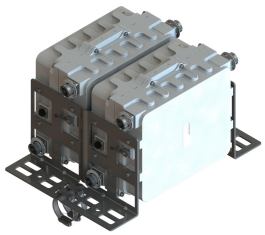
# TMA2T7UC8-11V | E15R02P58



2pack Twin Compact TMA 700uC/850MHz, Diplexed BTS/ANT, Variable Gain and AISG

- Support DC/AISG antenna Auto-forward

OBSOLETE

## Product Classification

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

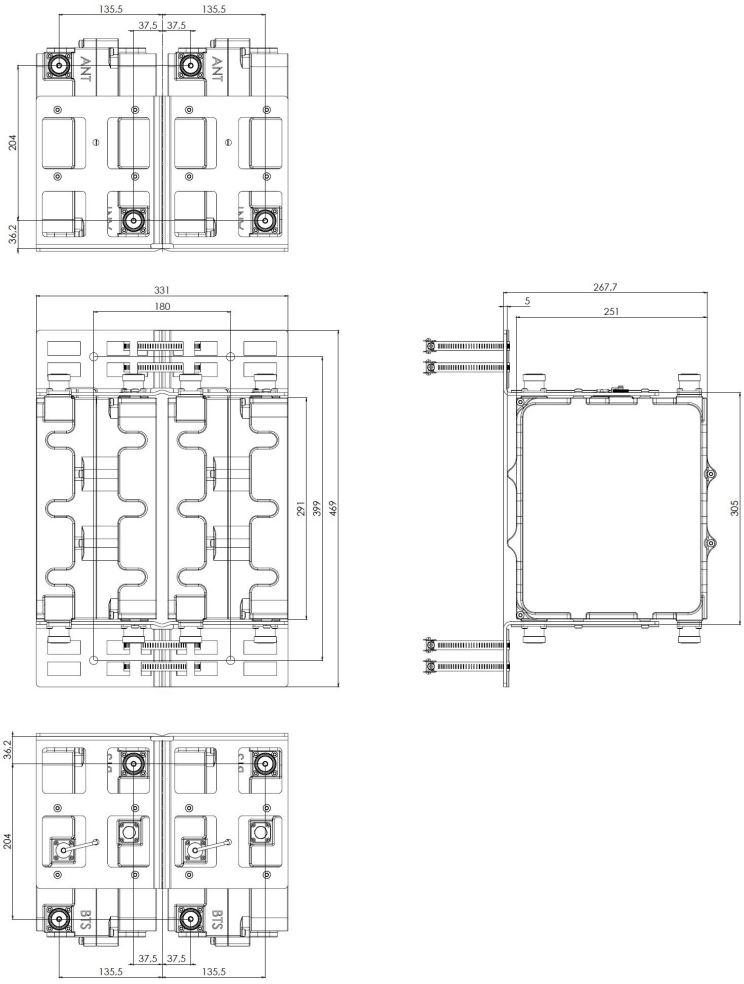
## General Specifications

| | |
|---|---|
| **Color** | Gray |
| **Modularity** | 2-Twin |
| **Mounting** | Pole \| Wall |
| **Mounting Pipe Hardware** | Band clamps (4) |
| **RF Connector Interface** | 7-16 DIN Female |
| **RF Connector Interface Body Style** | Long neck |

## Dimensions

| | |
|---|---|
| **Height** | 305 mm \| 12.008 in |
| **Width** | 331 mm \| 13.032 in |
| **Depth** | 251 mm \| 9.882 in |
| **Ground Screw Diameter** | 6 mm \| 0.236 in |
| **Mounting Pipe Diameter Range** | 40–160 mm |

## Outline Drawing




## Electrical Specifications

| | |
|---|---|
| **License Band, LNA** | CEL 850 \| USA 750 |

## Electrical Specifications, dc Power/Alarm

| | |
|---|---|
| **dc Switching/Redundancy** | Yes |
| **Lightning Surge Current** | 10 kA |
| **Lightning Surge Current Waveform** | 8/20 waveform |
| **Operating Current at Voltage** | 240 mA @ 12 V |
| **Operating Current Tolerance** | ±20 mA |
| **Voltage** | 7–30 Vdc |

| | |
|---|---|
| **Voltage, CWA Mode** | 10–18 Vdc |
| **Alarm Current, CWA Mode** | 30–170 mA @ 10–18 V |

