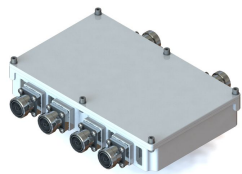


## Twin Tower Mounted Amplifier WCS with 700-850 Bypass AISG



### Product Classification

**Product Type** Tower mounted amplifier

### General Specifications

**RF Connector Interface** 7-16 DIN Female

**RF Connector Interface Body Style** Long neck

### Dimensions

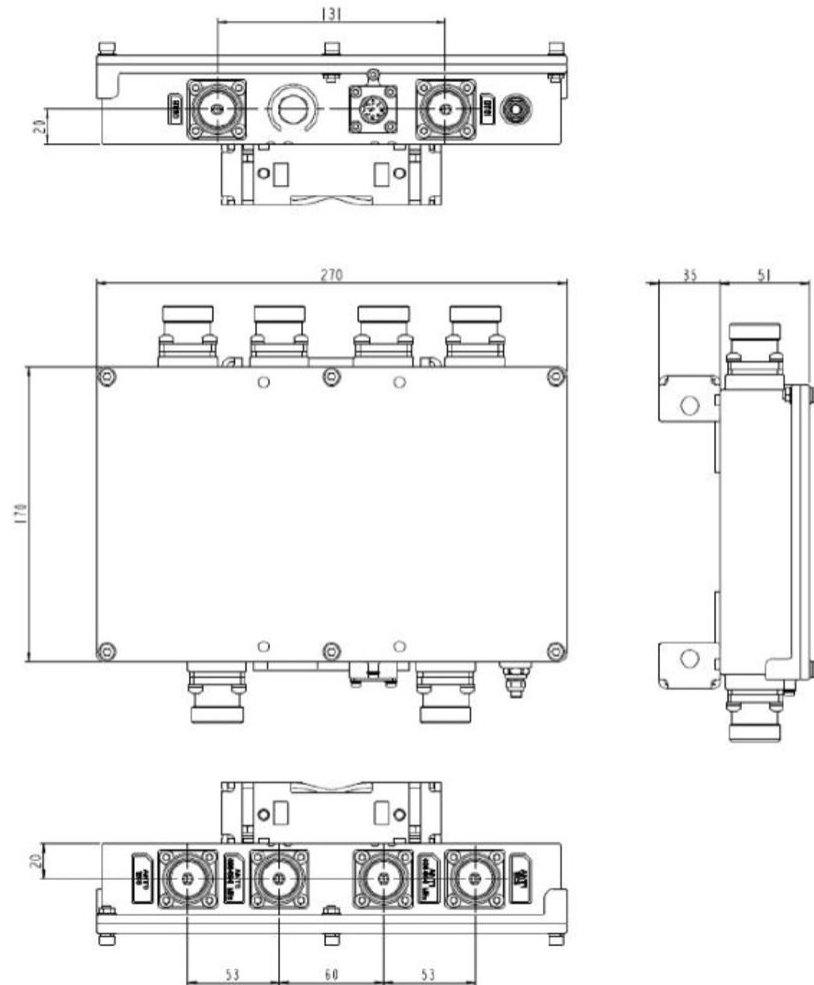
**Height** 170 mm | 6.693 in

**Width** 270 mm | 10.63 in

**Depth** 50 mm | 1.969 in

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## Outline Drawing



## Electrical Specifications

**License Band, Band Pass** CEL 850 | LMR 750 | LMR 800 | USA 700 | USA 750

**License Band, LNA** WCS 2300

## Electrical Specifications, Common Port

**Composite Power, RMS** 200 W

## Electrical Specifications, dc Power/Alarm

**Lightning Surge Current** 10 kA

**Lightning Surge Current Waveform** 8/20 waveform

**Operating Current at Voltage** 210 mA @ 12 Vdc

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**Voltage, CWA Mode** 10–18 Vdc

