



PTP 800 SPLIT-MOUNT SOLUTION

LICENSED ETHERNET MICROWAVE FOR MULTI-SERVICE NETWORKS

Cambium Point-to-Point (PTP) 800 Licensed Ethernet Microwave Solutions can efficiently and affordably transport the data, voice and video that your bandwidth-intensive applications require without having to contend with other communicators in your radio-frequency (RF) band.

SPLIT-MOUNT ARCHITECTURE

Within our PTP 800 family of products, we offer two architectures, a split-mount architecture and an all-indoor architecture. In this Specification Sheet, we detail the specifics of our Split-Mount systems. Information on our PTP 800i All-Indoor system is available at [PTP 800](#).

Our PTP 800 Split-Mount systems operate in the 6 to 38 GHz licensed bands, at up to 368 Mbps throughput¹ (full duplex), and with user-configured channel bandwidths from 7 to 56 MHz. When deployed, the outdoor radio unit (ODU) and antenna are mounted on a tower or rooftop and connected via cable to the Compact Modem Unit (CMU) located inside your building or equipment housing unit.

Within the split-mount platform, you can choose between our Standard ODU-A or our High Performance ODU-B. ODU-A is available in 6 to 38 GHz frequencies, while the High Performance ODU-B is available in the 11, 18 and 23 GHz bands. The ODU-B offers higher transmit power, lower power consumption, and lighter weight when compared with the ODU-A. In addition, our NTIA-compliant 7 and 8 GHz models support DoD and non-DoD applications within the U.S. Federal Government.

COST-EFFICIENT SCALABILITY

With upgradeable capacity from 10 Mbps to full capacity via software key, PTP 800 systems offer exceptional cost efficiency and scalability, allowing you to purchase only the capacity you need today and add capacity as your needs grow. Whether your organization is a carrier, service provider, utility company, municipality, public safety organization, government agency or corporate enterprise, PTP 800 radios will provide you with high-performance, ultra-reliable connectivity and backhaul.

RADIO TECHNOLOGY

| | | |
|----------------------------------|--|-------------------|
| ODU-A RF bands ² | L6 GHz Band: | 5.925 – 6.425 GHz |
| | U6 GHz Band: | 6.425 – 7.100 GHz |
| | 7 GHz Band: | 7.125 – 7.9 GHz |
| | 8 GHz Band: | 7.725 – 8.5 GHz |
| | 11 GHz Band: | 10.7 – 11.7 GHz |
| | 13 GHz Band: | 12.75 – 13.25 GHz |
| | 15 GHz Band: | 14.4 – 15.35 GHz |
| | 18 GHz Band: | 17.7 – 19.7 GHz |
| | 23 GHz Band: | 21.2 – 23.6 GHz |
| | 26 GHz Band: | 24.25 – 26.5 GHz |
| | 28 GHz Band: | 27.5 – 29.5 GHz |
| | 32 GHz Band: | 31.8 – 33.4 GHz |
| | 38 GHz Band: | 37.0 – 40.0 GHz |
| ODU-B RF bands ² | 11 GHz Band: | 10.7 – 11.7 GHz |
| | 18 GHz Band: | 17.7 – 19.7 GHz |
| | 23 GHz Band: | 21.2 – 23.6 GHz |
| Channel size | Configurable from 7 to 56 MHz | |
| Maximum Tx power ³ | 30 dBm | |
| Best Rx sensitivity ⁴ | -90.9 dBm | |
| Modulation | QPSK to 256 QAM | |
| | Fixed mode or Adaptive Coding and Modulation (ACM) | |
| Error correction | Low Density Parity Check (LDPC) code | |
| Duplex scheme | FDD | |
| Security and encryption | Proprietary air interface | |
| | Optional FIPS-197 compliant 128/256-Bit AES Encryption | |
| | Optional FIPS 140-2 ⁵ | |
| | Authenticated SNTP | |

