

## TPX-11x

Triplexer | 700+800+900 / 1800+2100 / 2300+2600 | Single and Twin Units | Indoor / Outdoor

- Combines 700+800+900, 1800+2100 and 2300+2600 MHz into a single output
- Usable at BTS or antenna end
- Available as single or twin unit, with Auto-Sense or various DC/AISG bypass configurations
- Suitable for indoor or outdoor applications
- Pole or wall mounting
- Available with 7/16-DIN or 4.3-10 Connectors



| Ordering Options | Single Unit |        | Twin Unit |        |
|------------------|-------------|--------|-----------|--------|
|                  | 7/16-DIN    | 4.3-10 | 7/16-DIN  | 4.3-10 |

When ordering replace "x" with correct option for bypass configuration and single or twin unit.

|   |          |              |          |              |
|---|----------|--------------|----------|--------------|
| With DC/AISG Auto-Sense                                     | TPX-11A  | TPX-11A-43F  | TPX-11AA | TPX-11AA-43F |
| DC/AISG bypass from common to 2300+2600 port                | TPX-112  | TPX-112-43F  | TPX-113  | TPX-113-43F  |
| DC/AISG bypass from common to 1800+2100 port                | TPX-110  | TPX-110-43F  | TPX-111  | TPX-111-43F  |
| DC/AISG bypass from common to 700+800+900 port              | TPX-118  | TPX-118-43F  | TPX-119  | TPX-119-43F  |
| DC/AISG bypass from common to 1800+2100 & 2300+2600 ports   | TPX-1110 | TPX-1110-43F | TPX-1111 | TPX-1111-43F |
| DC/AISG bypass from common to 700+800+900 & 2300+2600 ports | TPX-1112 | TPX-1112-43F | TPX-1113 | TPX-1113-43F |
| Full DC/AISG bypass   | TPX-114  | TPX-114-43F  | TPX-115  | TPX-115-43F  |
| No DC/AISG bypass   | TPX-116  | TPX-116-43F  | TPX-117  | TPX-117-43F  |

| Electrical Characteristics                |               |                  |  |  |
|---|---------------|------------------|--|--|
| 700+800+900 Channel (Port 1) - Common     |               |                  |  |  |
| Frequency Band                            |               | 698-960 MHz      |  |  |
| Insertion Loss                            |               | < 0.2 dB         |  |  |
| Return Loss                               |               | > 18 dB          |  |  |
| Rejection                                 | 1710-2170 MHz | > 50 dB          |  |  |
|   | 2300-2700 MHz | > 50 dB          |  |  |
| Continuous Average Power                  |               | 250 W            |  |  |
| Intermodulation, 2x43 dBm TX Carrier, IM3 |               | -117 dBm         |  |  |
| 1800+2100 Channel (Port 2) - Common       |               |                  |  |  |
| Frequency Band                            |               | 1710-2170 MHz    |  |  |
| Insertion Loss                            |               | < 0.2 dB Typical |  |  |
| Return Loss                               |               | > 18 dB          |  |  |
| Rejection                                 | 698-960 MHz   | > 50 dB          |  |  |
|   | 2300-2700 MHz | > 50 dB          |  |  |
| Continuous Average Power                  |               | 400 W            |  |  |
| Intermodulation, 2x43 dBm TX Carrier, IM3 |               | -117 dBm         |  |  |
| 2300+2600 Channel (Port 3) - Common       |               |                  |  |  |
| Frequency Band                            |               | 2300-2700 MHz    |  |  |
| Insertion Loss                            |               | < 0.2 dB Typical |  |  |
| Return Loss                               |               | > 18 dB          |  |  |
| Rejection                                 | 698-2170 MHz  | > 50 dB          |  |  |
| Continuous Average Power                  |               | 250 W            |  |  |
| Intermodulation, 2x43 dBm TX Carrier, IM3 |               | -117 dBm         |  |  |

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| General Electrical         |                        | Standard Models   | Models With Auto-Sense                  |
|----------------------------|------------------------|---|---|
| DC Bypass Rating           |                        | 3 A   | 2 A, drop max 2.4 V                     |
| AISG Pass                  |                        | Yes   | ---                                     |
| AISG RL                    |                        | ---   | > 12 dB                                 |
| AISG Loss                  |                        | ---   | < 1 dB                                  |
| Lightning Protection       |                        | ---   | 10kA 8/20 $\mu$ s                       |
| Input Voltage Power        |                        | ---   | 8-30 V max 0.3 W                        |
| Environmental              |                        |   |   |
| Temperature Range          |                        | -40° to +60° C (-40° to 140° F)   |   |
| Ingress Protection         |                        | IP68  |   |
| Mechanical Characteristics |                        | Single Unit   | Twin Unit                               |
| Finish                     |                        | Light Grey, NCS 1502-R  |   |
| Connectors                 |                        | 7/16 Female or 4.3-10 Female  |   |
| Dimensions (H x W x D)     | Standard Models        | 150 x 170 x 50 mm (5.9 x 6.7 x 2.0 in)  | 150 x 170 x 107 mm (5.9 x 6.7 x 4.2 in) |
|                            | Models with Auto-Sense | 150 x 170 x 61 mm (5.9 x 6.7 x 2.4 in)  | TBD                                     |
| Weight                     | Standard Models        | Gross   | 3.1 kg (6.8 lbs)                        |
|                            |                        | Net   | 2.6 kg (5.7 lbs)                        |
|                            | Models with Auto-Sense | TBD   | TBD                                     |
| Mounting Options           |                        | Description   |   |
| Pole / Wall Bracket        |                        | Two metal clamps for pole mount included; Pole Diameter 40-140 mm (1.57-5.5 in) |   |

