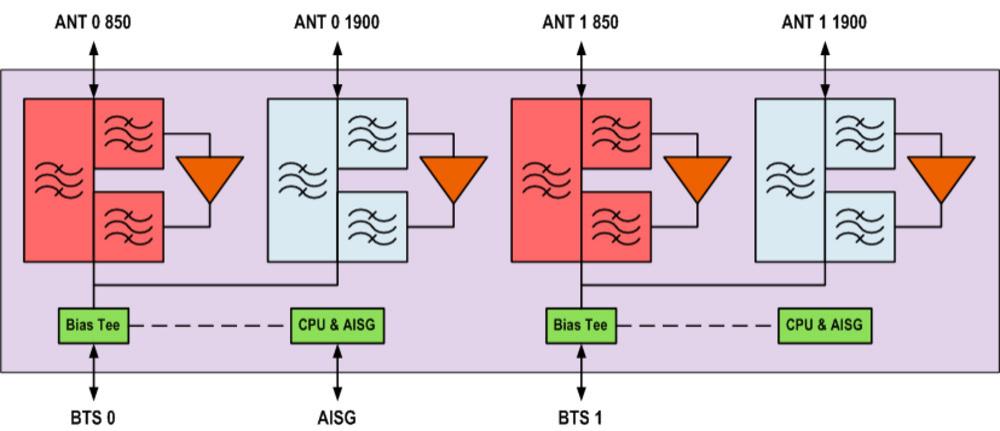
Insertion Loss, maximum, dB	0.5	0.9
Group Delay Variation, maximum, ns	25	20
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	65	60
Return Loss, minimum, dB	18	18
Input Power, RMS, maximum, W	500	300
Input Power, PEP, maximum, W	5000	3000
3rd Order PIM, typical, dBc	-155	-155
3rd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

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## 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