Dual Band Tower Mounted Amplifier, 700//800 MHz, 12 dB, 2 BTS & 2 ANT ports, AISG with 1 RET connector (1 device with 2 sub-units), with 4.3-10 connectors

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- 2 input ports and 2 output ports
- Designed to boost UP-Link Coverage and KPIs
- Automatic LNA by-pass function
- Connectors "in line"
- TMA is operating in AISG mode
- Single AISG with 1 RET connector
- 1 device with 2 sub-units
- Built in lightning protection

Product Classification

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

General Specifications

Color
Gray

Modularity
2-Twin

Mounting Pipe Hardware
Band clamps (2)

RF Connector Interface
4.3-10 Female

Dimensions

Height
140 mm | 5.512 in

Width
177 mm | 6.969 in

Depth
260 mm | 10.236 in

Mounting Pipe Diameter Range
42.6–122 mm

Outline Drawing
Electrical Specifications

License Band, Band Pass  APT 700
License Band, LNA  APT 700 | CEL 900 | EDD 800

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy  Yes
Lightning Surge Current  10 kA
Lightning Surge Current Waveform  8/20 waveform

Electrical Specifications, AISG

AISG Connector  8-pin DIN Female
AISG Connector Standard  IEC 60130-9
**Electrical Specifications**

<table>
<thead>
<tr>
<th>Sub-module</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Port Designation</td>
<td>ANT 700</td>
<td>ANT 800</td>
</tr>
<tr>
<td>License Band</td>
<td>APT 700, Band Pass</td>
<td>EDD 800, LNA</td>
</tr>
</tbody>
</table>

| Return Loss, typical, dB | 20 |
| Return Loss - Bypass Mode, typical, dB | 14 |

**Electrical Specifications Rx (Uplink)**

<table>
<thead>
<tr>
<th>Frequency Range, MHz</th>
<th>703–733</th>
<th>832–862</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bandwidth, MHz</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Gain, nominal, dB</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Noise Figure, typical, dB</td>
<td>1.25</td>
<td>1.3</td>
</tr>
<tr>
<td>Group Delay Variation, maximum, ns</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Group Delay Variation Bandwidth, MHz</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total Group Delay, maximum, ns</td>
<td>120</td>
<td>220</td>
</tr>
<tr>
<td>Total Group Delay, typical, ns</td>
<td>90</td>
<td>180</td>
</tr>
<tr>
<td>Return Loss, minimum, dB</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Insertion Loss - Bypass Mode, typical, dB</td>
<td>1.8</td>
<td>1.7</td>
</tr>
</tbody>
</table>

**Electrical Specifications Tx (Downlink)**

<table>
<thead>
<tr>
<th>Frequency Range, MHz</th>
<th>758–788</th>
<th>791–821</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bandwidth, MHz</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Insertion Loss, maximum, dB</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Insertion Loss, typical, dB</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Group Delay Variation, maximum, ns</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Group Delay Variation Bandwidth, MHz</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total Group Delay, maximum, ns</td>
<td>45</td>
<td>55</td>
</tr>
<tr>
<td>Total Group Delay, typical, ns</td>
<td>35</td>
<td>45</td>
</tr>
<tr>
<td>Return Loss, minimum, dB</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Return Loss, typical, dB</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Input Power, RMS, maximum, W</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>
### Environmental Specifications

**Operating Temperature**
-40 °C to +65 °C (-40 °F to +149 °F)

**Relative Humidity**
Up to 100%

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

**Ingress Protection Test Method**
IEC 60529:2001, IP67

### Packaging and Weights

**Included**
Mounting hardware

**Volume**
7 L

**Weight, net**
11 kg | 24.251 lb

### Regulatory Compliance/Certifications

**Agency**
ISO 9001:2015

**Classification**
Designed, manufactured and/or distributed under this quality management system

*Footnotes*

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

License Bands that have RxUplink amplification