CCV4PX310.11R

12-port sector antenna, 4x 790–960 and 8x 1695–2690 MHz, 65° HPBW, 6x 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

This product will be discontinued on: March 27, 2020

Replaced By
RRV4-65D-R6 12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET. Antenna rear wind loading 880N @ 150km/h

### Electrical Specifications

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Gain, dBi</td>
<td>15.8</td>
<td>16.4</td>
<td>16.7</td>
<td>16.8</td>
<td>17.4</td>
<td>18.1</td>
<td>18.1</td>
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<tr>
<td>Beamwidth, Horizontal, degrees</td>
<td>73</td>
<td>62</td>
<td>63</td>
<td>66</td>
<td>67</td>
<td>62</td>
<td>64</td>
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<tr>
<td>Beamwidth, Vertical, degrees</td>
<td>8.9</td>
<td>8.1</td>
<td>7.6</td>
<td>7.0</td>
<td>6.6</td>
<td>5.5</td>
<td>5.2</td>
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<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>
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<tr>
<td>USLS (First Lobe), dB</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
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<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>35</td>
<td>34</td>
<td>33</td>
<td>38</td>
<td>39</td>
<td>39</td>
<td>41</td>
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<tr>
<td>Isolation, Cross Polarization, dB</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
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<tr>
<td>Isolation, Inter-band, dB</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
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<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>
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<tr>
<td>PIM, 3rd Order, 2 x 20 W, dBc</td>
<td>-150</td>
<td>300</td>
<td>300</td>
<td>250</td>
<td>250</td>
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<tr>
<td>Input Power per Port, maximum, watts</td>
<td>300</td>
<td>300</td>
<td>250</td>
<td>250</td>
<td>250</td>
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<tr>
<td>Polarization</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
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<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>
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</tbody>
</table>

### Electrical Specifications, BASTA*

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Gain by all Beam Tilts, average, dBi</td>
<td>15.5</td>
<td>16.2</td>
<td>16.4</td>
<td>16.4</td>
<td>16.9</td>
<td>17.8</td>
<td>17.8</td>
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<tr>
<td>Gain by all Beam Tilts Tolerance, dB</td>
<td>±0.5</td>
<td>±0.3</td>
<td>±0.4</td>
<td>±0.5</td>
<td>±0.8</td>
<td>±0.4</td>
<td>±0.4</td>
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<tr>
<td>Gain by Beam Tilt, average, dBi</td>
<td>0°</td>
<td>15.5</td>
<td>0°</td>
<td>16.2</td>
<td>0°</td>
<td>16.3</td>
<td>0°</td>
</tr>
<tr>
<td>Beamwidth, Horizontal Tolerance, degrees</td>
<td>±5.7</td>
<td>±4.7</td>
<td>±3.4</td>
<td>±7.3</td>
<td>±4.6</td>
<td>±3.7</td>
<td>±3.7</td>
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<tr>
<td>Beamwidth, Vertical Tolerance, degrees</td>
<td>±0.4</td>
<td>±0.3</td>
<td>±0.5</td>
<td>±0.5</td>
<td>±0.3</td>
<td>±0.3</td>
<td>±0.2</td>
</tr>
<tr>
<td>USLS, beampeak to 20° above beampeak, dB</td>
<td>18</td>
<td>18</td>
<td>17</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Front-to-Back Total Power at 180° ± 30°, dB</td>
<td>23</td>
<td>24</td>
<td>26</td>
<td>30</td>
<td>30</td>
<td>32</td>
<td>32</td>
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<tr>
<td>CPR at Boresight, dB</td>
<td>19</td>
<td>18</td>
<td>20</td>
<td>20</td>
<td>19</td>
<td>17</td>
<td>18</td>
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</tbody>
</table>

*March 27, 2020

January 22, 2020
*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>ARxxxxxxxxxxx1</td>
</tr>
<tr>
<td>R2</td>
<td>790-960</td>
<td>3-4</td>
<td>2</td>
<td>ARxxxxxxxxxxx2</td>
</tr>
<tr>
<td>Y1</td>
<td>1695-2690</td>
<td>5-6</td>
<td>3</td>
<td>ARxxxxxxxxxxx3</td>
</tr>
<tr>
<td>Y2</td>
<td>1695-2690</td>
<td>7-8</td>
<td>4</td>
<td>ARxxxxxxxxxxx4</td>
</tr>
<tr>
<td>Y3</td>
<td>1695-2690</td>
<td>9-10</td>
<td>5</td>
<td>ARxxxxxxxxxxx5</td>
</tr>
<tr>
<td>Y4</td>
<td>1695-2690</td>
<td>11-12</td>
<td>6</td>
<td>ARxxxxxxxxxxx6</td>
</tr>
</tbody>
</table>

Sizes of colored boxes are not true depictions of array sizes.

**General Specifications**

- **Operating Frequency Band**: 1695 – 2690 MHz | 790 – 960 MHz
- **Antenna Type**: Sector
- **Band**: Multiband
- **Performance Note**: Outdoor usage | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN

**Mechanical Specifications**

- **RF Connector Quantity, total**: 12
- **RF Connector Quantity, low band**: 4
- **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**: Low loss circuit board
- **Radome Material**: Fiberglass, UV resistant
- **Reflector Material**: Aluminum
RF Connector Location

Wind Loading, frontal
1,085.0 N @ 150 km/h | 243.9 lbf @ 150 km/h

Wind Loading, lateral
380.0 N @ 150 km/h | 85.4 lbf @ 150 km/h

Wind Loading, maximum
1,404.0 N @ 150 km/h | 315.6 lbf @ 150 km/h

Wind Speed, maximum
200 km/h | 124 mph

Dimensions

Length
2720.0 mm | 107.1 in

Width
498.0 mm | 19.6 in

Depth
197.0 mm | 7.8 in

Net Weight, without mounting kit
54.0 kg | 119.0 lb

Remote Electrical Tilt (RET) Information

Input Voltage
10–30 Vdc

Internal RET
High band (4) | Low band (2)

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
2906.0 mm | 114.4 in

Width
565.0 mm | 22.2 in

Depth
312.0 mm | 12.3 in

Shipping Weight
78.8 kg | 173.7 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)
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