ETHERNET BRIDGING

| | |
|-----------------------------------|---|
| Protocol | IEEE 802.3 |
| | 802.1p/1Q (served by 8 queues) |
| | 802.1ad (Q-in-Q) |
| Frame size | Up to 9600 bytes |
| User data throughput ⁶ | 10 to 368 Mbps at the Ethernet (full duplex); use our Cambium PTP LINKPlanner to determine actual throughput for the deployment |
| QoS | 8 Queues by VLAN tag, Layer 3 DSCP and TC |
| Latency | To < 115 μ s @ full capacity with 64 bytes |
| User traffic interface | 100 / 1000 Base T (RJ-45) – auto MDI/MDIX, 1000 Base SX and LX options |

MANAGEMENT & INSTALLATION

| | |
|-----------------------|---|
| Network management | Inband and out-of-band |
| Protocol | SNMP v1, v2c, v3 |
| EMS | Web access via browser using HTTP or HTTPS/TLS ⁷ |
| | Cambium Wireless Manager, release 3.0 or higher |
| | Your existing network management system |
| | Motorola ASTRO [®] Unified Event Manager (UEM) |
| | Remote authentication using RADIUS |
| Out-of-band interface | 10 / 100 Base T (RJ-45) |
| Installation | ODU – RSSI output assistance for link alignment |
| Connection | IF cable between outdoor unit (ODU) and compact modem unit (CMU); |
| | distance up to 1000 ft. (300 meters) using the LMR600 cable; 630 ft. (190 meters) is achievable with the CNT400 IF cable |

PHYSICAL

| | | |
|------------------------|---|--|
| Physical configuration | Split mount – Compact Modem Unit (CMU) and Outdoor Unit (ODU) | |
| Dimensions | ODU: Diameter 10.5" (26.7 cm), Depth 3.5" (8.9 cm) CMU: Width 7.1" (18.0 cm), Height 1.4" (3.5 cm), Depth 8.7" (22.0 cm) | |
| Weight | ODU-A: 10.1 lbs (4.6 kg) ODU-B: 8.6 lbs (3.9 kg) CMU: 2.4 lbs (1.1 kg) | |
| Wind speed survival | ODU: 150 mph (242 kph) | |
| Power source | -48V DC (-40.5V DC to -60V DC) | |
| Power consumption | ODU-A – 1+0 Configuration (per end) 6 ~ 11 GHz: 71 Watts maximum 13 ~ 38 GHz: 62 Watts maximum | ODU-B – 1+0 Configuration (per end) 11 GHz: 58 Watts maximum 18, 23 GHz: 56 Watts maximum |
| | ODU-A – 1+1 Configuration (2 ODUs + 2 CMUs per end) 6 ~ 11 GHz: 122 Watts maximum 13 ~ 38 GHz: 114 Watts maximum | ODU-B – 1+1 Configuration (2-ODUs + 2-CMUs per end) 11 GHz: 98 Watts maximum 18, 23 GHz: 98 Watts maximum |

ENVIRONMENTAL & REGULATORY

| | | |
|-----------------------|--|--|
| Operating temperature | Outdoor Unit: -27° to +131° F (-33° to +55° C) – EN 300 019-1-4 Compact Modem Unit: -27° to +131° F (-33° to +55° C) – EN 300 019-1-3 | |
| Humidity | Outdoor Unit: Up to 100% Compact Modem Unit: Up to 95%, non-condensing | |
| Safety | UL 60950; IEC 60950; EN 60950; CSA 22.2 No. 60950 | |
| EMC | USA: FCC Part 15, Class B Europe: EN 301 489-1 and EN 301 489-4 | |
| Radio standard | ETSI Harmonized Standard EN 302 217-2-2 FCC Regulation Title 47, Part 101 Industry Canada Specification RSS-GEN and relevant SRSP Specifications | |

¹ 368 Mbps maximum throughput requires a 56 MHz channel and 256 QAM which may not be available in certain regions due to regulatory restrictions.

² Regulatory conditions for RF bands may vary by geographic location and should be confirmed prior to system purchase.

