

OWL630

OUTDOOR ACCESS POINT



INTRODUCTION

4ipnet OWL630 is an enterprise-grade, concurrent dual-band 802.11ac outdoor access point, designed specifically to withstand harsh weather conditions in outdoor and industrial environments. Featuring two 3x3 MIMO radios that can each support up to 450 and 1300 Mbps data rates in the 2.4 and 5 GHz bands respectively, the OWL630 is ideal for providing wire-like performance that is crucial for businesses. Traffic prioritization ensures that bandwidth hungry applications such as HD videos can stream perfectly, while enforcing strict quality of service requirements for VoIP and mission critical services.

Given the overcrowding of the 2.4 GHz band by legacy Wi-Fi devices, more and more devices and networks are migrating to the 5 GHz band for increased performance. The wider channels and additional spatial streams offered by 802.11ac allows the OWL630 to meet high capacity demands while providing three-fold performance over 802.11n networks. However, due to the significant proportion of 2.4 GHz-only clients in use today, the OWL630's ability to service clients in both the 2.4 GHz and 5 GHz bands becomes essential for organizations that wish to improve overall wireless experience without sacrificing legacy support.

The OWL630's exterior is an IP68 rated, rust-resistant metal housing that is extremely sturdy and flexible to deploy. With the included mounting kit, the OWL630 can be easily and securely mounted on poles. The six external N-type connectors can be coupled with antennas of varying gains, allowing wireless coverage to be optimized for each deployment scenario. Combined with PoE (Power over Ethernet) support that eliminates the need for traditional power sources, and a unique downlink PoE LAN port for supplying power to other IP-based devices, the OWL630 offers unparalleled deployment flexibility.

When used with the 4ipnet WHG Controller, the OWL630 supports a wide-array of value added applications required by enterprises and organizations, such as bandwidth control, user authentication and billing, centralized WLAN management, and much more. Along with stringent yet customizable security policies, the flexible and fully-featured OWL630 becomes the ideal choice for wireless connectivity in all types of outdoor deployments.

HIGHLIGHTS

- Concurrent dual-band 2.4 & 5 GHz
- 802.11ac 3x3 MIMO supporting up to 1.3 Gbps data rate
- Pole mountable IP68 weatherproof metal housing
- 802.3at Power over Ethernet compatible with 802.3af downlink PoE
- Standalone or centrally managed by 4ipnet WHG Controller
- Integrated enterprise-grade, standards-based security
- Up to 16 ESSIDs per radio with 802.1Q VLAN
- Captive portal and Guest provisioning*¹
- Rogue AP detection & Load balancing*¹
- Fast Layer 2/Layer 3 roaming*¹

*¹: When used in conjunction with 4ipnet WHG Controller

FEATURES

Maximum Deployment Flexibility

Supporting 802.3at PoE, the OWL630 can be easily placed in outdoor locations where traditional power sources are unavailable. Furthermore, the OWL630's built-in surge protection can prevent damage caused by potential power surges. Along with the IP68 rated housing and wide operating temperature range, the OWL630 can be placed in virtually any climate, altitude, or geographic location. In addition, the downlink PoE LAN port allows it to supply power to another AP or IP-based device, eliminating the need for additional cabling and increasing deployment flexibility.

