

# PTP 450 900 MHz

The Cambium Networks PTP 450 900 MHz provides excellent near and non line of sight penetration especially well-suited to the needs of rural broadband deployments, SCADA and sensor data backhaul and even video surveillance applications. The PTP 450 900MHz solution is based on the reliable industry-proven Cambium Networks 450 platform.

Key features of PTP 450 900 MHz include:

- Excellent near and non line of sight propagation.
- Up to 130 Mbps capacity in a 20 MHz channel
- Flexible channel selections of 5, 7, 10 and 20 MHz.
- Low power consumption and small form factor.
- Available in Cambium Networks LINKPlanner for simple, accurate planning of capacity and availability.



*PTP 450 900 MHz  
Connectorized Module*



*PTP 450 900 MHz  
(Shown with optional 12 dBi yagi)*

## PRODUCT

|                              |  |
|------------------------------|--|
| Radio Model Number           | C009045B001A                                       |
| Optional 12 dBi Yagi Antenna | N009045D003A                                       |
| Power Supply                 | N000900L001A                                       |
| Line Cords                   | US: N000900L007A EU: N000900L008A UK: N000900L009A |

## SPECTRUM

|                 |                                    |
|-----------------|------------------------------------|
| Channel Spacing | Configurable on 0.5 MHz increments |
| Frequency Range | 902 - 928 MHz                      |
| Channel Width   | 5 MHz, 7 MHz, 10 MHz or 20 MHz     |

## INTERFACE

|                                  |  |
|----------------------------------|--|
| MAC (Media Access Control) Layer | Cambium Networks proprietary   |
| Physical Layer                   | 2x2 MIMO OFDM  |
| Ethernet Interface               | 10/100BaseT, full duplex, rate auto negotiated                       |
| Protocols Used                   | IPv4, UDP, TCP, IP, ICMP, Telnet, SNMP, HTTP, FTP                    |
| Network Management               | HTTP, HTTPS, Telnet, FTP, SNMP v2 and v3                             |
| VLAN                             | 802.1ad (DVLAN Q-inQ), 802.1Q with 802.1p priority, dynamic port VID |

## SECURITY

|            |                                  |
|------------|----------------------------------|
| Encryption | 56-bit DES, FIPS-197 128-bit AES |
|------------|----------------------------------|

## PERFORMANCE

|                              |                                  |                                       |
|------------------------------|----------------------------------|---------------------------------------|
| ARQ                          | Yes                              |                                       |
| Modulation Levels (Adaptive) | MCS                              | Signal to Noise Required (SNR, in dB) |
| 2X                           | QPSK                             | 10                                    |
| 4X                           | 16QAM                            | 17                                    |
| 6X                           | 64QAM                            | 24                                    |
| 8X                           | 256QAM                           | 32                                    |
| Maximum Deployment Range     | Up to 122 miles (200 km)         |                                       |
| Latency                      | 3 - 5 ms, typical                |                                       |
| GPS Synchronization          | Yes, via Autosync (CMM4 or UGPS) |                                       |
| Quality of Service           | Diffserve QoS                    |                                       |

## LINK BUDGET

|                        |  |
|------------------------|--|
| Transmit Power Range   | -30 dBm to +25 dBm (combined up to EIRP limit by region) (1 dB step) |
| Maximum Transmit Power | +25 dBm combined output  |

## PHYSICAL

|                           |  |
|---------------------------|--|
| Antenna Connection        | 50 ohm, SMA  |
| Surge Suppression         | EN61000-4-5: 1.2us/50us, 500 V voltage waveform        |
| Mean Time Between Failure | > 40 Years   |
| Environmental             | IP 55  |
| Temperature / Humidity    | -40°C to +60°C (-40°F to +140°F), 0-95% non-condensing |
| Weight                    | 0.45 kg (1 lb.)  |
| Wind Survival             | 190 km/hour (118 mi/hour)                              |
| Dimensions (h x w x d)    | Subscriber Module: 30 x 9 x 5 cm (11" x 3.5" x 2")     |
| Power Consumption         | 12 W typical, 15 W max                                 |
| Input Voltage             | 20 - 32 V DC   |

## CERTIFICATIONS

|                 |             |
|-----------------|-------------|
| Industry Canada | 109W-0021   |
| FCC ID          | Z8H89FT0021 |