³ Transmit power depends on frequency, modulation and regulations (ETSI/FCC).

⁴ Receive sensitivity depends on frequency, channel bandwidth and modulation (-90.9 dBm is based on an 11 GHz model with 7 MHz channel bandwidth and the QPSK mode).

⁵ FIPS 140-2 certification status may be confirmed at: <http://csrc.nist.gov/groups/STM/cmvp/inprocess.html>

⁶ User throughput depends on the configuration of channel bandwidth, modulation and capacity license key. Radios ship with factory-set 10 Mbps throughput capacity cap; additional capacity may be purchased at time of order or anytime after deployment. Full capacity is not available for all combinations of bands and regulations.

⁷ Web access via HTTPS/TLS is available on AES-enabled radios.

| Radio Configuration | | | | | | | | | | | | | | |
|-----------------------|--|---------------|---------------------------|---------------------------------|------------------------------------|----------------|---------------|---|----------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Frequency (GHz) | L6 | U6 | 7 | 8 | 11 | 13 | 15 | 18 | 23 | 26 | 28 | 32 | 38 | |
| Standard | ETSI / FCC | ETSI / FCC | ETSI / NTIA | ETSI / NTIA | ETSI / FCC | ETSI | ETSI | ETSI / FCC | ETSI / FCC | ETSI / FCC | ETSI | ETSI | ETSI / FCC | |
| Frequency Range (GHz) | 5.925 ~ 6.425 | 6.425 ~ 7.100 | 7.125 ~ 7.9 | 7.725 ~ 8.50 | 10.7 ~ 11.7 | 12.75 ~ 13.25 | 14.4 ~ 15.35 | 17.7 ~ 19.7 | 21.2 ~ 23.6 | 24.25 ~ 26.5 | 27.5 ~ 29.5 | 31.8 ~ 33.4 | 37.0 ~ 40.0 | |
| FCC | T/R Spacing (MHz) | 252.04 | 160 170 | 300 | 360 | 490 500 | | 1560 | 1200 | 800 | | | 700 | |
| | Channel Bandwidth (MHz) | 10 30 | 10 30 | 10 20 30 40 50 | 10 20 30 40 50 | 10 30 40 | | 10 20 30 40 50 80 ⁸ | 10 20 30 40 50 | | | | 10 50 | |
| ETSI | T/R Spacing (MHz) | 252.04 | 340 | 154 161 168 196 245 | 119 126 208 266 311.32 | 490 530 | 266 | 420 490 728 315 322 644 | 1008 1010 | 1008 1232 | 1008 | 1008 | 812 | 1260 |
| | Channel Bandwidth (MHz) | 29.65 | 7 14 30 40 60 | 7 14 28 | 7 14 28 29.65 | 40 | 7 14 28 | 7 14 28 56 | 7 13.75 27.5 55 | 7 14 28 56 | 7 14 28 56 | 7 14 28 56 | 7 14 28 56 | 7 14 28 56 |
| RF Channel Selection | Via Web GUI | | | | | | | | | | | | | |
| System Configuration | 1 + 0, 1+1 HSB, 1+1 HSB/SD and 2+0 | | | | | | | | | | | | | |
| ATPC Range (dB) | Transmit Power Control – Adaptive, lower power limit varies with RF band down to 1dBm minimum. | | | | | | | | | | | | | |

| PTP 800 Family of Products | |
|----------------------------|--------|
| PTP L6800 | L6 GHz |
| PTP U6800 | U6 GHz |
| PTP 07800 | 7 GHz |
| PTP 08800 | 8 GHz |
| PTP 11800 | 11 GHz |
| PTP 13800 | 13 GHz |
| PTP 15800 | 15 GHz |
| PTP 18800 | 18 GHz |
| PTP 23800 | 23 GHz |
| PTP 26800 | 26 GHz |
| PTP 28800 | 28 GHz |
| PTP 32800 | 32 GHz |
| PTP 38800 | 38 GHz |