Ready for High Density Environments

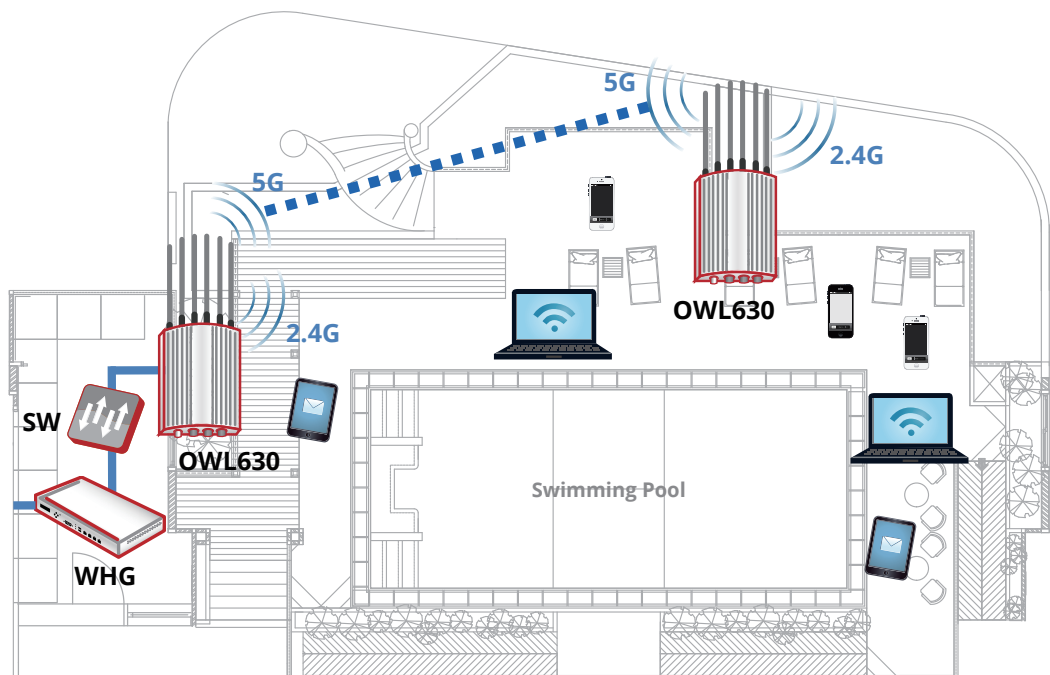
With the ability to operate in the 2.4 and 5 GHz bands, the OWL630 can distribute clients on separate channels, thereby mitigating channel congestion. The OWL630 also implements advanced AP features such as airtime fairness, multicast to unicast conversion and optimal client filtering that improve wireless performance in high density environments, ensuring uninterrupted access to mission critical resources and delay sensitive applications. Wireless QoS with standards-based 802.11e/WMM (Wi-Fi Multimedia) further guarantees a wire-like experience.

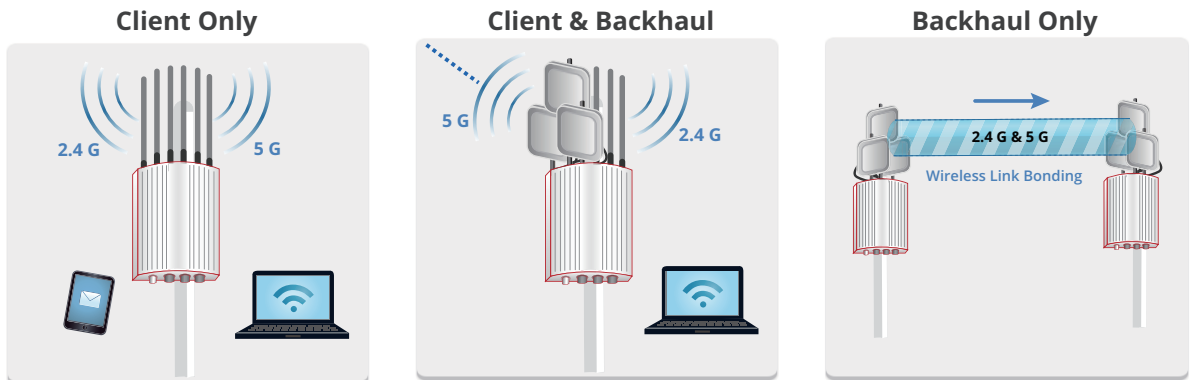
Diverse Outdoor Applications

The two radios of the OWL630 can be configured in a variety of operating modes to suit the needs of different operators and organizations. With one radio operating in the 2.4 GHz band while the other in the 5 GHz band, the need for simultaneous client connectivity and wireless backhaul can be fulfilled. Furthermore, for high throughput backhaul applications, data transmission of both radios can be aggregated to achieve better performance redundancy.

Enterprise-grade, Standards-based Security

With 802.1X authentication and a backend RADIUS server, the OWL630 can prevent unauthorized users from accessing the corporate intranet. Furthermore, the AP's Layer 2 firewall capability blocks unwanted traffic, reducing network overhead and providing an added layer of security. Finally, the AP can be configured with multiple SSIDs, each utilizing different security standards (e.g. WPA2-Enterprise) and VLAN tags, which enables easy network segmentation to protect corporate resources.





