OWL610
Outdoor Access Point / Bridge

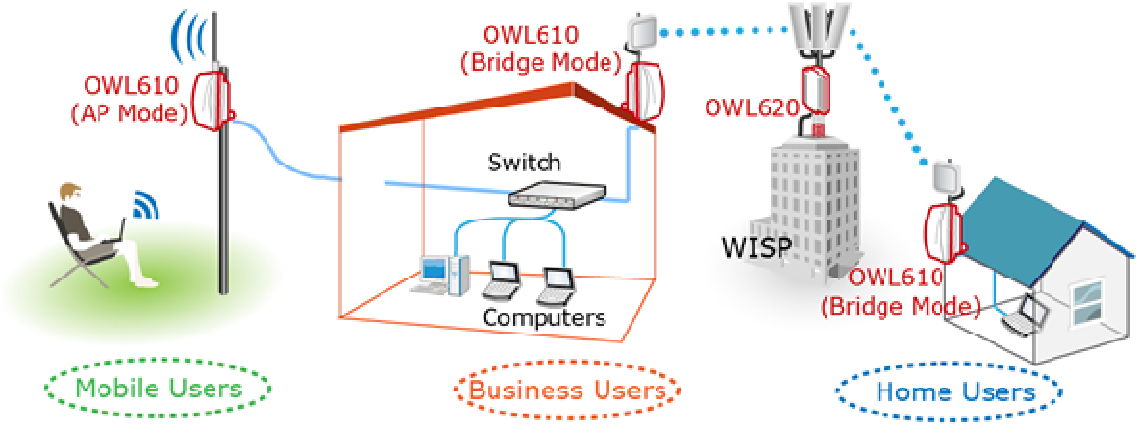
www.4ipnet.com

The 4ipnet OWL610 is a dual-band Wi-Fi 802.11a/b/g/n device for long range outdoor 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 industrial environments.

As an access point with wall-penetrating, high-power signal and long-range coverage, the OWL610 can effectively serve Wi-Fi clients, or it can be set up as a WDS-mesh node by establishing multiple WDS links to bridge neighboring access points together.

The OWL610 supports tunnel-based AP Management, and comes with all standards demanded by enterprise applications, including business-grade security (802.1X, WPA and WPA2) and multiple ESSIDs with VLAN tags to segment a corporate network and protect critical resources. Furthermore, one OWL610 with multiple SSIDs is capable of acting as multiple Virtual APs (VAPs).

Supporting up to 300Mbps wireless speed with its 802.11n 2x2 MIMO solution, and with a gigabit Ethernet interface, the OWL610 is perfect for bandwidth-hungry applications such as video surveillance and multi-media streaming over wireless. The diversity of applications, ranging from servicing clients to wireless backhaul, makes the OWL610 a perfect choice for any outdoor deployment.



FEATURES & BENEFITS

Rugged IP68 Housing Suitable for a Wide-Array of Outdoor Applications

- Diverse Deployment Scenarios:
  (1) Municipal Wi-Fi
  (2) Home Owner Association (HOA), RV parks, and recreation resorts
  (3) Hotels, mobile hospitals, and mobile libraries
  (4) Shopping malls, airports, harbors, roadways, warehouses, and manufacturing plants
- IP68 weather- and water-proof, housed in durable, rust-resistant metal casing

2 x 2 MIMO 802.11a/b/g/n Solution with N-type External Antenna Connectors

- High-speed IEEE 802.11a/b/g/n wireless network interface, providing transmission rates up to 300Mbps
- 2 N-type connectors allows for flexibility in choosing of suitable antenna type and gain depending on individual deployment needs

Supporting QoS & 802.11e WMM

- Supports IEEE 802.1p/IEEE 802.1Q Quality of Service (QoS) tagging features
- Supports IEEE 802.11e Wireless Multi-Media to fulfill bandwidth thirsty triple-play (voice, video, and data) applications

IGMP Snooping

- Minimizes unnecessary multicast or broadcast messages being transmitted over the air
- A perfect solution to wireless environments with a high density of users

Enterprise-grade WLAN Security & Client Authentication

- Advanced security options: 64/128/152 bits WEP, WPA/WPA2 with IEEE 802.1X or PSK (Pre-Shared Key)
- Ability to filter out unauthorized wireless clients with built-in MAC access control list or via back-end RADIUS server authentication

Multiple Virtual APs & Capability of Client Isolation

- Create up to 8 Virtual APs (VAP), each with its own ESSID; that is, one AP can have up to 8 ESSIDs
- Each VAP appears to clients as an independent AP and its traffic can be associated with a particular VLAN ID
- Wireless LAN segmentation, Disable SSID Broadcast, and the option of Station Isolation

Gigabit Ethernet Port with PoE

- The IEEE 802.3af Power over Ethernet (PoE) compliant design eliminates the need for power sockets, allows installation of this device in areas where power outlets are not readily available, and provides standard based compatibility with other device
- Provides 10/100/1000 Gigabit Ethernet ports for high throughput applications