| User Ethernet Data Throughput – ODU-A and ODU-B | | | | | | | | | | | | | |
|---|--|-------|------|-------|---------------------------|-------|----------|------|-------|--------------------------------|-------|-------|--|
| Modulation | Maximum Throughput – Mbps (1518 Bytes/Frame) | | | | | | | | | | | | |
| | Channel Bandwidth (MHz) | | | | | | | | | | | | |
| | 7 | 13.75 | 14 | 27.5 | 28/ 29.65 ⁹ | 55 | 56/60/80 | 10 | 20 | 30 | 40 | 50 | |
| 256 QAM-H | N/A | N/A | N/A | N/A | N/A | 364.9 | 368.6 | N/A | N/A | N/A | N/A | N/A | |
| 256 QAM-L | N/A | N/A | N/A | 166.9 | 170.4 | 343.6 | 347.2 | N/A | 113.6 | 177.4 | 236.7 | 301.6 | |
| 128 QAM | 34.4 | 69.8 | 71.0 | 148.0 | 151.1 | 300.4 | 303.5 | 50.9 | 102.2 | 155.1 | 206.9 | 258.6 | |
| 64 QAM | 30.0 | 60.7 | 61.8 | 122.7 | 125.3 | 252.6 | 255.2 | 42.8 | 84.9 | 130.4 / 135.5 ¹⁰ | 181.9 | 217.4 | |
| 32 QAM | 24.6 | 49.9 | 50.7 | 99.1 | 101.2 | 200.7 | 202.8 | 33.7 | 67.8 | 103.6 | 150.7 | 178.6 | |
| 16 QAM | 20.0 | 40.6 | 41.3 | 73.3 | 74.8 | 150.9 | 152.4 | 29.1 | 58.5 | 77.9 | 103.9 | 150.5 | |
| 8PSK | 14.7 | 29.9 | 30.4 | 55.7 | 56.8 | 114.6 | 115.8 | 20.4 | 40.3 | 59.1 | 78.9 | 103.7 | |
| QPSK | 10.1 | 20.0 | 20.3 | 37.0 | 37.8 | 76.3 | 77.1 | 13.8 | 28.5 | 39.4 | 52.6 | 65.7 | |

| Transmit Power – ODU-A | | | | | | | | | | | | | | |
|------------------------|-------------------------------------|------|--------|------|--------|------|------|------|------------------------------------|------|------|------|--------|----|
| Modulation | Maximum Transmit Power – ETSI (dBm) | | | | | | | | Maximum Transmit Power – FCC (dBm) | | | | | |
| | Frequency (GHz) | | | | | | | | Frequency (GHz) | | | | | |
| | 6, 7, 8 | 11 | 13, 15 | 18 | 23, 26 | 28 | 32 | 38 | L6 | 7, 8 | 11 | 18 | 23, 26 | 38 |
| QPSK | 30.0 | 28.0 | 26.0 | 25.5 | 25.0 | 23.0 | 23.0 | 22.0 | 22.0 | 19.0 | 23.0 | 23.0 | 20.0 | |
| 8PSK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 22.0 | 22.0 | 19.0 | 22.0 | 22.0 | 19.0 | |
| 16 QAM | 28.0 | 26.0 | 23.0 | 22.0 | 22.0 | 21.0 | 20.0 | 22.0 | 22.0 | 19.0 | 22.0 | 22.0 | 19.0 | |
| 32 QAM | 28.0 | 26.0 | 23.0 | 22.0 | 22.0 | 19.0 | 20.0 | 22.0 | 22.0 | 19.0 | 22.0 | 22.0 | 19.0 | |
| 64 QAM | 24.0 | 21.0 | 18.0 | 17.0 | 17.0 | 16.0 | 16.0 | 22.0 | 22.0 | 19.0 | 17.0 | 17.0 | 15.0 | |
| 128 QAM | 24.0 | 21.0 | 18.0 | 17.0 | 17.0 | 16.0 | 16.0 | 22.0 | 22.0 | 19.0 | 17.0 | 17.0 | 15.0 | |
| 256 QAM | 22.0 | 19.0 | 16.0 | 15.0 | 15.0 | 14.0 | 14.0 | 22.0 | 22.0 | 19.0 | 15.0 | 15.0 | 13.0 | |

⁸ The 80 MHz channel width is available only on the 18 GHz ODU-B.