SPECIFICATIONS

PHYSICAL

Power	<ul style="list-style-type: none"> DC Input: 12V / 2.5A or 12V / 4A (M12 connector) PoE: 802.3at compliant (PoE injector optional)
Dimensions	<ul style="list-style-type: none"> 25.0 cm (L) x 20.0 cm (W) x 7.4 cm (H)
Weight	<ul style="list-style-type: none"> 2.80 kg (6.17 lbs)
Interfaces	<ul style="list-style-type: none"> Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3at PoE LAN: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 802.3af downlink PoE on LAN port Console: 1 x RJ-45
Environmental Conditions	<ul style="list-style-type: none"> Operating Temperature: -30°C (-22°F) to 70°C (158°F) Operating Humidity: 0% to 95% non-condensing IP68 Rating
Power Consumption	<ul style="list-style-type: none"> 22W max.
Antenna	<ul style="list-style-type: none"> Type: 6 x External N-type connectors
Mounting	<ul style="list-style-type: none"> Pole mount (Mounting kit included)
Protective Vent Plug	

WI-FI

Standards	<ul style="list-style-type: none"> 802.11 a/b/g/n/ac Concurrent dual-band 2.4 & 5 GHz
Supported Data Rates	<ul style="list-style-type: none"> 802.11b: 1, 2, 5.5, 11 Mbps 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n: 6.5 – 216.7 Mbps (20 MHz) 802.11n: 13.5 – 450 Mbps (40 MHz) 802.11ac: 6.5 – 260.1 Mbps (20 MHz) 802.11ac: 13.5 – 600 Mbps (40 MHz) 802.11ac: 29.3 – 1300 Mbps (80 MHz)
Radio Chains	<ul style="list-style-type: none"> 3 x 3
Spatial Streams	<ul style="list-style-type: none"> 3
Output Power	<ul style="list-style-type: none"> 2.4 GHz: Up to 21 dBm*¹ 5 GHz: Up to 26 dBm*¹
Channelization	<ul style="list-style-type: none"> 20 MHz 40 MHz 80 MHz
Frequency Band	<ul style="list-style-type: none"> 2.412 – 2.472 GHz 5.180 – 5.825 GHz
Operating Channels	<ul style="list-style-type: none"> 2.4 GHz: 1 – 11 (US), 1 – 13 (Europe), 1 – 13 (Japan) 5 GHz*²: 36 – 165 (US), 36 – 140 (Europe), 100 – 140 (Japan)
ESSIDs	<ul style="list-style-type: none"> Up to 16 per radio (32 total)

*1: Maximum power is limited by local regulatory requirements

*2: Some channels are restricted by local regulatory requirements

PERFORMANCE

Physical Data Rate	<ul style="list-style-type: none"> Up to 450 Mbps (2.4 GHz) Up to 1.3 Gbps (5 GHz)
Concurrent Users	<ul style="list-style-type: none"> Up to 384 (256 on 2.4 GHz, 128 on 5 GHz)

QUALITY OF SERVICE

Wireless QoS (802.11e/WMM)
DSCP (802.1p)
Airtime Fairness
Band Steering
Multicast to Unicast Conversion
Optimal Client Filtering

SECURITY

Wireless Security	<ul style="list-style-type: none"> WEP WPA/WPA2 Mixed WPA2-Personal WPA2-Enterprise (802.1X) TKIP and AES Encryption
VLAN Tagging (802.1Q)	
Station Isolation	
DHCP Snooping	
Layer-2 Firewall	

MANAGEMENT

Deployment	<ul style="list-style-type: none"> Standalone Tunneled management by 4ipnet WHG Controller IPv4 & IPv6 compatible
Configuration	<ul style="list-style-type: none"> Web User Interface (HTTP/HTTPS) SNMP v1, v2c, v3

MOBILITY/ROAMING

802.1X Preauthentication
Layer 2/Layer 3 Fast Roaming

RECEIVE SENSITIVITY

Operating Mode	Data Rate	Receive Sensitivity (dBm)
802.11b	1 Mbps	-93
	11 Mbps	-90
802.11a	6 Mbps	-90
	54 Mbps	-72
802.11g	6 Mbps	-90
	54 Mbps	-74
802.11n (HT20)	MCS0	-86
	MCS7	-69
	MCS8	-84
	MCS15	-65
802.11n (HT40)	MCS0	-83
	MCS7	-66
	MCS8	-81
	MCS15	-62
802.11ac (VHT20)	MCS0	-90
	MCS8	-67
802.11ac (VHT40)	MCS0	-87
	MCS9	-61
802.11ac (VHT80)	MCS0	-84
	MCS9	-58