

2CPX208R-V3

4-port multibeam antenna, 4x 790–960 MHz, 2x 38° HPBW, 2x RET with manual override.



- Integrated Internal Remote Electrical Tilt (RET), with independent control of electrical tilt with manual override on all arrays
- Single panel design supporting two separate beams perfectly optimized at horizontal pointing angles of +27 degrees and –27 degrees from boresight

Electrical Specifications

| Frequency Band, MHz | 790–890 | 890–960 |
|--------------------------------------|-------------|-------------|
| Gain, dBi | 18.1 | 18.6 |
| Beam Centers, Horizontal, degrees | ±27 | ±27 |
| Beamwidth, Horizontal, degrees | 40 | 35 |
| Beamwidth, Vertical, degrees | 10.0 | 9.1 |
| Beam Tilt, degrees | 0–10 | 0–10 |
| USLS (First Lobe), dB | 18 | 18 |
| Null Fill, dB | -22 | -22 |
| Front-to-Back Ratio at 180°, dB | 32 | 31 |
| Isolation, Same Beam, dB | 25 | 25 |
| VSWR Return Loss, dB | 1.29 18.0 | 1.29 18.0 |
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 |
| Input Power per Port, maximum, watts | 300 | 300 |
| Polarization | ±45° | ±45° |
| Impedance | 50 ohm | 50 ohm |

Electrical Specifications, BASTA*

| Frequency Band, MHz | 790–890 | 890–960 |
|---|---|---|
| Gain by all Beam Tilts, average, dBi | 17.8 | 18.3 |
| Gain by all Beam Tilts Tolerance, dB | ±0.4 | ±0.3 |
| Gain by Beam Tilt, average, dBi | 0 ° 17.9 5 ° 17.9 10 ° 17.8 | 0 ° 18.4 5 ° 18.4 10 ° 18.1 |
| Beamwidth, Horizontal Tolerance, degrees | ±2.3 | ±2.2 |
| Beamwidth, Vertical Tolerance, degrees | ±0.5 | ±0.4 |
| USLS, beampeak to 20° above beampeak, dB | 21 | 22 |
| Front-to-Back Total Power at 180° ± 30°, dB | 23 | 20 |
| CPR at Boresight, dB | 23 | 21 |
| CPR at Sector, dB | 12 | 7 |

* 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](#).

General Specifications

2CPX208R-V3

| | |
|---------------------------------|---------------|
| Operating Frequency Band | 790 – 960 MHz |
| Antenna Type | Multibeam |
| Band | Single band |
| Performance Note | Outdoor usage |

Mechanical Specifications

| | |
|--|--|
| RF Connector Quantity, total | 4 |
| RF Connector Quantity, low band | 4 |
| RF Connector Interface | 7-16 DIN Female |
| Color | Light gray |
| Grounding Type | RF connector inner conductor and body grounded to reflector and mounting bracket |
| Radiator Material | Low loss circuit board |
| Radome Material | Polyester fiberglass pultrusion |
| Reflector Material | Aluminum |
| RF Connector Location | Bottom |
| Wind Loading, frontal | 1,352.0 N @ 150 km/h 303.9 lbf @ 150 km/h |
| Wind Loading, lateral | 228.0 N @ 150 km/h 51.3 lbf @ 150 km/h |
| Wind Speed, maximum | 200 km/h 124 mph |

Dimensions

| | |
|---|---------------------|
| Length | 2090.0 mm 82.3 in |
| Width | 504.0 mm 19.8 in |
| Depth | 118.0 mm 4.6 in |
| Net Weight, without mounting kit | 32.5 kg 71.7 lb |

Remote Electrical Tilt (RET) Information

| | |
|--|-----------------------------------|
| Input Voltage | 10–30 Vdc |
| Internal RET | 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 | 2229.0 mm 87.8 in |
| Width | 593.0 mm 23.3 in |
| Depth | 209.0 mm 8.2 in |

2CPX208R-V3

Shipping Weight

45.5 kg | 100.3 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