⁹ For Upper 6 GHz only, 30 MHz capacity is equal to 28 MHz capacity.

¹⁰ 135.5 Mbps is available in Lower 6 GHz.

| Receive Sensitivity – ODU-A | | | | | | | | | |
|--|------------|-----------------|-------|--------|-------|--------|-------|-------|-------|
| BER = 1e-6 | Modulation | Frequency (GHz) | | | | | | | |
| | | 6, 7, 8 | 11 | 13, 15 | 18 | 23, 26 | 28 | 32 | 38 |
| Receive Sensitivity @ 56/60 MHz channel (dBm) | 256 QAM-H | -63.2 | N/A | -63.7 | N/A | -63.2 | -62.7 | -62.2 | -61.2 |
| | 256 QAM-L | -65.1 | N/A | -65.6 | N/A | -65.1 | -64.6 | -64.1 | -63.1 |
| | 128 QAM | -67.8 | N/A | -68.3 | N/A | -67.8 | -67.3 | -66.8 | -65.8 |
| | 64 QAM | -70.8 | N/A | -71.3 | N/A | -70.8 | -70.3 | -69.8 | -68.8 |
| | 32 QAM | A | N/A | A | N/A | A | -72.9 | -72.4 | A |
| | 16 QAM | A | N/A | -77.7 | N/A | -77.2 | -76.7 | -76.2 | -75.2 |
| | 8PSK | A | N/A | A | N/A | A | A | A | A |
| | QPSK | A | N/A | -83.5 | N/A | -83.0 | -82.5 | -82.0 | -81.0 |
| Receive Sensitivity @ 55 MHz channel (dBm) | 256 QAM-H | N/A | N/A | N/A | -63.8 | N/A | N/A | N/A | N/A |
| | 256 QAM-L | N/A | N/A | N/A | -65.7 | N/A | N/A | N/A | N/A |
| | 128 QAM | N/A | N/A | N/A | -68.4 | N/A | N/A | N/A | N/A |
| | 64 QAM | N/A | N/A | N/A | -71.4 | N/A | N/A | N/A | N/A |
| | 32 QAM | N/A | N/A | N/A | A | N/A | N/A | N/A | N/A |
| | 16 QAM | N/A | N/A | N/A | -77.8 | N/A | N/A | N/A | N/A |
| | 8PSK | N/A | N/A | N/A | A | N/A | N/A | N/A | N/A |
| | QPSK | N/A | N/A | N/A | -83.6 | N/A | N/A | N/A | N/A |
| Receive Sensitivity @ 50 MHz channel (dBm) | 256 QAM | -65.3 | N/A | N/A | -65.8 | -65.3 | N/A | N/A | -62.3 |
| | 128 QAM | -68.5 | N/A | N/A | -69.0 | -68.5 | N/A | N/A | -65.5 |
| | 64 QAM | -71.5 | N/A | N/A | -72.0 | -71.5 | N/A | N/A | -68.5 |
| | 32 QAM | -73.8 | N/A | N/A | -74.3 | -73.8 | N/A | N/A | -70.8 |
