level one ®

Dual Radio PoE
Mesh Access Point

WAB-7400

H/W Version: 1

Superior Wireless Mesh Performance

The LevelOne WAB-7400 is a dual-radio wireless mesh access point that was developed to tackle the professional-level wireless challenges any systems integrator will face. Whether it's creating an industrial grade wireless mesh network for a factory or warehouse, or building a flexible network on a large corporate campus, the LevelOne WAB-7400 does the job with simplicity and ease.

Dual Band Technology

When a client needs to transmit surveillance data around the premises, but they also want wireless internet access at each access point, what do you do? The LevelOne WAB-7400 comes dual-radio technology, allowing both requirements to be

fulfilled. The 5 GHz radio creates a robust auto-forming and self-healing line of sight backhaul network to handle high-bandwidth data, voice, and surveillance streams. The 2.4 GHz radio allows users to connect via the broadcast SSIDs for internet surfing or accessing resources on the LAN. Since each chipset operates on a different frequency, both networks offer professional-class performance with no overlapping interference.

Power over Ethernet (PoE)

With PoE functionality, system installers can deploy WAB-7400 in tight spots on the roof of tall buildings because all power and data is transferred using a single Cat.5 cable.

1. WLAN 2 connector
2. WLAN 1 connector
3. Ethernet 10/100 RJ45 port

1   2   3

Key Features

- IEEE 802.11a/b/g standard compliant operates on the 2.4 GHz/5 GHz unlicensed ISM spectrum
- Self-configuration and healing Mesh network
- Advanced OLSR (Optimal Link State Routing) protocols find the optimal routing path once the link status is changed or broken
- Support 802.1x (EAP-TLS/TTLS/SIM/PEAP) and 802.11i (WPA/WPA2, AES) high security level
- Support 802.1Q VLAN
- Support WMM extension and bandwidth control
- 802.3af PoE power supply and data transmission
- Support SNMP v1/v2c/v3
- IP-65 Weather proof design

Works Well With

OAN-2150
15dBi Omni-Directional Outdoor Antenna

OAN-0600
Dual-Band Omni-Directional Antenna

Technical Specifications

Standard Conformance
IEEE 802.11a/b/g, IEEE 802.3, IEEE 802.3u, IEEE802.3af

Network Interface
LAN: 10/100 Mbps RJ-45 Port

Radio Operation

Data Transfer Rate
802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps
802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps
802.11b: 1, 2, 5.5, 11Mbps

Modulation
802.11a/g: OFDM (64-QAM, 16-QAM, QPSK, BPSK)
802.11b: DSSS (DBPSK, DQPSK, CCK)

Media Access Control
CSMA/CA with ACK

Frequency Band
802.11a: 5.15~5.25GHz, 5.25~5.35GHz, 5.47~5.725GHz, 5.725~5.825GHz
802.11b/g: 2.4~2.4835 GHz

Number of Channels
802.11b/g:
Channel 1~11 North America
Channel 1~13 Europe
Channel 1~14 Japan

802.11a:
US/Canada: 12 non-overlapping channel (5.15~5.35GHz, 5.725~5.825GHz)
Europe: 19 non-overlapping channel (5.15~5.35GHz, 5.47~5.825GHz)
Japan: 4 non-overlapping channel (5.15~5.25GHz)
China: 5 non-overlapping channel (5.725~5.85GHz)

RF Connector
2 x N-type (WLAN1 / WLAN2)

Receiver Sensitivity(Typical)
802.11a:
-88dBm @ 6Mbps
-70dBm @ 54Mbps

802.11g:
-91dBm @ 6Mbps
-74dBm @ 54Mbps

802.11b:
-92 dBm @ 1Mbps
-95 dBm @ 11Mbps

Transmitter Output Power (Typical)
5.15~5.24 GHz (IEEE802.11a):
17dBm @6~24Mbps
17dBm @36Mbps
16 dBm @48Mbps
15 dBm @54Mbps

5.26~5.35GHz (IEEE802.11a):
20dBm @6~24Mbps
18dBm @36Mbps
16 dBm @48Mbps
15 dBm @54Mbps

5.745~5.85GHz (IEEE802.11a):
18dBm @6~24Mbps
16dBm @36Mbps
14 dBm @48Mbps
13 dBm @54Mbps

2.412~2.472GHz (IEEE802.11g):
20 dBm @54Mbps

2.412~2.472GHz (IEEE802.11b):
20 dBm @1, 2, 5.5 and 11Mbps

Operating Mode
WLAN1: ADHOC mode (Backhaul)
WLAN2: AP mode

Auto Channel Selection
Yes

System

Management
- HTTP / HTTPS/ SSH
- Network Management System (NMS)
- SNMP v1/v2c/v3
- Firmware upgrade via utility/HTTPS
- Syslog

Network Management System Features
- MESH AP discovery
- MESH AP status
- MESH AP setup, upgrade, reboot
- User status, activity
- Support windows XP, Vista

System Operating Mode
- Gateway
- Relay*
*Remark: In Relay mode, Ethernet functionality will be disabled except power feeding