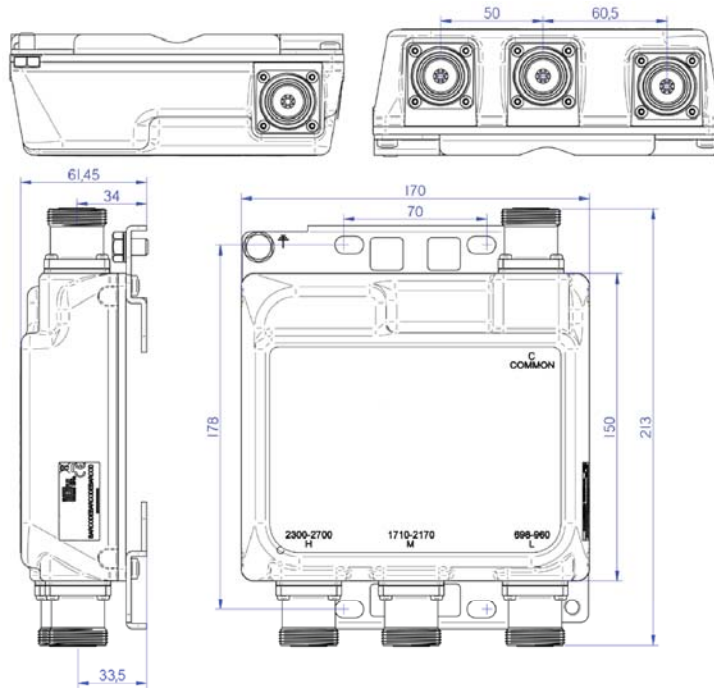
| Block Diagrams                   |                                  |                                    |   |   |                             |                             |
|----------------------------------|----------------------------------|------------------------------------|---|---|-----------------------------|-----------------------------|
| DC/AISG Bypass<br>2300+2600 Port | DC/AISG Bypass<br>1800+2100 Port | DC/AISG Bypass<br>700+800+900 Port | DC/AISG Bypass<br>1800+2100 &<br>2300+2600 Port | DC/AISG Bypass<br>700+800+900 &<br>2300+2600 Port | Full DC/AISG Bypass         | No DC/AISG Bypass           |
| 700-900 1800-2100 2300-2600      | 700-900 1800-2100 2300-2600      | 700-900 1800-2100 2300-2600        | 700-900 1800-2100 2300-2600                     | 700-900 1800-2100 2300-2600                       | 700-900 1800-2100 2300-2600 | 700-900 1800-2100 2300-2600 |
|                                  |                                  |                                    |   |   |                             |                             |
| TPX-112<br>TPX-113               | TPX-110<br>TPX-111               | TPX-118<br>TPX-119                 | TPX-1110<br>TPX-1111                            | TPX-1112<br>TPX-1113                              | TPX-114<br>TPX-115          | TPX-116<br>TPX-117          |

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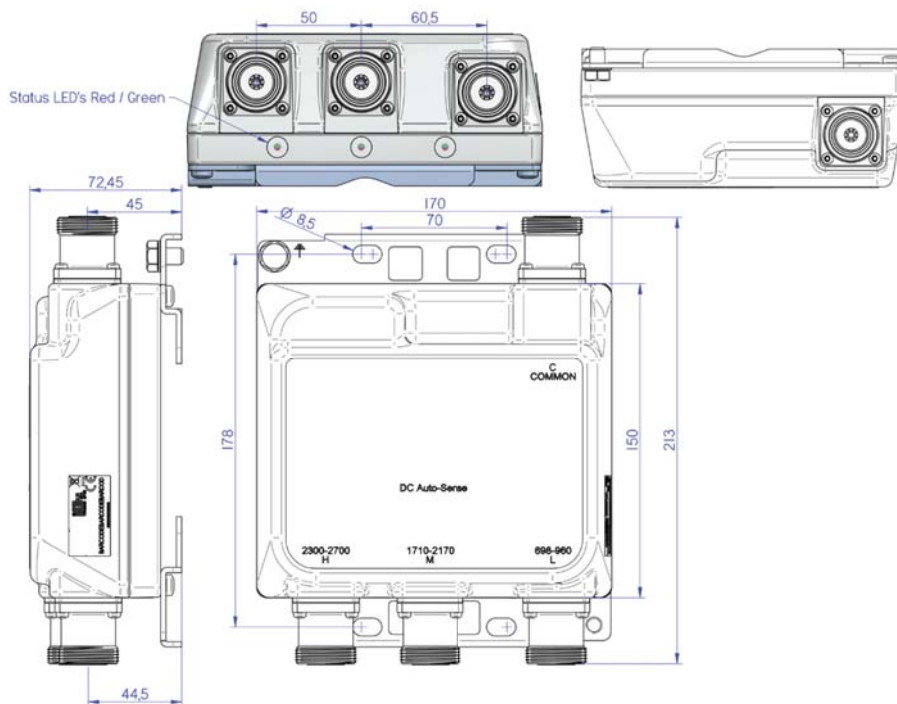
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Dimensions - Single Unit with 7/16-DIN Connectors



Dimensions - Single Unit with Auto-Sense and 7/16-DIN Connectors



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