

FreeCon WAB-3000



Wireless Mesh Outdoor AP/Bridge

Wireless Outdoor Mesh Access Point

The LevelOne WAB-3000 is a Wireless outdoor Access Point that is able to automatically configure and operate within a 40 node wireless Mesh network. It is hosed in a IP66 casing for outdoor use as an access point, bridge or signal repeater with a minimum range of 420m (1400 feet).

Dual Radios for 802.11b/g/a Operations

The WAB-3000 operates on both the 2.4 GHz and 5GHz radio bands and incorporates the IEEE 802.11a/b and 802.11g wireless radio standards on both AP and bridging ports to give maximum flexibility when setting up an outdoor wireless network. The WAB-3000 further provides Super G^{TM} and Turbo A wireless network connectivity to provide a wireless network with data transfer rates of up to 108 Mbps.

Self-Forming, Self-Configuring, Self-Healing mesh network

WAB-3000 allows users to build a self-organizing mesh network which doesn't require manual configuration. Adding new AP nodes or relocating existing Access Points are as easy as powering them on and place them within the network coverage range.

The network automatically detects and configures the new or relocated nodes and incorporates them into the existing mesh networking system. WAB-3000 is also a highly adaptable self-healing node with repairing "dead-paths" through multiple paths between alternative nodes.

Advanced Security Features

In order to protect a wireless network from unauthorized access, the WAB-3000 is able to auto-detect and report rogue access points. The wireless network is further protected with 128-bit AES WEP/WPA2/802.11i encryption keys.

Easy Installation and Maintenance

Node management is made easy with its Web-based management interface. With a Web-browser like Internet Explorer, network administrators can easily configure, maintain, and add and remove users from the wireless network.

The 802.1Q/VLAN feature allows for the use of multiple SSIDs for various service types over a common wireless network. Also, another important feature of the WAB-3000 is its ability to balance the load of all wireless clients connected throughout the network. This ensures a better managed wireless network with optimized data traffic.

The WAB-3000 also offers a built-in Power over Ethernet (PoE) function to eliminate power cables and adapters when deploying network devices within the wireless network.



WAB-3000

Key Features

- self-configuration, self-healing MESH network up to 40 nodes
- Supports 802.1Q/VLANfeature allows for the use of multiple SSIDs in a single network
- Detects & reports rogue APs
- Rugged IP 66 casing for outdoor use as a HotSpot or repeater
- Dual Radios: 802.11a/b/g for both AP and Bridging
- Supports Gateway mode on WAN port

- Super G & Turbo A on access point & bridge up to 108 Mbps
- Multiple user configurable modes: access point, wireless bridge, or repeater modes
- Power-over-Ethernet (PoE) functionality
- VLAN 802.1Q and multiple SSIDs
- 64/128/152-bit WEP AES-CCMP/WPA2/802.11i encryption and security keys
- Wireless client load balancing



FreeCon WAB-3000



Technical Specification

External Ports

1 x 10/100 Mbps WAN Ethernet port

1 x 10/100Mbps LAN port

3 x External antenna ports

■ WAN Ethernet Setting

DHCP client Supports 10/100 Mbps auto negotiation

LAN Ethernet Setting

10/100 mbps full/half duplex auto negotiation

Device Management

Web Server/ HTTPS

Supports SNMP v1, v2, v3 agent Multiple user privileges

Power

Input Voltage: 24 VDC

Injector input: 100~240 VAC, 50~60Hz

Power Consumption: 25W

Environment & Safety

Operating Temperature: -5°C~+50°C (WAB-3000A) Operating Temperature: -30°C ~ +70°C (WAB-3000H)

Operating Humidity: 0~95% non-condensing EMI/Safety: FCC Class A, CE

Physical Spec

Dimensions: 23.5cm(L) x 21.0cm(W) x 7.62cm (H)

Weight: 2.5 Kg(5.5lbs)

LEDs

Power WAN

WLAN1: Activity light/ Link Ind. WLAN2: Activity light/ Link Ind WLAN: Signal Strength

Wireless interface

802.11a/b/g for AP & bridge with Super G (Turbo A optional)

Operation Mode

Access Point, Bridge/Repeater

Self-Forming, Self-configuring, self-organizing mesh

Up to 40 nodes

Channel Number

Fixed or automatic select (optimum)

Antennas

2 x 5dBi for 802.11a and 2.5abi for 802.11b/g Dual band omni directional antenna

Enhanced Features

Multiple SSIDs, VLAN 802.1Q 802.11a Dynamic Frequency Selection 802.11a Transmit Power control Load Balancing of Wireless Clients

Security

WEP: 64/128/152-bit encryption WPA-PSK WPA (802.1x) - Dynamic Key

WPA2/ 802.11i

AES-CCMP: 128-bit encryption Enable/disable broadcast SSID

MAC address filtering

Rogue wireless AP detection with email notification

Wireless AP and wireless client activities monitoring

Signal strength

MAC address listing of wireless clients

Tools and Utilities

Ping Utility - Trace route utility

Trace route utility

Firmware upgrade via web

Reboot device Factory default

Product Diagram

Mesh Network HotSpot HotSpot

Ordering Information

WAB-3000A

Wireless Mesh Outdoor AP/Bridge

WAB-3000H

Wireless Mesh Outdoor AP/Bridge with Temperature Controller

