

# E15Z01P17

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

## Product Classification

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

## General Specifications

**Color** Gray

**Modularity** 1-Single

**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

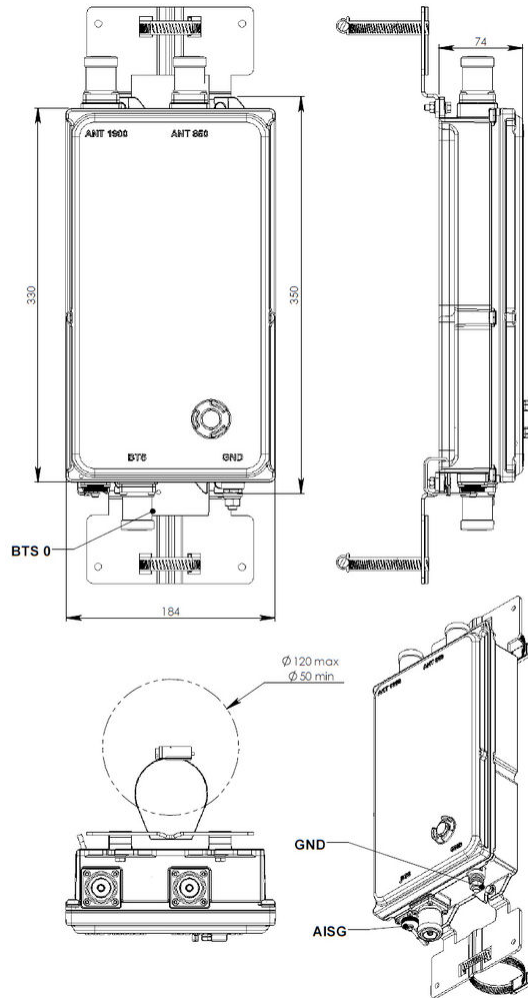
**Depth** 74 mm | 2.913 in

**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
<b>Voltage, CWA Mode</b>	10–18 Vdc

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**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

<b>Sub-module</b>	<b>1</b>	<b>1</b>
<b>Branch</b>	1	2
<b>Port Designation</b>	ANT 850	ANT 1900
<b>License Band</b>	CEL 850, LNA	PCS 1900, LNA

## Electrical Specifications Rx (Uplink)

<b>Frequency Range, MHz</b>	<b>824–849</b>	<b>1850–1910</b>
<b>Bandwidth, MHz</b>	25	60
<b>Gain, nominal, dB</b>	12	12
<b>Gain Tolerance, dB</b>	+1.3/-1.0	+1.3/-1.0
<b>Noise Figure, typical, dB</b>	1.1	1.5
<b>Group Delay Variation, maximum, ns</b>	270	50
<b>Group Delay Variation Bandwidth, MHz</b>	5	5
<b>Total Group Delay, maximum, ns</b>	370	180
<b>Output IP3, minimum, dBm</b>	25	21
<b>Return Loss, minimum, dB</b>	18	18
<b>Insertion Loss - Bypass Mode, typical, dB</b>		3
<b>Return Loss - Bypass Mode, typical, dB</b>		18
<b>TX Band Rejection, minimum, dB</b>		80

## Electrical Specifications Tx (Downlink)

<b>Frequency Range, MHz</b>	<b>869–894</b>	<b>1930–1990</b>
<b>Bandwidth, MHz</b>	25	60
<b>Insertion Loss, maximum, dB</b>	0.5	0.9
<b>Group Delay Variation, maximum, ns</b>	25	20

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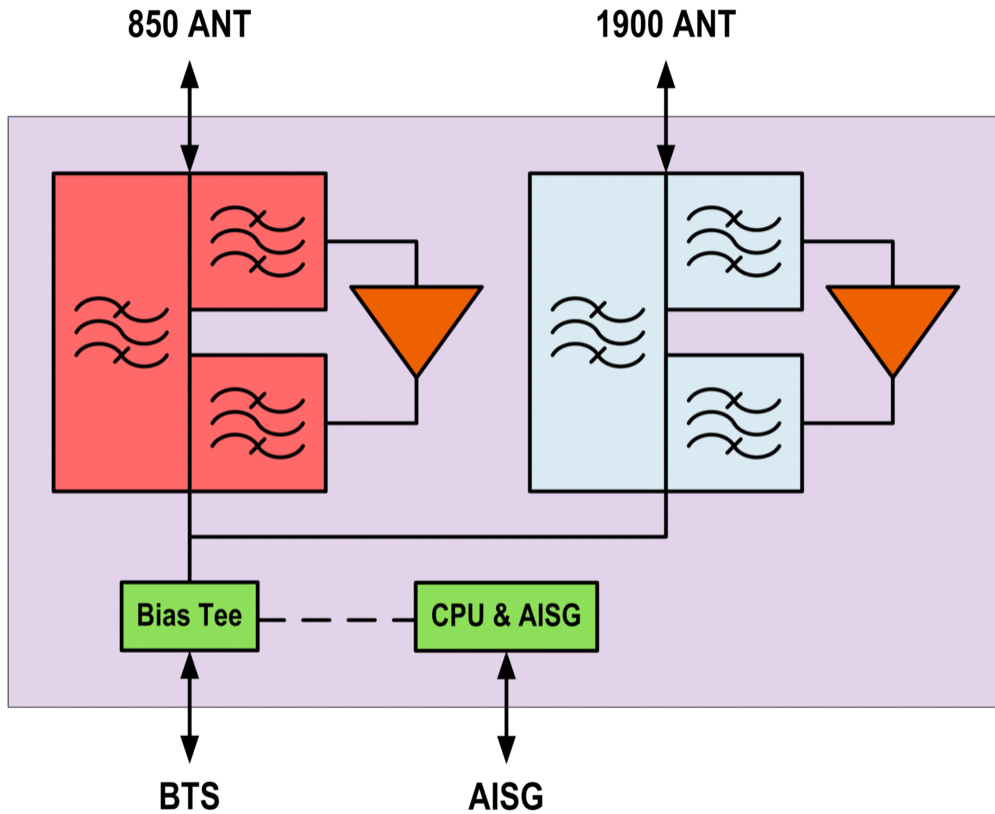
<b>Group Delay Variation Bandwidth, MHz</b>	5	5
<b>Total Group Delay, maximum, ns</b>	65	60
<b>Return Loss, minimum, dB</b>	18	18
<b>Input Power, RMS, maximum, W</b>	500	300
<b>Input Power, PEP, maximum, W</b>	5000	3000
<b>3rd Order PIM, maximum, dBc</b>	-155	-155
<b>3rd Order PIM Test Method</b>	2 x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

## Electrical Specifications, Band Reject

<b>Frequency Range, MHz</b>	<b>851–856</b>
<b>Attenuation, minimum, dB</b>	30

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## Block Diagram



## Material Specifications

**Finish** Painted

## Mechanical Specifications

**Wind Loading at Velocity, maximum** 60 N @ 115 km/h

## 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

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## Packaging and Weights

<b>Included</b>	Mounting hardware
<b>Weight, net</b>	5 kg   11.023 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



## \* Footnotes

<b>License Band, LNA</b>	License Bands that have RxUplink amplification
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