



108Mbps 11g Outdoor PoE AP



WAB-3003

H/W Version: 1

Product Overview

The LevelOne WAB-3003 108Mbps 11g Outdoor PoE AP is a 500mW Wi-Fi 802.11b/g device for long range wireless transmission. Its rugged IP68-rated metal housing is weatherproof, watertight and rust resistant, making it an ideal solution for deployments in harsh conditions, such as outdoor or industrial environments.

High-Power Signal and Long-Range Coverage

When in AP mode, WAB-3003 operates as an AP station with wall-penetrating high-power signal and long-range coverage to better serve Wi-Fi clients. In addition, it can be set up as a WDS-mesh mode by establishing multiple WDS links to bridge neighbor access points together.

Business-Class Security and Multiple-SSID/VLAN Tagging Support

Coming with business-class security, WAB-3003 is also an ideal for enterprise applications when operates

in the AP mode. Furthermore, one WAB-3003 with multiple SSIDs is capable of acting as multiple Virtual Access Points (VAPs). By tagging the traffic from each VAP with a unique VLAN ID, it allows for segmenting a corporate network by VLANs to protect critical resources.

Multiple Operation Modes for Different Infrastructures

WAB-3003 supports multiple operation modes (AP/ Bridge/CPE) and works well as a last-mile solution for wireless ISPs (WISPs). When operating in CPE (Client) mode, it functions as a Wi-Fi modem gateway to receive wireless signal over the last-mile Internet feed from WISPs. The CPE's bandwidth to the Internet can be assigned by the WISP.

Being a versatile Wi-Fi device, WAB-3003 does not limit itself to outdoor usage only. When managed by a Controller (such as the AMG-series), it performs as a Wi-Fi base station in either a public or private wireless access deployment.



1. RJ-45 Port
2. N Type Antenna

Key Features

- Rugged, Compact, and Adaptive to Versatile Environments
- High Transmit Power and N-type Connector
- High-Speed with QoS for Voice, Video, and Data Applications
- Power over Ethernet (PoE) & Flexible Mounting Options
- Multiple Operation Modes for Different Infrastructures
- Business-Class Security and Multiple-SSID/VLAN tagging Supported

Works Well With



AMG-2001
Access and AP Management Gateway



AMG-2100
Gigabit Access and AP Management Gateway

Technical Specification

Wireless Radio

Frequency band: 2.4 GHz

Modulations:

- (1) 802.11b: DSSS (CCK, DQPSK, DBPSK)
- (2) 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)

Channels:

- (1) USA (Channel 1~11)
- (2) Japan (Channel 1~14)
- (3) Europe (Channel 1~13)

Data rate with auto fallback:

- (1) 802.11b: 1~11Mbps
- (2) 802.11g: 6~108Mbps

Receiver sensitivity:

- (1) 802.11b: 11Mbps@-89dBm
- (2) 802.11g: 54Mbps@-74dBm

RF max. transmit power:

US version: 500 mW; EU version: 100 mW

Multiple Operating Modes

Wireless architecture:

- (1) AP mode
- (2) WDS repeater mode (WDS Bridge) Supporting up to 8

WDS links per AP

- (3) Universal repeater mode (MAC NAT) Acting as AP and STA client simultaneously
- (4) CPE mode (Client gateway)

Gateway Features in CPE Mode

- Built-in NAT mode: To support IP sharing on the LAN side for multiple users (subscribers) to get access to the Internet
- Built-in DHCP server for issuing local IP addresses
- Built-in DDNS/DNS client
- Bandwidth management: To limit the uplink and downlink throughput
- Client connection control: For WISP's operator to remotely suspend or resume the service for subscribers at the CPE
- IP/Port forwarding and DMZ

General Access Point Features

- Number of VAP (ESSID): 8
- Number of associated clients per VAP: 32
- Setting for maximum number of associated clients
- Beacon interval: Adjustable to best adapt to the deployment environment
- Auto fallback: Data rate for long distance communication in noisy environments
- IAPP: To provide a faster roaming capability for the stations among different APs nearby
- 802.11g protection: Not to be affected with surrounding existence of 802.11b stations
- RTS/CTS and fragmentation control
- ACK timeout support
- Adjustable transmission power: 5 levels
- Wireless site survey: For scanning the surrounding access points for connection
- Supports IEEE 802.11e WMM and QoS within WDS Link

Security

- Data encryption: WEP (64/128/152-bits), WPA/WPA2 with TKIP or AES-CCMP with key's refreshing period setting
- User Authentication: WEP, IEEE 802.1X, WPA-PSK, WPA-RADIUS, MAC ACL, MAC authentication using RADIUS with built-in 802.1X Autjenticator
- Supports IEEE 802.11 mixed mode; open and shared key authentication
- Hidden ESSID: Broadcast SSID enable / disable
- Station Isolation : All associated stations can not communicate with each other when enabled
- Supports AES data encryption over WDS link
- Built-in Layer 2 Firewall, blocking Dynamic ARP Inspection & DHCP Snooping