Tunneled AP Management

- OWL610 can be physically deployed at any location with connection to the Internet. Its can then be managed by a remote 4ipnet Secure WLAN Controller, incorporating it into the controller's internal network via secure tunnels
- With Tunneled AP Management, wireless clients associated to OWL610 can enjoy the network service provided by a remote 4ipnet Secure WLAN Controller

SPECIFICATIONS

4ipnet® OWL610

Wireless Radio

- Wireless Interface: IEEE 802.11 a/b/g/n
- Frequency band: 2.4 GHz and 5 GHz
- Wireless architecture:
  (1) AP mode
  (2) WDS mode (Repeater / Bridge)
- Modulation:
  (1) OFDM (64-QAM, 16-QAM, QPSK, BPSK)
  (2) DSSS (CCK, DBPSK, DQPSK)
- Channels:
  (1) USA: 1~11, 36, 40, 44, 48, 52~64, 100~140, 149~165
  (2) Japan: 1~13, 36, 40, 44, 48, 52~64, 100~140
  (3) Europe: 1~13, 36, 40, 44, 48, 52~64, 100~140
- Data rate with auto fallback:
  (1) 802.11a: 6 ~ 54 Mbps
  (2) 802.11b: 1 ~ 11 Mbps
  (3) 802.11g: 6 ~ 54 Mbps
  (4) 802.11n: 6.5 ~ 300Mbps
- Transmit Power (without antenna):
  (1) 802.11a: Up to 19dBm
  (2) 802.11b: Up to 21dBm
  (3) 802.11g: Up to 21dBm
  (4) 802.11an: Up to 20dBm
  (5) 802.11gn: Up to 21dBm
- Receiver Sensitivity:
  (1) 802.11a: -95dBm@6Mbps
  (2) 802.11b: -95dBm@1Mbps
  (3) 802.11g: -95dBm@6Mbps
  (4) 802.11an HT20: -95dBm@MCS0
  (5) 802.11an HT40: -91dBm@MCS0
  (6) 802.11gn HT20: -95dBm@MCS0
  (7) 802.11gn HT40: -90dBm@MCS0
- IGMP Snooping
- Proxy ARP
- 2.4GHz Channel Analysis

QoS-WMM

- DiffServ/TOS
- IEEE 802.1p/COS
- IEEE 802.1Q Tag VLAN priority control
- IEEE 802.11e WMM

Handover & Roaming

- IEEE 802.11i pre-auth (PMKSA cache)

Security

- Supports IEEE 802.11 mixed mode; open and shared key authentication
- Data encryption with WEP (64/128/152-bits)
- User Authentication: WEP, IEEE 802.1X, WPA-PSK, WPA-RADIUS, MAC ACL, MAC authentication using RADIUS with built-in 802.1X Authenticator
- WPA/WPA2 with TKIP or AES-CCMP with setting of key refresh period
- Hidden ESSID: enable/disable SSID broadcast
- MAC Address filtering (MAC ACL)
- Maximum number of registered RADIUS servers: 2
- Station Isolation
- Supports AES data encryption over WDS link
- Built-in Layer 2 Firewall, blocking Dynamic ARP Inspection & DHCP Snooping

System Management

- Web-based administration
- SNMP v1/v2c
- Provides Event Log
- SYSLOG information support
- Client Statistics
- Configuration backup and restore
- Firmware upgrade
- Capable of performing RADIUS Accounting and Accounting Update
- Supports Tunneled AP Management with 4ipnet Secure WLAN Controllers
- IPv6*
- Ethernet LAN Port Mapping (with a 4ipnet controller)

Built-in Servers & Client Interfaces to Other Services

- DHCP client
- DNS client
- SYSLOG client
- RADIUS client
- SNMP v1/v2c client

Wireless Signal Management

- Number of ESSIDs (Virtual APs): s8
- Number of associated clients: 128
- Setting for maximum number of associated clients
- Network policy based on ESSID

Hardware Specification

- IP68 water-proof metal case
- Uplink Port: 1 × 10/100/1000 Base-T Ethernet with IEEE 802.3af PoE
- LAN Port: 1 × 10/100/1000 Base-T Ethernet
- Console Port: 1 × RJ45
- Antenna: 2 × External N-type connectors

Physical and Power

- Supports IEEE 802.3af PoE
- Form Factor: Pole Mountable
- Dimensions (W x D x H): 9.5" x 9.1" x 5.2"
  (240 mm x 230 mm x 130 mm)
- Weight: 5.3lbs (2.4 kg)

Environment

- Operation Temperature: -30 ~ + 70 °C (-22 ~158°F)
- Storage Temperature: -40 ~ + 85 °C (-40 ~185 °F)
- Operation Humidity: 0 ~ 95% maximum (Non-condensing)
- Storage Humidity: 100% (Non-condensing)

Certifications

- FCC, CE
- RoHS compliant

Package Contents

- 4ipnet OWL610 x 1
- CD-ROM (with User's Manual and QIG) x 1
- Quick Installation Guide x 1
- Mounting Kit x 1

* So far OWL610 only supports IPv6 for web services
** Specifications subject to change without notice