| | 16 QAM | -75.8 | N/A | N/A | -76.3 | -75.8 | N/A | N/A | -72.8 |
| | 8PSK | -79.1 | N/A | N/A | -79.6 | -79.1 | N/A | N/A | -76.1 |
| | QPSK | -83.7 | N/A | N/A | -84.2 | -83.7 | N/A | N/A | -80.7 |
| Receive Sensitivity @ 40 MHz channel (dBm) | 256 QAM | -66.8 | -67.3 | N/A | -67.3 | -66.8 | N/A | N/A | N/A |
| | 128 QAM | -69.5 | -70.0 | N/A | -70.0 | -69.5 | N/A | N/A | N/A |
| | 64 QAM | -71.9 | -72.4 | N/A | -72.4 | -71.9 | N/A | N/A | N/A |
| | 32 QAM | -74.0 | -74.5 | N/A | -74.5 | -74.0 | N/A | N/A | N/A |
| | 16 QAM | -78.9 | -79.4 | N/A | -79.4 | -78.9 | N/A | N/A | N/A |
| | 8PSK | -81.1 | -81.6 | N/A | -81.6 | -81.1 | N/A | N/A | N/A |
| | QPSK | -84.7 | -85.2 | N/A | -85.2 | -84.7 | N/A | N/A | N/A |
| Receive Sensitivity @ 30 MHz channel (dBm) | 256 QAM | -67.8 | -68.5 | N/A | -68.5 | -68.0 | N/A | N/A | N/A |
| | 128 QAM | -70.7 | -71.2 | N/A | -71.2 | -70.7 | N/A | N/A | N/A |
| | 64 QAM | -73.0 | -74.2 | N/A | -74.2 | -73.7 | N/A | N/A | N/A |
| | 32 QAM | -76.3 | -76.8 | N/A | -76.8 | -76.3 | N/A | N/A | N/A |
| | 16 QAM | -80.1 | -80.6 | N/A | -80.6 | -80.1 | N/A | N/A | N/A |
| | 8PSK | -82.3 | -82.8 | N/A | -82.8 | -82.3 | N/A | N/A | N/A |
| | QPSK | -85.9 | -86.4 | N/A | -86.4 | -85.9 | N/A | N/A | N/A |
| Receive Sensitivity @ 28/29.65 ¹¹ MHz channel (dBm) | 256 QAM | -68.2 | N/A | -68.7 | N/A | -68.2 | -67.7 | -67.2 | -66.2 |
| | 128 QAM | -70.9 | N/A | -71.4 | N/A | -70.9 | -70.4 | -69.9 | -68.9 |
| | 64 QAM | -73.9 | N/A | -74.4 | N/A | -73.9 | -73.4 | -72.9 | -71.9 |
| | 32 QAM | -76.4 | N/A | -76.9 | N/A | -76.4 | -75.9 | -75.4 | -74.4 |
| | 16 QAM | -80.3 | N/A | -80.8 | N/A | -80.3 | -79.8 | -79.3 | -78.3 |
| | 8PSK | A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | QPSK | -86.1 | N/A | -86.6 | N/A | -86.1 | -85.6 | -85.1 | -84.1 |