## Electrical Specifications, AISG

| | |
|---|---|
| **AISG Carrier** | 2.176 MHz ± 100 ppm |
| **AISG Connector** | 8-pin DIN Female |
| **AISG Connector Standard** | IEC 60130-9 |
| **Protocol** | AISG 2.0 |
| **Voltage, AISG Mode** | 10–30 Vdc |

## Electrical Specifications

| **Sub-module** | **1 \| 2 \| 3 \| 4** | **1 \| 2 \| 3 \| 4** |
|---|---|---|
| **Branch** | 1 | 2 |
| **Port Designation** | ANT | ANT |
| **AISG 2.0 Device Subunit** | E15R02P58 1/2 | E15R02P58 1/2 |
| **License Band** | USA 750, LNA | CEL 850, LNA |
| **Return Loss, typical, dB** | 24 | 24 |
| **Return Loss at 8 dB, typical, dB** | 22 | 22 |
| **Return Loss at 4 dB, typical, dB** | 20 | 20 |
| **Return Loss - Bypass Mode, typical, dB** | 14 | 14 |

## Electrical Specifications Rx (Uplink)

| **Frequency Range, MHz** | **777.5–787** | **824–849** |
|---|---|---|
| **Gain, nominal, dB** | 13 | 13 |
| **Gain Adjustment Range, dB** | 4-13 | 4-13 |
| **Gain Adjustment Range Increments, dB** | 1 | 1 |
| **Noise Figure, typical, dB** | 1.8 | 1.9 |
| **Noise Figure at 8 dB, typical, dB** | 2.1 | 2.4 |
| **Noise Figure at 4 dB, typical, dB** | 3.1 | 3.2 |
| **Group Delay Variation, maximum, ns** | 160 | 150 |
| **Group Delay Variation Bandwidth, MHz** | 5 | |
| **Insertion Loss - Bypass Mode, typical, dB** | 3 | 3.2 |

## Electrical Specifications Tx (Downlink)

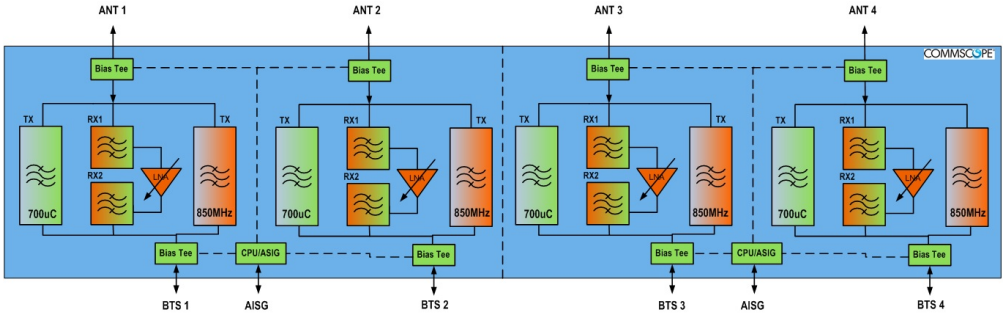
| **Frequency Range, MHz** | **746–756** | **869–894** |
|---|---|---|

| | | |
|---|---|---|
| **Insertion Loss, typical, dB** | 0.5 | 0.5 |
| **Return Loss, typical, dB** | 24 | 24 |
| **Input Power, RMS, maximum, W** | 200 | 500 |
| **Input Power, PEP, maximum, W** | 2000 | 5000 |
| **3rd Order PIM, typical, dBc** | | -161 |
| **3rd Order PIM Test Method** | | 2 x 20 W CW tones |
| **7th Order PIM, minimum, dBc** | -161 | |
| **7th Order PIM Test Method** | 2 x 20 W CW tones | |

## Electrical Specifications, Band Reject

| | | |
|---|---|---|
| **Frequency Range, MHz** | **763–775** | **851–856** |
| **Attenuation, minimum, dB** | 27 | 20 |

## Block Diagram




## Material Specifications

| | |
|---|---|
| **Finish** | Painted |

## 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 |
| **Weight, net** | 25 kg \| 55.115 lb |

## * Footnotes

| | |
|---|---|
| **License Band, LNA** | License Bands that have RxUplink amplification |