



# Wireless 11a/b/g Outdoor PoE AP

## WAB-7000

### Fast and Far-Reaching Outdoor Wireless + Clear 11a Transmission

LevelOne's WAB-7000 is an outdoor PoE access point that can be deployed in AP, client, bridge, and repeater modes. It is especially useful as it can operate in 11a or 11b/g modes. As the 2.4GHz spectrum (11b/g) is frequently crowded with other wireless traffic, it is nice to have clear transmission lanes in the 11a mode (5GHz). (Like driving through the countryside on a Sunday afternoon.)

With the N-type connector, installers are free to choose an antenna that best fits their requirement.

### High Output Power for Extended Coverage

The LevelOne WAB-7000 support optional High Power RF transmission for long distance Point-to-Point or Point-to-Multipoint Deployment

### Power Over Ethernet = Simple Installation

It's not always easy to find a power outlet, especially when you're on the roof of a building trying to connect 2 LANs in bridge mode. We've taken this into consideration and have made WAB-7000 PoE-compliant, making installation simple and easy.

### Weatherproof

Snow, rain, typhoons, desert heat, etc., this AP is up to the challenge. The WAB-7000 is IP-66 rated so you can deploy your wireless network in any harsh weather condition.

### Security

In addition to the industry security standards (WEP/WPA/WPA2), WAB-7000 also comes with MAC address filtering and tunneling to let network admins know exactly which stations have access to the network.



**WAB-7000**

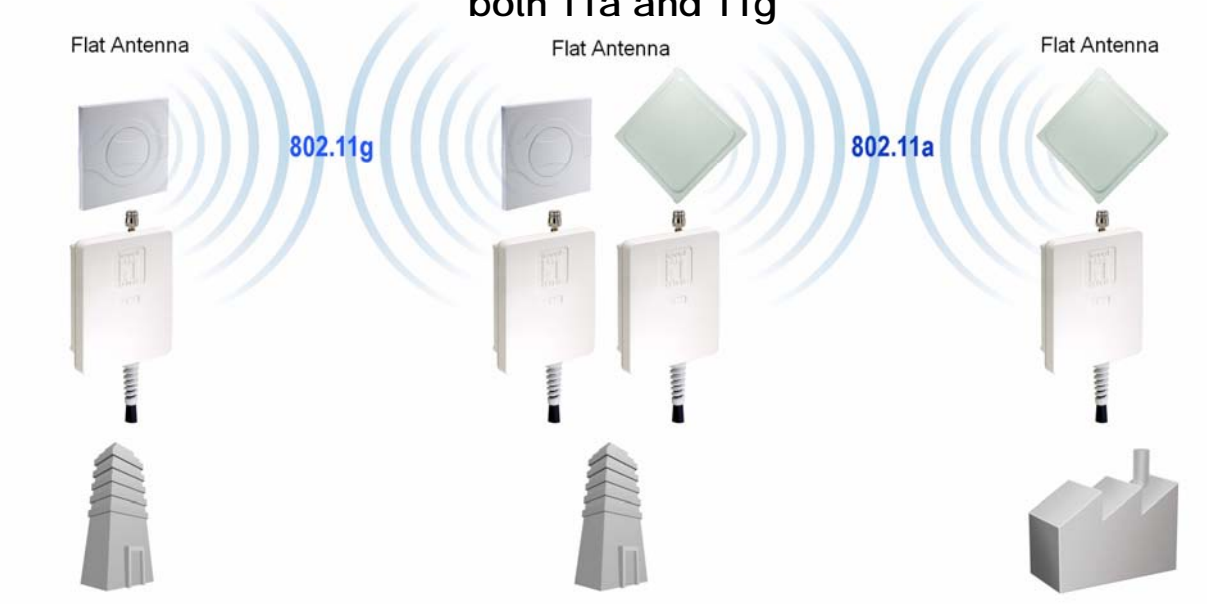
## Key Features

- IEEE 802.11a/b/g standard compliant, operates on the 2.4 and 5 GHz unlicensed ISM spectrum
- Data rate of up to 54 Mbps
- Point-to-point and point-to-multi-point topology
- Optional Hi-Power RF transmission
- ACK timeout adjustment for long distance applications
- 802.11i and 802.1x security support
- PoE power supply and data transmission
- IP-66 weather-proof design

