10-port sector antenna, 2x 790–960 MHz 65° HPBW, 4x 1695–2690 MHz 65° HPBW and 4x 1695–2180 MHz 2x 33° HPBW, 5x RET with manual override. Bands cascaded SRET

- Integrated Internal Remote Electrical Tilt (RET), with independent control of electrical tilt with manual override on all arrays
- All Internal RET actuators are connected in “Cascaded SRET” configuration

### Electrical Specifications

<table>
<thead>
<tr>
<th>Frequency Band, MHz</th>
<th>LB</th>
<th>LB</th>
<th>HB</th>
<th>HB</th>
<th>HB</th>
<th>HB-Dual-Beam2</th>
<th>HB-Dual-Beam2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain, dBi</td>
<td>15.8</td>
<td>16.1</td>
<td>16.2</td>
<td>16.9</td>
<td>17.3</td>
<td>16.5</td>
<td>18.1</td>
</tr>
<tr>
<td>Beam Centers, Horizontal, degrees</td>
<td>±32</td>
<td>±32</td>
<td>±32</td>
<td>±32</td>
<td>±32</td>
<td>±32</td>
<td>±32</td>
</tr>
<tr>
<td>Beamwidth, Horizontal, degrees</td>
<td>69</td>
<td>68</td>
<td>66</td>
<td>67</td>
<td>65</td>
<td>65</td>
<td>36</td>
</tr>
<tr>
<td>Beamwidth, Vertical, degrees</td>
<td>11.1</td>
<td>10.2</td>
<td>10.1</td>
<td>9.0</td>
<td>7.3</td>
<td>10.3</td>
<td>10.3</td>
</tr>
<tr>
<td>Beam Tilt, degrees</td>
<td>0–10</td>
<td>0–10</td>
<td>0–10</td>
<td>0–10</td>
<td>0–10</td>
<td>0–10</td>
<td>0–10</td>
</tr>
<tr>
<td>USLS (First Lobe), dB</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Null Fill, dB</td>
<td>-22</td>
<td>-22</td>
<td>-22</td>
<td>-22</td>
<td>-22</td>
<td>-22</td>
<td>-22</td>
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<tr>
<td>Front-to-Back Ratio at 180°, dB</td>
<td>32</td>
<td>36</td>
<td>31</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>27</td>
</tr>
<tr>
<td>CPR at Bore sight, dB</td>
<td>16</td>
<td>15</td>
<td>17</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>CPR at Sector, dB</td>
<td>10</td>
<td>13</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Isolation, Cross Polarization, dB</td>
<td>28</td>
<td>28</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Isolation, Inter-band, dB</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Isolation, Beam to Beam, dB</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>VSWR</td>
<td>Return Loss, dB</td>
<td>1.5</td>
<td>14.0</td>
<td>1.5</td>
<td>14.0</td>
<td>1.5</td>
<td>14.0</td>
</tr>
<tr>
<td>Input Power per Port, maximum, watts</td>
<td>300</td>
<td>300</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Polarization</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
</tr>
<tr>
<td>Impedance</td>
<td>50 ohm</td>
<td>50 ohm</td>
<td>50 ohm</td>
<td>50 ohm</td>
<td>50 ohm</td>
<td>50 ohm</td>
<td>50 ohm</td>
</tr>
</tbody>
</table>

### Electrical Specifications, BASTA*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain by all Beam Tilts, average, dBi</td>
<td>15.7</td>
<td>15.9</td>
<td>15.9</td>
<td>16.5</td>
<td>16.9</td>
<td>15.8</td>
<td>17.5</td>
</tr>
<tr>
<td>Gain by all Beam Tilts Tolerance, dB</td>
<td>±0.2</td>
<td>±0.1</td>
<td>±0.3</td>
<td>±0.5</td>
<td>±0.7</td>
<td>±1.1</td>
<td>±0.9</td>
</tr>
</tbody>
</table>

Gain by Beam Tilt, average, dBi

| Beamwidth, Horizontal, degrees | ±0.7 | ±0.5 | ±2.8 | ±4.3 | ±7.6 | ±3.4 | ±2.1 |
| Beamwidth, Vertical Tolerance, degrees | ±0.5 | ±0.4 | ±0.7 | ±0.6 | ±0.6 | ±0.6 | ±0.7 |
| USLS, beam peak to 20° above beam peak, dB | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Front-to-Back Total Power at 180° ± 30°, dB | 26 | 26 | 29 | 29 | 29 | 24 | 28 |
| CPR at Bore sight, dB | 16 | 16 | 17 | 20 | 20 | 13 | 15 |
| CPR at Sector, dB | 12 | 14 | 12 | 13 | 6 | 6 | 6 |

