

Twin In-Band Diplexer 850A , DC/AISG on LTE, 4.3-10 connectors

- Enables LTE carrier to share the RF path with other UMTS services
- Optimized for 5 MHz LTE carrier on A-Block
- LTE port supports 850MHz EARFCN 2475 through 2477
- UMTS port supports 850MHz UARFCN 4357
- Narrow guard band to maximize utilization of licensed spectrum
- DC/AISG pass on LTE port

Product Classification

Product Type Diplexer

Dimensions

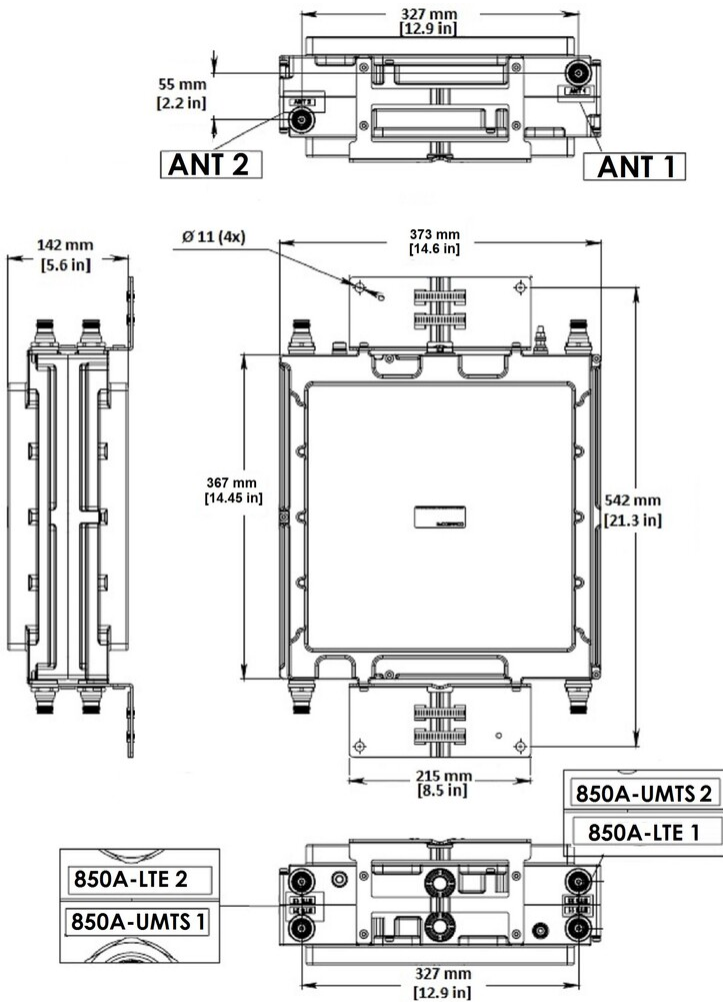
Height 367 mm | 14.449 in

Width 373 mm | 14.685 in

Depth 142 mm | 5.591 in

Ground Screw Diameter 6 mm | 0.236 in

Outline Drawing



Electrical Specifications

5th Order IMD Test Method	Two +43 dBm carriers
5th Order IMD, maximum	-155 dBc
License Band	CEL 850
Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform

Electrical Specifications, Rx (Uplink)

Frequency Band	829.25 – 833.95 MHz
Insertion Loss, maximum	1.8 dB
Return Loss, minimum	18 dB
Isolation, minimum	27 dB

TD-850A-05-43 | E14Z00P13

Port Designation 850A-LTE

Total Group Delay, maximum 380 ns

Electrical Specifications 2, Rx (Uplink)

Frequency Band 824.25 – 828.42 MHz

Isolation, minimum 27 dB

Port Designation 850A-UMTS

Total Group Delay, maximum 380 ns

Insertion Loss, maximum 1.8 dB

Return Loss, minimum 18 dB

Electrical Specifications, Tx (Downlink)

Frequency Band 874.25 – 878.95 MHz

Isolation, minimum 27 dB

Input Power, PEP, maximum 120 W

Input Power, RMS, maximum 750 W

Total Group Delay, maximum 380 ns

Insertion Loss, maximum 1.8 dB

Return Loss, minimum 18 dB

Electrical Specifications 2, Tx (Downlink)

Frequency Band 869.25 – 873.42 MHz

Input Power, PEP, maximum 120 W

Input Power, RMS, maximum 750 W

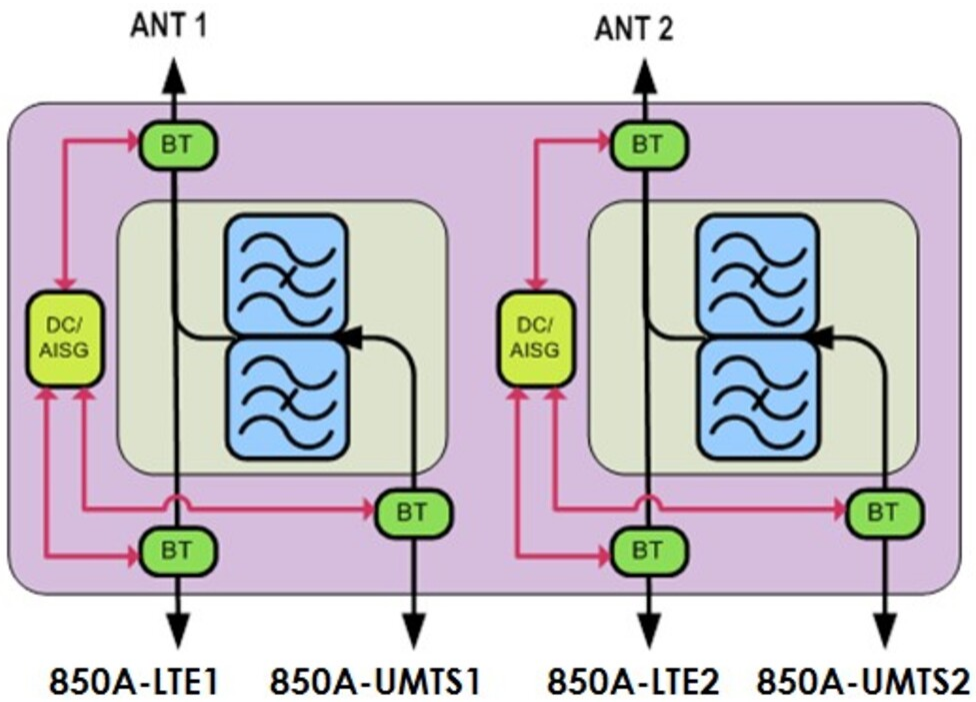
Insertion Loss, maximum 1.8 dB

Isolation, minimum 27 dB

Return Loss, minimum 18 dB

Total Group Delay, maximum 380 ns

Block Diagram



Environmental Specifications

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Ingress Protection Test Method	IEC 60529:2001, IP67

Packaging and Weights

Weight, net	17.6 kg 38.801 lb
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