Terrabit Networks

TERRABIT NETWORKS PD1-W21-231-T ACCESS POINT CEILING

PD1-W21-231-T

The multifunction PD1-W21-231-T is high-performance indoor 802.11n access point (AP) designed for maximum deployment flexibility in high-density environments. These high-speed APs deliver wire-like performance at data rates up to 300 Mbps per radio.

The PD1-W21-231-T features 3x3 MIMO dual-band 2.4-GHz and 5-GHz radios with imbeded antenna interfaces.

Working with Terrabit's line of centralized Access Controllers, the PD1-W21-231-T deliver secure, high-speed network services that move users to a "wireless where possible, wired where necessary" network access model. The network can then be rightsized by eliminating unused Ethernet switch ports and thereby reducing operating costs.

802.11n enables the use of wireless as a primary connection with speed and reliability comparable to a wired LAN. It also increases performance by utilizing techniques such as channel bonding, block acknowledgement and MIMO radios. Advanced antenna technology also increases range and reliability.

The PD1-W21-231-T feature 1000BASE-T Ethernet interface and operate from standard 802.3af power-over-Ethernet (PoE) sources.

APPLICATION

○ High-performance enterprise and hotels, branch offices and retail spaces where flexibility in interfaces is required. Remote access and secure-jack applications. Indoor applications.

OPERATING MODE

○ Multi-service 802.11a/b/g/n WLAN, 802.11a/b/g/n air monitor, hybrid combination of WLAN/AM.

RF MANAGEMENT

○ Automatic transmit power and channel management control with auto coverage hole correction via ARM.

WIRELESS RADIO SPECIFICATIONS

○ AP type: 3x3 multiple input/multiple output (MIMO).
  Supported frequency bands (country-specific restrictions apply):
  - 2.400 to 2.4835 GHz.
  - 5.150 to 5.250 GHz.
  - 5.250 to 5.350 GHz.
  - 5.470 to 5.725 GHz.
  - 5.725 to 5.850 GHz.
○ Available channels: Controller-managed, dependent upon configured regulatory domain.
○ Supported radio technologies:
    802.11b: Direct-sequence spread-spectrum (DSSS).
    802.11a/g/n: Orthogonal frequency division multiplexing (OFDM).
    802.11n: 3x3 MIMO with 2 spatial streams.

- Supported modulation types:

    802.11b: BPSK, QPSK, CCK.

    802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM.

- Transmit power: Configurable in increments of 0.5 dBm.

- Maximum transmit power:

    2.4GHz: 27 dBm (limited by local regulatory requirements).

    5 GHz: 27 dBm (limited by local regulatory requirements).

- Maximum ratio combining (MRC) for improved receiver performance.

- Association rates (Mbps):

    802.11b: 1, 2, 5.5, 11.

    802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54.

    802.11n: MCS0 - MCS15 (6.5 Mbps to 300 Mbps).

- 802.11n high-throughput (HT) support: HT 20/40.

- 802.11n packet aggregation: A-MPDU, A-MSDU.

POWER

- 48 volts DC 802.3af power over Ethernet (PoE).
- Maximum power consumption: 12.5 watts.

INTERFACES

- Network: One 10/100/1000BASE-T Ethernet (RJ-45), auto-sensing link speed and MDI/MDX.

CERTIFICATIONS

- Wi-Fi Certified: 802.11a/b/g/n.

WARRANTY

- 12 months.

ANTENNA

- Six integrated downtilt omni-directional antennas for 3x3 MIMO with maximum antenna gain of 3.0 dBi in 2.4 GHz and 5.0 GHz.

ENVIRONMENTAL

- Operating:

    - Temp: 0° to 50° C (32° to 122° F).

    - Humidity: 5 to 95% non-condensing.

- Storage and Transportation Temperature Range:

    - Temp: -40° to +70° C (-40° to +158° F).