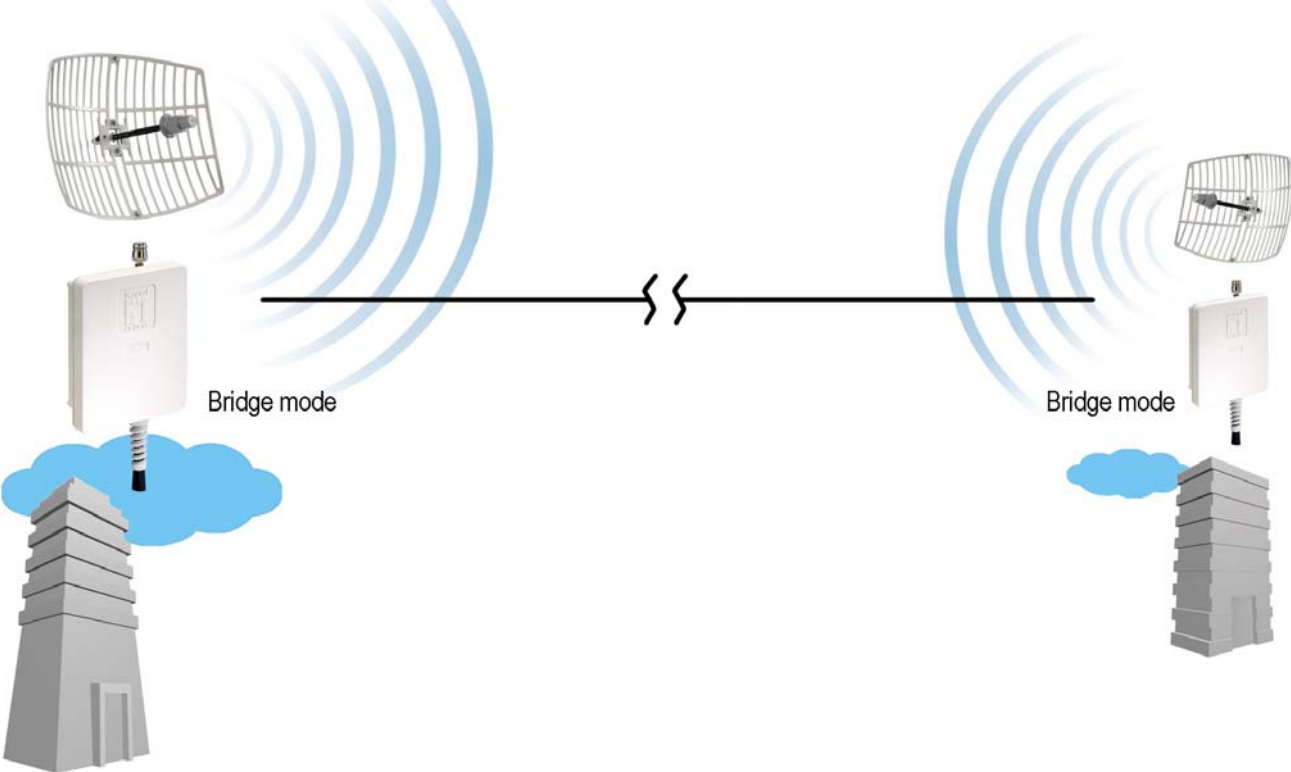
## Package Contents

- WAB-7000
- Power over Ethernet Injector (POI-2000)
- Wall/Pole mounting kit
- Waterproof kit for Ethernet cable
- User Manual CD-ROM

