Twin Dual Duplexer Shelf, 850 RXAIT

### Product Classification

**Product Type**
- Duplexer shelf

### General Specifications

**Application**
- Indoor

**Antenna Interface**
- 7-16 DIN Female

**BTS Interface**
- 7-16 DIN Female

**Color**
- Black | Copper

**Rack Type**
- EIA 19 in

**Rack Units**
- 2

**Rx Interface**
- N Female

**Rx2 Interface**
- SMA Female

### Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Metric</th>
<th>Inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>88.1 mm</td>
<td>3.469 in</td>
</tr>
<tr>
<td>Width</td>
<td>482.6 mm</td>
<td>19 in</td>
</tr>
<tr>
<td>Depth</td>
<td>377.6 mm</td>
<td>14.866 in</td>
</tr>
</tbody>
</table>
Electrical Specifications

3rd Order IMD Test Method
Two +43 dBm carriers

3rd Order IMD, maximum
-150 dBm

dc Interface
SMA Female

dc Pass-through
Rx

License Band
Cellular

Electrical Specifications, Rx (Uplink)

Band Rejection at Operating Frequency
27 dB @ 800–814 MHz | 30 dB @ 851–869 MHz | 50 dB @ 700–800 MHz | 50 dB @ 960–6000 MHz

Bandwidth
25 MHz
Frequency Band: 824 – 849 MHz

**Group Delay Variation at Frequency, maximum**
- 150 ns @ 5.00 MHz
- 75 ns @ 1.23 MHz

**Insertion Loss, maximum**
- 1.8 dB

**Insertion Loss, typical**
- 0.5 dB

**Return Loss, minimum**
- 18 dB

**Total Group Delay, maximum**
- 280 ns

**Tx Band Rejection**
- 80 dB

---

**Electrical Specifications 2, Rx (Uplink)**

**Bandwidth**
- 25 MHz

**Frequency Band**
- 824 – 849 MHz

**Group Delay Variation at Frequency, maximum**
- 40 ns @ 1.23 MHz
- 80 ns @ 5.00 MHz

**Total Group Delay, maximum**
- 150 ns

**Tx Band Rejection**
- 80 dB

**Insertion Loss, maximum**
- 1 dB

**Insertion Loss, typical**
- 0.8 dB

**Return Loss, minimum**
- 18 dB

---

**Electrical Specifications, Tx (Downlink)**

**Band Rejection at Operating Frequency**
- 20 dB @ 896–902 MHz

**Bandwidth**
- 25 MHz

**Frequency Band**
- 869 – 894 MHz

**Group Delay Variation at Frequency, maximum**
- 100 ns @ 5.00 MHz
- 50 ns @ 1.23 MHz

**Input Power, PEP, maximum**
- 12000 W

**Input Power, RMS, maximum**
- 800 W

**Rx Band Rejection**
- 80 dB

**Total Group Delay, maximum**
- 200 ns

**Insertion Loss, maximum**
- 0.9 dB

**Insertion Loss, typical**
- 0.4 dB

**Return Loss, minimum**
- 18 dB

---

**Block Diagram**
Environmental Specifications

**Operating Temperature**
0 °C to +50 °C (+32 °F to +122 °F)

**Ingress Protection Test Method**
IEC 60529:2001, IP30

**Packaging and Weights**

**Weight, without mounting hardware**
14.7 kg | 32.408 lb