## Electrical Specifications, AISG

**AISG Carrier** 2.176 MHz ± 100 ppm

**AISG Connector** 8-pin DIN Female

**AISG Connector Standard** IEC 60130-9

**Protocol** AISG 1.1 | AISG 2.0

**Voltage, AISG Mode** 10–30 Vdc

## Electrical Specifications

<b>Sub-module</b>	<b>1   2</b>	<b>1   2</b>
<b>Branch</b>	1	2
<b>Port Designation</b>	ANT 1 698-894	ANT 0 WCS
<b>AISG 2.0 Device Subunit</b>		E25A01P03 1/2
<b>License Band</b>	[10, 11, 15, 16, 4]	WCS 2300, LNA

## Electrical Specifications Rx (Uplink)

<b>Frequency Range, MHz</b>	<b>2305–2315</b>
<b>Gain, nominal, dB</b>	13
<b>Gain Tolerance, dB</b>	1
<b>Noise Figure, typical, dB</b>	1.7

## Electrical Specifications Tx (Downlink)

<b>Frequency Range, MHz</b>	<b>2350–2360</b>
<b>Insertion Loss, maximum, dB</b>	0.6
<b>Insertion Loss, typical, dB</b>	0.5
<b>Total Group Delay, maximum, ns</b>	50
<b>Return Loss, minimum, dB</b>	18
<b>Return Loss, typical, dB</b>	20
<b>Input Power, RMS, maximum, W</b>	200
<b>Input Power, PEP, maximum, W</b>	3000
<b>3rd Order PIM, typical, dBc</b>	-153
<b>3rd Order PIM Test Method</b>	Two +43 dBm carriers

## Electrical Specifications, Band Pass

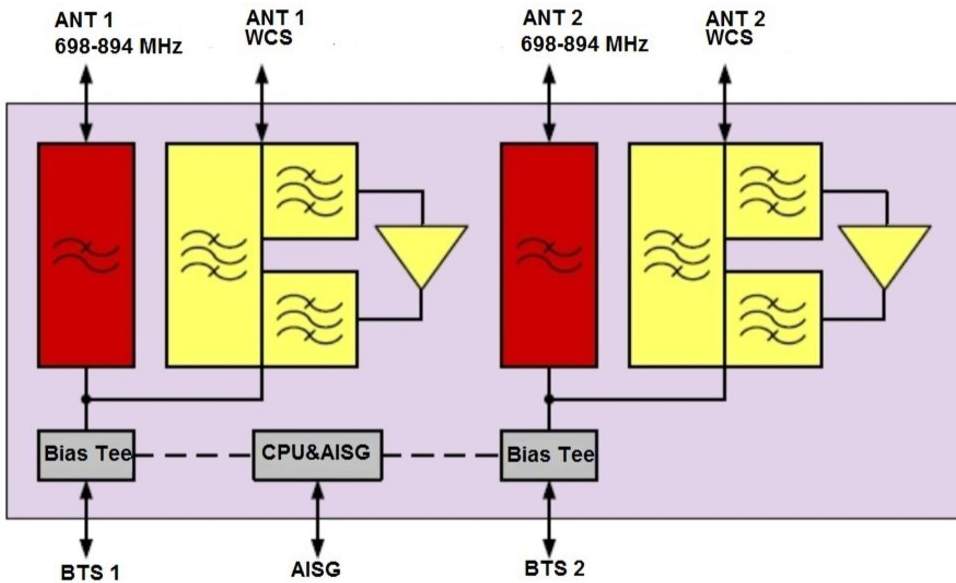
<b>Frequency Range, MHz</b>	<b>698–894</b>
<b>Insertion Loss, maximum, dB</b>	0.2

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<b>Return Loss, minimum, dB</b>	18
<b>Return Loss, typical, dB</b>	20
<b>Isolation, minimum, dB</b>	60
<b>Input Power, RMS, maximum, W</b>	200
<b>Input Power, PEP, maximum, W</b>	3000
<b>3rd Order PIM, maximum, dBc</b>	-153

## Block Diagram



## Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +65 °C (-40 °F to +149 °F)
<b>Relative Humidity</b>	Up to 100%
<b>Corrosion Test Method</b>	IEC 60068-2-11, 30 days
<b>Ingress Protection Test Method</b>	IEC 60529:2001, IP67

## Packaging and Weights

<b>Weight, net</b>	4.2 kg   9.259 lb
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## \* Footnotes

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**License Band, Band Pass** License Bands that are to be passed through with no amplification

**License Band, LNA** License Bands that have RxUplink amplification