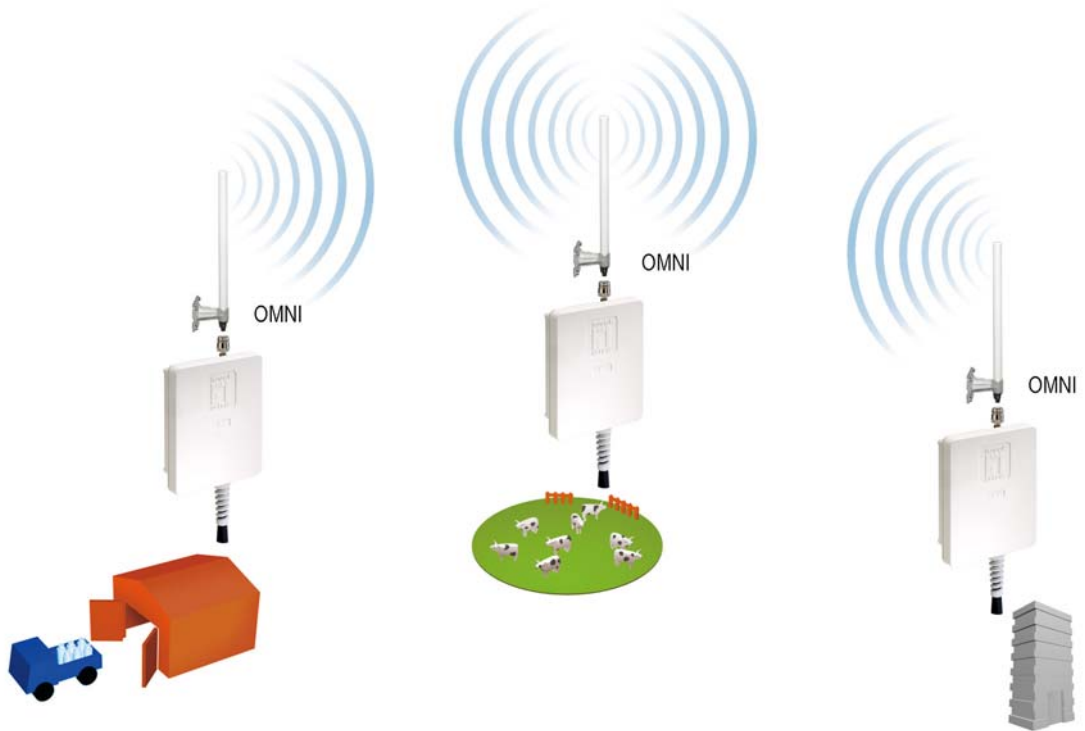
WAB-7000 as a Point-to-Point solution using both 11a and 11g



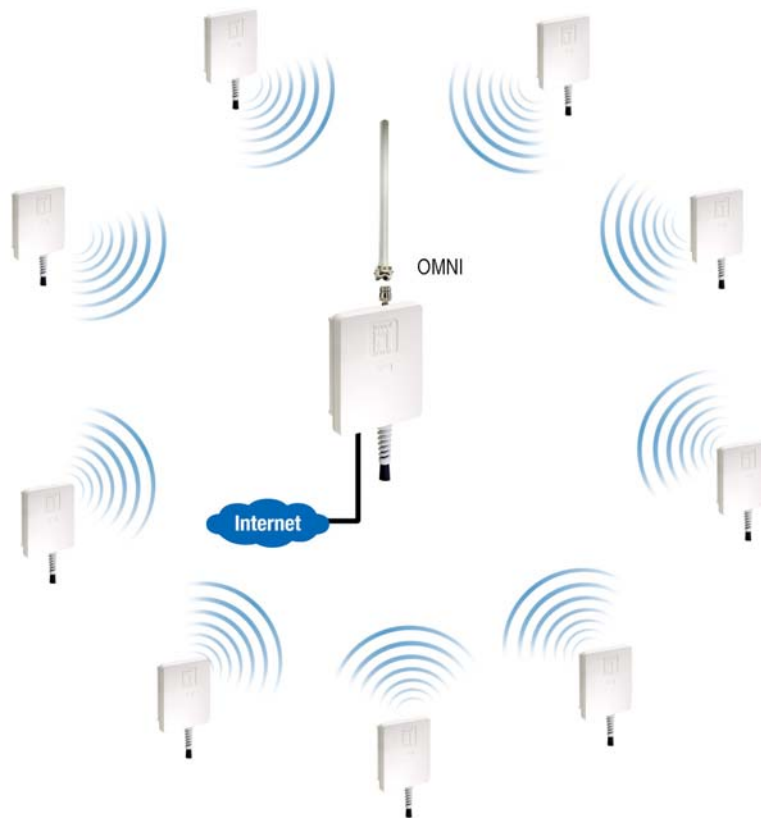
WAB-7000 as a Point-to-Point AP for long distances