Administration

- Software one-button-click to reset factory defaults
- Web-based management interface with remote configuration management and firmware upgrade capabilities
- Utilities for system configuration backup and restoration
- Two administration accounts in CPE mode:
 - (1) "root" for the WISP administrator, who can change all settings including bandwidth limit
 - (2) "admin" for the local administrator, who can view all settings and change only some preferences
- SNMP MIBII support (v1/v2c)
- NTP time synchronization
- Watch dog: Auto recovery while detecting system fault
- Syslog client
- Supports Event Log and SYSLOG reporting to external server
- Supports RADIUS accounting and accounting update
- Supports statistics on total transmission encountered and ransmitting error occurred

Hardware and Environment

- Metal case: Weather proof, compliant with IP68 Standard
- LAN Port: 1 x 10/100 Base-TX Ethernet with PoE
- N-type(female) connector for external antenna
- LED Indication: Power x 1; Ethernet x 1; Wireless x 1, Wireless - Signal Strength x 3
- PSE for PoE: DC 48V/0.4A
- Form Factor: Wall or Pole Mountable
- Dimension (W x D x H): 6.5" x 3.8" x 1.9" (165 x 96 x 48 mm)
- Weight: 1.6 lbs (0.72 kg)
- Operation Temperature: -30 ~ +70 °C (-22 ~158oF)
- Storage Temperature: -40 ~ +85 °C (-40~185 oF)
- Operation Humidity: 100% maximum (Non-condensing)
- Storage Humidity: 100% (Non-condensing)

Certifications

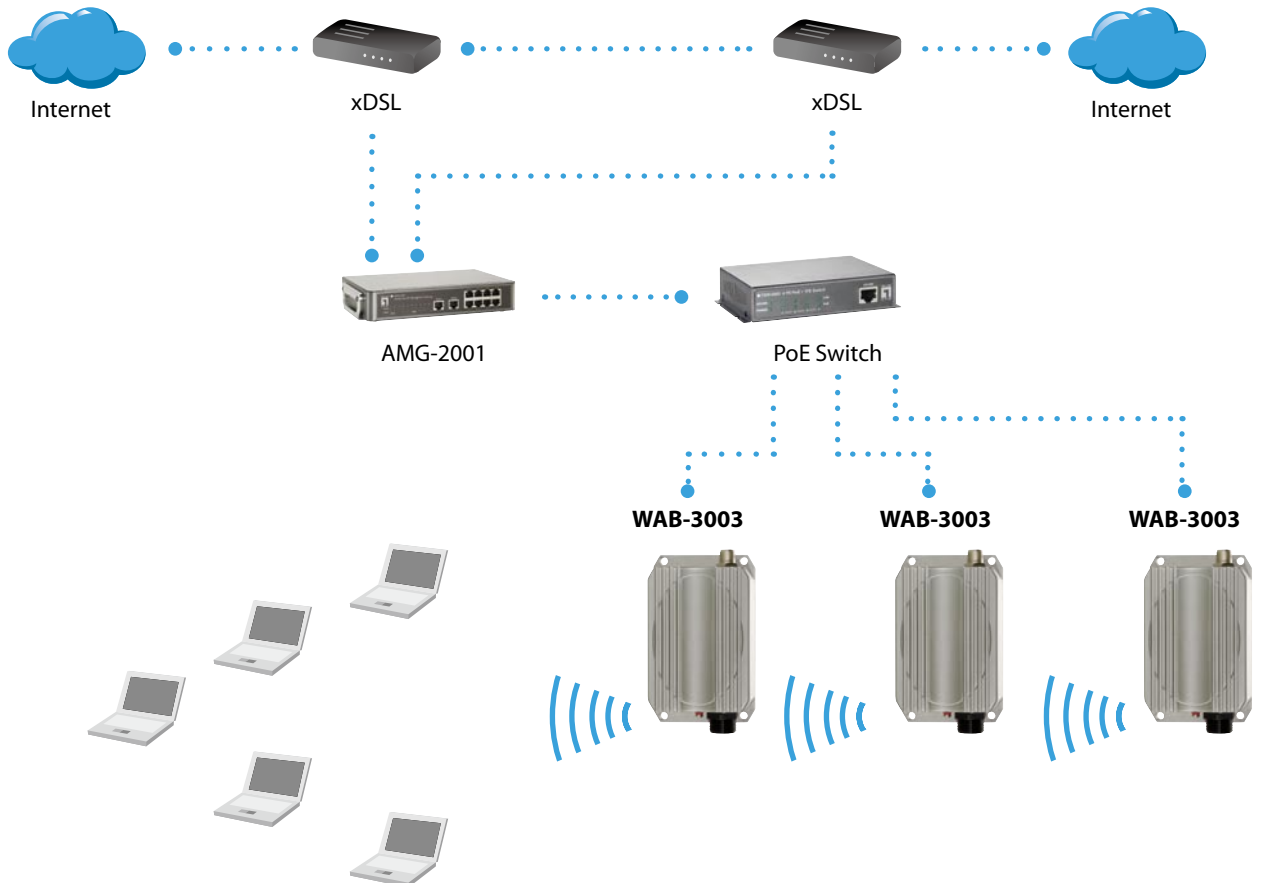
FCC, CE, IP68, RoHS compliant

Product Diagram

WDS Mode



AP Mode



Order Information

WAB-3003: 108Mbps 11g Outdoor PoE AP

Package Contents

WAB-3003, Power Injector, CD Manual, Quick Installation Guide



Optional Accessories



ANC-4230
400 Series N plug to N plug Cable
3m



ANC-2210
200 Series N plug to N plug Cable
1m