NOTE:

“A” indicates frequencies that are supported only in the ACM mode.

¹¹ For Upper 6 GHz only, 30 MHz capacity is equal to 28 MHz capacity.

Receive Sensitivity – ODU-A (continued)

| BER = 1e-6 | Modulation | Frequency (GHz) | | | | | | | |
|---|------------|-----------------|-------|--------|-------|--------|-------|-------|-------|
| | | 6, 7, 8 | 11 | 13, 15 | 18 | 23, 26 | 28 | 32 | 38 |
| Receive Sensitivity @ 27.5 MHz channel (dBm) | 256 QAM | N/A | N/A | N/A | -68.8 | N/A | N/A | N/A | N/A |
| | 128 QAM | N/A | N/A | N/A | -71.5 | N/A | N/A | N/A | N/A |
| | 64 QAM | N/A | N/A | N/A | -74.5 | N/A | N/A | N/A | N/A |
| | 32 QAM | N/A | N/A | N/A | -77.0 | N/A | N/A | N/A | N/A |
| | 16 QAM | N/A | N/A | N/A | -80.9 | N/A | N/A | N/A | N/A |
| | 8PSK | N/A | N/A | N/A | A | N/A | N/A | N/A | N/A |
| | QPSK | N/A | N/A | N/A | -86.7 | N/A | N/A | N/A | N/A |
| Receive Sensitivity @ 20 MHz channel (dBm) | 256 QAM | -69.9 | N/A | N/A | -70.4 | -69.9 | N/A | N/A | N/A |
| | 128 QAM | -72.0 | N/A | N/A | -72.5 | -72.0 | N/A | N/A | N/A |
| | 64 QAM | -75.4 | N/A | N/A | -75.9 | -75.4 | N/A | N/A | N/A |
| | 32 QAM | -77.8 | N/A | N/A | -78.3 | -77.8 | N/A | N/A | N/A |
| | 16 QAM | -80.1 | N/A | N/A | -80.6 | -80.1 | N/A | N/A | N/A |
| | 8PSK | -83.1 | N/A | N/A | -83.6 | -83.1 | N/A | N/A | N/A |
| | QPSK | -87.1 | N/A | N/A | -87.6 | -87.1 | N/A | N/A | N/A |
| Receive Sensitivity @ 14 MHz channel (dBm) | 128 QAM | -73.5 | N/A | -74.0 | N/A | -73.5 | -73.0 | -72.5 | -71.5 |
| | 64 QAM | -75.8 | N/A | -76.3 | N/A | -75.8 | -75.3 | -74.8 | -73.8 |
| | 32 QAM | -77.8 | N/A | -78.3 | N/A | A | -77.3 | -76.8 | A |
| | 16 QAM | -80.7 | N/A | -81.2 | N/A | -80.7 | -80.2 | -79.7 | -78.7 |
| | 8PSK | A | A | A | N/A | A | A | A | A |
| | QPSK | -87.4 | N/A | -87.9 | N/A | -87.4 | -86.9 | -86.4 | -85.4 |
| Receive Sensitivity @ 13.75 MHz channel (dBm) | 128 QAM | N/A | N/A | N/A | -74.0 | N/A | N/A | N/A | N/A |
| | 64 QAM | N/A | N/A | N/A | -76.4 | N/A | N/A | N/A | N/A |
| | 32 QAM | N/A | N/A | N/A | -78.4 | N/A | N/A | N/A | N/A |
| | 16 QAM | N/A | N/A | N/A | -81.3 | N/A | N/A | N/A | N/A |
| | 8PSK | N/A | N/A | N/A | A | N/A | N/A | N/A | N/A |
| | QPSK | N/A | N/A | N/A | -88.0 | N/A | N/A | N/A | N/A |
| Receive Sensitivity @ 10 MHz channel (dBm) | 128 QAM | -74.2 | -74.6 | N/A | -74.6 | -74.1 | N/A | N/A | -71.2 |
| | 64 QAM | -77.4 | -77.9 | N/A | -77.9 | -77.4 | N/A | N/A | -74.4 |
| | 32 QAM | -80.0 | -79.9 | N/A | -79.8 | -79.4 | N/A | N/A | -77.0 |
| | 16 QAM | -82.5 | -82.8 | N/A | -82.8 | -82.3 | N/A | N/A | -79.5 |
| | 8PSK | -85.1 | -85.1 | N/A | -85.1 | -84.6 | N/A | N/A | -82.1 |
| | QPSK | -90.0 | -89.5 | N/A | -89.5 | -89.0 | N/A | N/A | -87.0 |
| Receive Sensitivity @ 7 MHz channel (dBm) | 128 QAM | -76.5 | N/A | -77.0 | -77.0 | -76.5 | -76.0 | -75.5 | -74.5 |
| | 64 QAM | -78.8 | N/A | -79.3 | -79.3 | -78.8 | -78.3 | -77.8 | -76.8 |
| | 32 QAM | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | 16 QAM | -83.7 | N/A | -84.2 | -84.2 | -83.7 | -83.2 | -82.7 | -81.7 |
| | 8PSK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | QPSK | -90.4 | N/A | -90.9 | -90.9 | -90.4 | -89.9 | -89.4 | -88.4 |

