Tower Mounted Amplifier

TTA-DB112x

700 / 900 | Twin TMA | AISG v2.0 | Fixed Gain

- 700 / 900, Twin TMA, AISG v2.0, Fixed Gain
- Available in single mode or independent AISG
- Increases coverage and capacity
- Helps to minimize site acquisition issues
- Reduces the cost of network expansion

<table>
<thead>
<tr>
<th>Ordering Options</th>
<th>Connector Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Mode (1x AISG)</td>
<td>TTA-DB112H</td>
</tr>
<tr>
<td>Independent AISG (2x AISG)</td>
<td>TTA-DB112N</td>
</tr>
</tbody>
</table>

**RF Characteristics**

**Downlink (TX) Path**

<table>
<thead>
<tr>
<th>Frequency Band</th>
<th>Insertion Loss (typical)</th>
<th>Return Loss</th>
<th>Continuous Average Power (53 dBM)</th>
<th>Intermodulation (2x43 dBM TX carrier, BTS Port)</th>
</tr>
</thead>
<tbody>
<tr>
<td>753-798 MHz</td>
<td>0.4 dB</td>
<td>≥ 18 dB</td>
<td>200 W</td>
<td>-117 dBm in RX band, ANT port</td>
</tr>
<tr>
<td>925-960 MHz</td>
<td>0.4 dB</td>
<td>≥ 18 dB</td>
<td></td>
<td>-117 dBm in RX band, ANT port</td>
</tr>
</tbody>
</table>

**Uplink (RX) Path**

<table>
<thead>
<tr>
<th>Frequency Band</th>
<th>Gain (nominal)</th>
<th>Return Loss</th>
<th>Noise Figure (typical)</th>
<th>Insertion Loss, Bypass Mode (typical)</th>
<th>Return Loss, Bypass Mode</th>
<th>Output IP3</th>
</tr>
</thead>
<tbody>
<tr>
<td>713-743 MHz</td>
<td>12 dB</td>
<td>≥ 16 dB</td>
<td>1.1 dB</td>
<td>1.7 dB</td>
<td>≥ 12 dB</td>
<td>&gt; 25 dBm</td>
</tr>
<tr>
<td>880-915 MHz</td>
<td>12 dB</td>
<td>≥ 16 dB</td>
<td>1.1 dB</td>
<td>1.7 dB</td>
<td>≥ 12 dB</td>
<td>&gt; 25 dBm</td>
</tr>
</tbody>
</table>

**Power Supply and Alarm - AISG Mode**

- DC Supply Voltage: 24 V DC nominal (9-31 V DC)
- Power Consumption: < 4 W
- Control Protocol: 3GPP/AISG v2.0

**Environmental Characteristics**

- Operating Temperature Range: -40° to +65° C (-40° to +149° F)
- Operation: ETS 300 019-1-4 Class 4.1E
- Storage: ETS 300 019-1-1 Class 1.2
- Ingress Protection: IP67
- EMC: EN 301 489-8
- Safety Standards: EN 60950
- Lighting Protection: ANT, BTS 10 kA 8/20 μs, RET Port 5 kA common mode
- MTBF (minimum): 1 Mh/TMA

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.
### Tower Mounted Amplifier

**TTA-DB112x**

*700 / 900 | Twin TMA | AISG v2.0 | Fixed Gain*

#### Mechanical Characteristics

<table>
<thead>
<tr>
<th>Connector</th>
<th>(Number, Type)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTS</td>
<td>(2x) 7/16-DIN Female or 4.3/10 Female</td>
</tr>
<tr>
<td>ANT</td>
<td>(4x) 7/16-DIN Female or 4.3/10 Female</td>
</tr>
<tr>
<td>AISG</td>
<td>(1x) 8-Pin Circular Female</td>
</tr>
<tr>
<td></td>
<td>(2x) 8-Pin Circular Female</td>
</tr>
</tbody>
</table>

#### Dimensions - Length x Width x Depth

- **TTA-DB112x**: 265 x 245 x 147 mm (10.4 x 9.6 x 5.8 in)
- **Gross Weight**: < 12.0 kg (< 26.5 lbs)

#### Connectors

- **BTS**: (2x) 7/16-DIN Female or 4.3/10 Female
- **ANT**: (4x) 7/16-DIN Female or 4.3/10 Female
- **AISG**: (1x) 8-Pin Circular Female
- **Independent Mode Model**: (2x) 8-Pin Circular Female

### Color

- NCS 1502-R

### Mounting

- Hose clamps, arbitrary orientation

#### Block Diagram

![Block Diagram](image-url)