

LigoPTP 2-N

2.4 GHz Point-to-Point Connectorized Backhaul Device



Key Features

- High, Adjustable TX Power 2.4 GHz PTP solution, ideal for:
Dedicated Access
Backhaul
- Flexible center channel and channel width capability (5/10/20/40 MHz) for throughput optimization
- True TCP throughput up to 70 Mbps
- 50,000 packets-per-second (PPS) - ideal for VOIP backhaul applications
- ARQ (Selective Repeat) for very high throughput
- Dynamic TDD for bandwidth optimization
- External N-connector for custom antenna application
- PoE built-in for single cable installation
- Advanced security technologies
- Comprehensive management features
 - Web GUI
 - Command line management via SSH
 - RCMS server support for configuration
 - SNMP V1/2/3 with traps supporting MIBs: 802.1, 802.1x, MIBII
 - Syslog support
- Rugged articulating bracket solution for multi-facet mounting

Product Overview

LigoWave delivers the most robust 2.4 GHz PTP solution on the market by coupling ultra-high output power, flexible channel width capability (5/10/20/40 MHz), and industry-leading proprietary software mechanisms. The LigoPTP 2 Series products offer carrier-class link connectivity, delivering true TCP throughput capability of 70 Mbps and packets-per-second performance of 50,000 PPS. The LigoPTP 2 series products offer an unlicensed PTP solution, ideal for dedicated access or backhaul applications (including VOIP) where other frequencies may be unavailable. The LigoPTP 2-N product features an external N-Connector for custom antenna application, delivering long-range, rock-solid link connectivity capability for the 2.4 GHz spectrum.

The LigoPTP 2-N showcases an array of advanced software mechanisms that provide optimal point-to-point connectivity for high-throughput, long distance links. LigoWave's proprietary PTP mechanisms utilize techniques such as Dynamic Time Division Duplexing (TDD) to dynamically allocate bandwidth in the direction needed, thus increasing link efficiency and greatly decreasing the impact that distance has on throughput of the link. The LigoWave point-to-point products also feature selective repeat ARQ technology, an enhanced error-correction software mechanism that optimizes data traffic to provide very high throughput over high-bandwidth, long-range links even in the presence of interference. The LigoPTP 2-N is also compatible with RCMS, a centralized configuration, firmware, and statistics server offered by LigoWave for carrier class diagnostic and configuration management capabilities.

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Specifications

WLAN Standard

Proprietary 2.4 GHz

Radio Scheme

OFDM - Variable modulation range (64QAM, 16QAM, QPSK, BPSK)
ARQ (Selective Repeat)

Error Correction

FEC, ARQ (Selective Repeat)

Duplexing Scheme

Dynamic Time-Division Duplexing (TDD)

Frequency Range

2.400 GHz ~ 2.4835 GHz

Channel Size

5/10/20/40 MHz

RF Output Power

24 dBm Peak - Adjustable

Receiver Sensitivity

BPSK: -93 ± 2 dBm, QPSK: -92 ± 2 dBm
16QAM: -87 ± 2 dBm, 64QAM: -79 ± 2 dBm

Operating Mode

Point-to-Point

Power System

Power over Ethernet, 9-48V DC
18V/1.0 A Integrated PoE Power Supply Included
Dual-layer ethernet surge protection

Antenna

External N-Connector for Custom Antenna Application

Security

Password Protection
AES Encryption
SSH Configuration Option

Operating Environment

Temperature: $-20^{\circ}\text{C} \sim 65^{\circ}\text{C}$
Humidity: 0 ~ 95% (non-condensing)

Mechanical

Dimensions: 8.75 in. x 8.75 in. x 3.5 in.
Weight: 7 lb. (mount included)
Wind Load: 0.53 ft.²

Warranty

2-Years

Certification

FCC/CE

Test Results

TCP Throughput based on channel size**

	5 MHz	10 MHz	20 MHz	40 MHz
5 Miles	10 Mbps	20 Mbps	40 Mbps	70 Mbps
20 Miles	5 Mbps	10 Mbps	20 Mbps	35 Mbps
30 Miles	3 Mbps	6 Mbps	12 Mbps	24 Mbps

**Note: Throughput results were measured using 19dBi Panel Antennas on each side of the PTP link

