

### Tower Mounted Amplifier, Cellular 850

#### **OBSOLETE**

This product was discontinued on: June 30, 2022

#### **Product Classification**

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

### General Specifications

**Color** Gray

**Modularity** 1-Single

Mounting Pipe HardwareBand clamps (2)RF Connector Interface7-16 DIN Female

RF Connector Interface Body Style Long neck

#### Dimensions

 Height
 330 mm | 12.992 in

 Width
 184 mm | 7.244 in

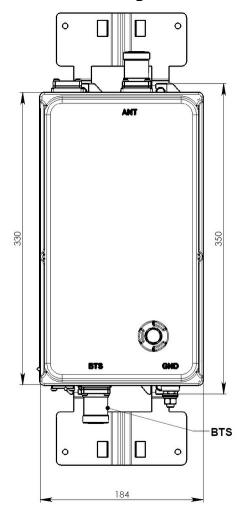
 Depth
 74 mm | 2.913 in

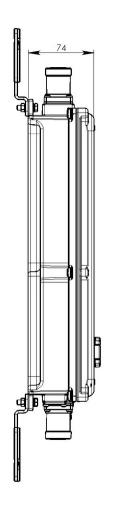
 Ground Screw Diameter
 6 mm | 0.236 in

 Mounting Pipe Diameter Range
 50-120 mm



## Outline Drawing





## **Electrical Specifications**

License Band, LNA CEL 850

## 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 100 mA @ 12 V

**Operating Current Tolerance** ±15 mA

**Voltage** 7–30 Vdc

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10-18 Vdc Voltage, CWA Mode

Alarm Current, CWA Mode 180-200 mA @ 10-18 V

## **Electrical Specifications**

Sub-module **Branch** 1 **Port Designation ANT** 

**License Band CEL 850, LNA** 

## Electrical Specifications Rx (Uplink)

Frequency Range, MHz 824-849 Bandwidth, MHz 25 Gain, nominal, dB 12 Gain Tolerance, dB ±1.0 Noise Figure, typical, dB 1.1 **Group Delay Variation,** 270 maximum, ns **Group Delay Variation** 5 Bandwidth, MHz Total Group Delay, maximum, 370

Output IP3, minimum, dBm 25 18 Return Loss, minimum, dB

## Electrical Specifications Tx (Downlink)

869-894 Frequency Range, MHz Bandwidth, MHz 25 Insertion Loss, maximum, dB 0.5 25 **Group Delay Variation,** maximum, ns 5 **Group Delay Variation** Bandwidth, MHz Total Group Delay, maximum, 65 Return Loss, minimum, dB 18 Input Power, RMS, maximum, 500 5000 Input Power, PEP, maximum,

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W

3rd Order PIM, maximum, dBc -155

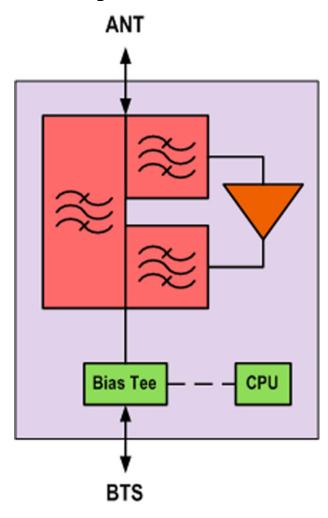
**3rd Order PIM Test Method** 2 x 20 W CW tones

Electrical Specifications, Band Reject

Frequency Range, MHz 851-856

Attenuation, minimum, dB 30

## Block Diagram



Material Specifications

**Finish** Painted

Mechanical Specifications

Wind Loading @ Velocity, maximum  $60.0 \text{ N} \otimes 115 \text{ km/h} (13.5 \text{ lbf} \otimes 115 \text{ km/h})$ 

**Environmental Specifications** 

**Operating Temperature**  $-40 \,^{\circ}\text{C} \text{ to } +65 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +149 \,^{\circ}\text{F})$ 

**Relative Humidity** Up to 100%

**Corrosion Test Method** IEC 60068-2-11, 30 days

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Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

IncludedMounting hardwareWeight, net5 kg | 11.023 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