## WDS Application



## Point to Multi-Point Application



## Technical Specifications

### Interface

- 1 X Wireless IEEE802.11a/b/g
- 1 X 10/100 Mbps Auto-MDIX RJ-45 Ethernet port
- 1 X RS232 console port connector

### Antenna Type

- External Type with N-type jack connector

### Data Transfer Rates

- 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54 Mbps

### Security

- IEEE802.1x Authenticator / RADIUS Client (EAP-MD5/TLS/TTLS) Support in AP Mode
- WPA /WPA2
- MAC address filtering
- Hide SSID in beacons
- User isolation
- NAT in CR mode

### IEEE Standards

- 802.11a/b/g, 802.1x,
- 802.3, 802.3u
- 802.3af
- Media Access Protocol: Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA)

### Modulation Technology

- Orthogonal Frequency Division Multiplexing (OFDM)
- DBPSK @ 1 Mbps DQPSK @ 2 Mbps
- CCK @ 5.5 & 11 Mbps
- BPSK @ 6 and 9 Mbps
- QPSK @ 12 and 18 Mbps
- 16-QAM @ 24 and 36 Mbps
- 64-QAM @ 48 and 54 Mbps

### Operation Mode

- AP mode/Client Bridge mode
- Universal Repeater mode
- Point-to-point , point-to-multi point, WDS mode

### Frequency Band

#### 802.11a:

- 5.15~5.25 GHz
- 5.25~5.35 GHz
- 5.47~5.725 GHz
- 5.725~5.825 GHz

#### 802.11b/g:

- 2.4~2.484 GHz

### Operating Channels

#### 802.11a:

- 11 for North America
- 14 for Japan
- 13 for Europe

#### 802.11b/g:

- *US/Canada*: 12 non-overlapping channels
  - (5.15~5.35 GHz, 5.725~5.825 GHz)
- *Europe*: 19 non-overlapping channels
  - (5.15~5.35 GHz, 5.47~5.825 GHz)
- *Japan*: 4 non-overlapping channels
  - (5.15~5.25 GHz)
- *China*: 5 non-overlapping channels
  - (5.725~5.85 GHz)

### Transmitter power

#### 5.15~5.24 GHz (11a)

- 17 dBm @ 6~24 Mbps
- 17 dBm @ 36 Mbps
- 16 dBm @ 48 Mbps
- 15 dBm @ 54 Mbps

#### 5.26~5.35 GHz (11a)

- 20 dBm @ 6~24 Mbps
- 18 dBm @ 36 Mbps
- 16 dBm @ 48 Mbps
- 15 dBm @ 54 Mbps

#### 5.745~5.85 GHz (11a)

- 18 dBm @ 6~24 Mbps
- 16 dBm @ 36 Mbps
- 14 dBm @ 48 Mbps
- 13 dBm @ 54 Mbps

#### 2.412~2.472 GHz (11b)

- 20 dBm @ 1, 2, 5.5, and 11 Mbps

#### 2.412~2.472 GHz (11g)

- 20 dBm @ 54 Mbps

### Receiver Sensitivity

#### 802.11a:

- -88 dBm @ 6 Mbps
- -70 dBm @ 54 Mbps

#### 802.11b:

- -92 dBm @ 1 Mbps
- -95 dBm @ 11 Mbps

#### 802.11g:

- -91 dBm @ 6 Mbps
- -74 dBm @ 54 Mbps

### Topology

- Infrastructure, WDS

### Configuration

- Web-based configuration (HTTP)
- SNMP V1
- Telnet

### Firmware Upgrade

- Upgrade firmware via web-browser

### IP Auto-configuration

- DHCP client/server

## Physical Specifications

### Housing

- IP-66 rated housing

### Dimensions

- Length= 163.8mm
- Width = 135.2mm
- Height= 52.0mm

### Weight

- 1.2 Kg (2.6 lbs)

### Power Requirements

- Active Ethernet (802.3af)
- 48 VDC/0.375A

### Environmental

#### Temperature Range

Operating: 0°C to 65°C  
(32°F to 149°F)

Storage: -20°C to 80°C  
(-4°F to 176°F)

#### Humidity (non-condensing)

5%~95% Typical

#### Regulation Certifications

FCC Part 15/UL, ETSI 300/328/CE

## Ordering Information

WAB-7000 11a/b/g Wireless PoE Access Point