WAN Connection Type (Gateway mode)
- Fixed IP
- PPPoE
- DHCP client

Wireless LAN Mode
- Ad-hoc (or peer to peer) Mode for 11a
- AP Mode for 11b/g

Security
- Authentication: 802.11i (WPA, WPA2), 802.1x (including EAP-TLS/TTLS)
- Encryption: Open, WEP-64/128, TKIP, AES
- MAC address access control list
- 802.1Q VLAN Support
- MSSID Support in client access mode
- VPN pass-through/ End to end VPN (PPTP)
- Hidden SSID
- HTTP login
- HTTPS login

QoS
- WMM
- Bandwidth control

Physical Specifications

Power Connector
1 x Proprietary Ethernet / Power connector with water proof

Power Requirement
48V DC, 0.375A (proprietary PoE)

Temperature
Operating: -20 ~ 70℃
Storage: -30 ~ 80℃

Humidity
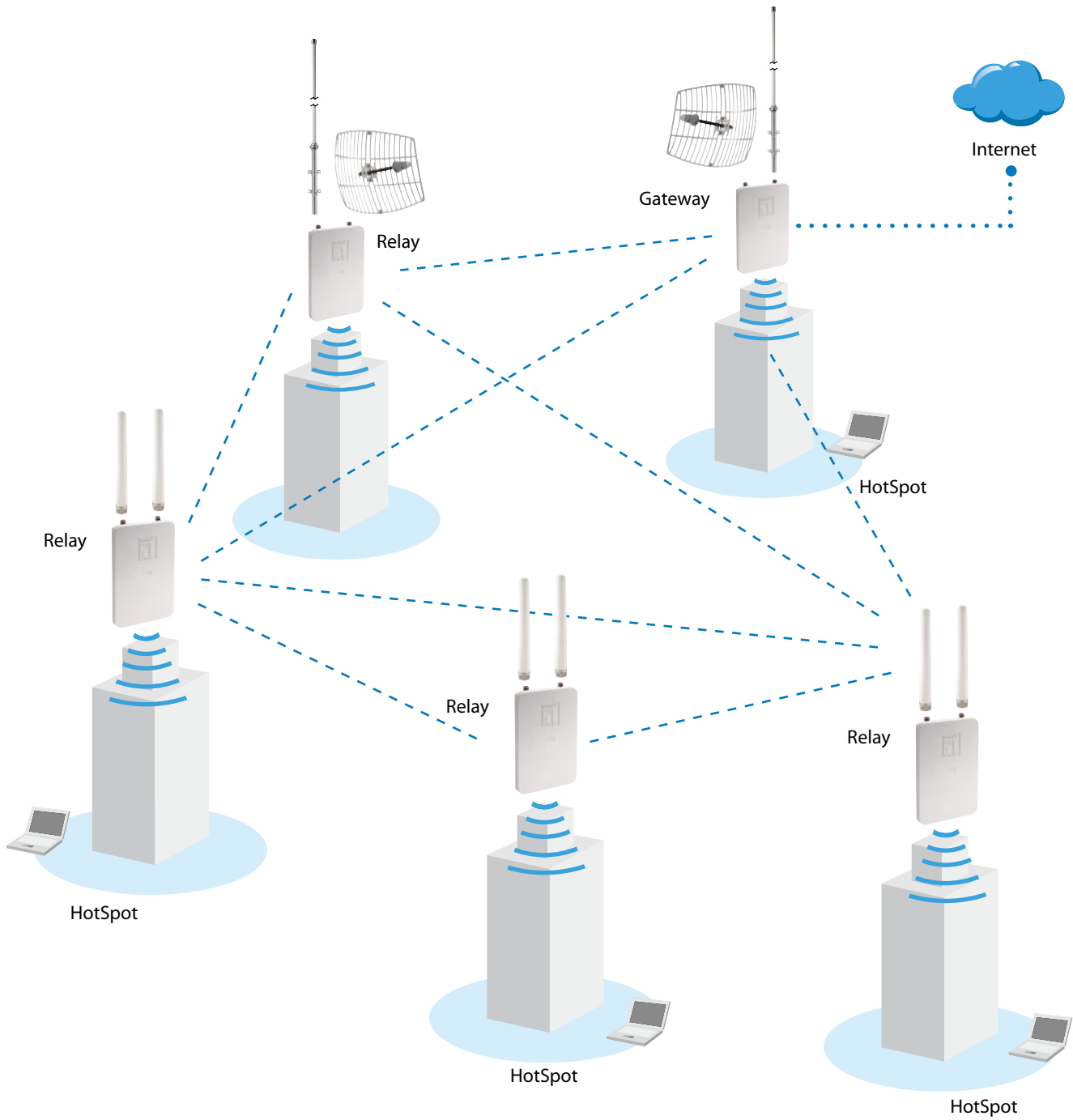0 ~ 95% (Non-condensing)

Dimensions
260mm(L) x 175mm(W) x 65mm(H)

Weight
450g

Certifications
CE,FCC

Product Diagram

Order Information   **WAB-7400:** Dual Radio PoE Mesh Access Point

Package Contents   WAB-7400
POI-2000 PoE Injector
CD Manual/Utility
Mounting Kit

Optional Accessories

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

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

V1.0