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*CVV2NPX308.208R*

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*CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, download the whitepaper Time to Raise the Bar on BSAs.*

Array Layout

<table>
<thead>
<tr>
<th>Array</th>
<th>Freq (MHz)</th>
<th>Conns</th>
<th>RET (SRET)</th>
<th>AISG RET UID</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>790-960</td>
<td>1-2</td>
<td>1</td>
<td>ARxxxxxxxxxxxxxxx1</td>
</tr>
<tr>
<td>B1</td>
<td>1695-2180</td>
<td>3-4</td>
<td>2</td>
<td>ARxxxxxxxxxxxxxxx2</td>
</tr>
<tr>
<td>B2</td>
<td>1695-2180</td>
<td>5-6</td>
<td>3</td>
<td>ARxxxxxxxxxxxxxxx3</td>
</tr>
<tr>
<td>Y1</td>
<td>1695-2690</td>
<td>7-8</td>
<td>4</td>
<td>ARxxxxxxxxxxxxxxx4</td>
</tr>
<tr>
<td>Y2</td>
<td>1695-2690</td>
<td>9-10</td>
<td>5</td>
<td>ARxxxxxxxxxxxxxxx5</td>
</tr>
</tbody>
</table>

(Sizes of colored boxes are not true depictions of array sizes)

**General Specifications**

- **Operating Frequency Band**: 1695 – 2180 MHz | 1695 – 2690 MHz | 790 – 960 MHz
- **Antenna Type**: Sector
- **Band**: Multiband
- **Performance Note**: Outdoor usage

**Mechanical Specifications**

- **RF Connector Quantity, total**: 10
- **RF Connector Quantity, low band**: 2
- **RF Connector Quantity, high band**: 8
- **RF Connector Interface**: 7-16 DIN Female
- **Color**: Gray
- **Grounding Type**: RF connector inner conductor and body grounded to reflector and mounting bracket
- **Radiator Material**: Brass | Low loss circuit board
- **Radome Material**: Fiberglass, UV resistant
- **Reflector Material**: Aluminum
- **RF Connector Location**: Bottom
- **Wind Loading, frontal**: 348.0 N @ 150 km/h | 78.2 lbf @ 150 km/h
Wind Loading, lateral
294.0 N @ 150 km/h
66.1 lbf @ 150 km/h

Wind Loading, maximum
737.0 N @ 150 km/h
165.7 lbf @ 150 km/h

Wind Speed, maximum
241 km/h | 150 mph

Dimensions
Length
2065.0 mm | 81.3 in
Width
350.0 mm | 13.8 in
Depth
208.0 mm | 8.2 in
Net Weight, without mounting kit
35.5 kg | 78.3 lb

Remote Electrical Tilt (RET) Information
Input Voltage
10–30 Vdc
Internal RET
High band (4) | Low band (1)
Power Consumption, idle state, maximum
2 W
Power Consumption, normal conditions, maximum
13 W
Protocol
3GPP/AISG 2.0 (Single RET)
RET Interface
8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity
1 female | 1 male

Packed Dimensions
Length
2250.0 mm | 88.6 in
Width
436.0 mm | 17.2 in
Depth
320.0 mm | 12.6 in
Shipping Weight
53.0 kg | 116.8 lb

Regulatory Compliance/Certifications
Agency
RoHS 2011/65/EU
ISO 9001:2015
China RoHS SJ/T 11364-2014
CE
Classification
Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
Above Maximum Concentration Value (MCV)
Compliant with the relevant CE product directives

Included Products
T-029-GL-E — Adjustable Tilt Pipe Mounting Kit for 2.0”-4.5” (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.
* Footnotes

**Performance Note**

Severe environmental conditions may degrade optimum performance
Adjustable Tilt Pipe Mounting Kit for 2.0"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.

General Specifications

**Application**
Outdoor

**Includes**
Brackets | Hardware

**Package Quantity**
1

Mechanical Specifications

**Color**
Silver

**Material Type**
Galvanized steel

**Mechanical Tilt**
0°–8°

Dimensions

**Antenna-to-Pipe Distance**
85.0 mm | 3.3 in

**Bracket-to-Bracket Distance**
1400.0 mm | 55.1 in

**Compatible Diameter, maximum**
115.0 mm | 4.5 in

**Compatible Diameter, minimum**
60.0 mm | 2.4 in

**Compatible Length, maximum**
2850.0 mm | 112.2 in

**Compatible Length, minimum**
1500.0 mm | 59.1 in

**Net Weight**
6.0 kg | 13.2 lb

Regulatory Compliance/Certifications

**Agency**
RoHS 2011/65/EU
ISO 9001:2015
China RoHS SJ/T 11364-2014
CE

**Classification**
Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
Above Maximum Concentration Value (MCV)
Compliant with the relevant CE product directives