| Transmit Power – ODU-B | | | |
|------------------------|------------------------------------|------|------|
| Modulation | Maximum Transmit Power – FCC (dBm) | | |
| | Frequency (GHz) | | |
| | 11 | 18 | 23 |
| QPSK | 20.0 | 24.0 | 23.0 |
| 8PSK | 20.0 | 23.0 | 23.0 |
| 16 QAM | 20.0 | 23.0 | 23.0 |
| 32 QAM | 20.0 | 23.0 | 23.0 |
| 64 QAM | 20.0 | 19.0 | 19.0 |
| 128 QAM | 20.0 | 19.0 | 19.0 |
| 256 QAM | 20.0 | 17.0 | 17.0 |

| Receive Sensitivity – ODU-B | | | | |
|--|------------|-----------------|-------|-------|
| BER = 1e-6 | Modulation | Frequency (GHz) | | |
| | | 11 | 18 | 23 |
| Receive Sensitivity @ 80 MHz channel (dBm) | 256 QAM-H | N/A | -63.7 | N/A |
| | 256 QAM-L | N/A | -65.6 | N/A |
| | 128 QAM | N/A | -68.3 | N/A |
| | 64 QAM | N/A | -71.3 | N/A |
| | 32 QAM | N/A | -74.1 | N/A |
| | 16 QAM | N/A | -77.3 | N/A |
| | 8PSK | N/A | -79.9 | N/A |
| | QPSK | N/A | -83.5 | N/A |
| Receive Sensitivity @ 50 MHz channel (dBm) | 256 QAM | N/A | -65.8 | -65.3 |
| | 128 QAM | N/A | -69.1 | -68.6 |
| | 64 QAM | N/A | -72.1 | -71.6 |
| | 32 QAM | N/A | -74.5 | -74.0 |
| | 16 QAM | N/A | -76.7 | -76.2 |
| | 8PSK | N/A | -79.9 | -79.4 |
| | QPSK | N/A | -83.9 | -83.4 |
| Receive Sensitivity @ 40 MHz channel (dBm) | 256 QAM | -67.1 | -67.1 | -66.6 |
| | 128 QAM | -70.1 | -70.1 | -69.6 |
| | 64 QAM | -72.6 | -72.6 | -72.1 |
| | 32 QAM | -74.5 | -74.5 | -74.0 |
| | 16 QAM | -79.1 | -79.1 | -78.6 |
| | 8PSK | -81.4 | -81.4 | -80.9 |
| Receive Sensitivity @ 30 MHz channel (dBm) | 256 QAM | -68.2 | -68.2 | -67.7 |
| | 128 QAM | -71.4 | -71.4 | -70.9 |
| | 64 QAM | -73.6 | -73.6 | -73.1 |
| | 32 QAM | -77.2 | -77.2 | -76.7 |
| | 16 QAM | -80.3 | -80.3 | -79.8 |
| | 8PSK | -82.6 | -82.6 | -82.1 |
| Receive Sensitivity @ 20 MHz channel (dBm) | 256 QAM | -68.2 | -68.2 | -67.7 |
| | 128 QAM | -71.4 | -71.4 | -70.9 |
| | 64 QAM | -73.6 | -73.6 | -73.1 |
| | 32 QAM | -77.2 | -77.2 | -76.7 |
| | 16 QAM | -80.3 | -80.3 | -79.8 |
| | 8PSK | -82.6 | -82.6 | -82.1 |
| Receive Sensitivity @ 10 MHz channel (dBm) | 128 QAM | -74.7 | -74.7 | -74.2 |
| | 64 QAM | -77.9 | -77.9 | -77.4 |
| | 32 QAM | -80.5 | -80.5 | -80.0 |
| | 16 QAM | -83.0 | -83.0 | -82.5 |
| | 8PSK | -85.6 | -85.6 | -85.1 |
| | QPSK | -90.5 | -90.5 | -90.0 |

NOTE:

While the information presented herein is, to the best of our knowledge, true and accurate, the information provided in this document is subject to change without notice.

For more information, refer to the Cambium PTP 800 Series Brochure or visit cambiumnetworks.com.