

OWL530

OUTDOOR ACCESS POINT



INTRODUCTION

4ipnet OWL530 is an enterprise-grade, dual-band 802.11n outdoor access point, designed specifically to withstand harsh weather conditions in outdoor and industrial environments. Featuring a 2x2 MIMO radio that can support up to 300 Mbps data rate, the OWL530 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 QoS requirements for VoIP and mission critical services.

The most unique feature of the OWL530 is its ability to operate in modes other than as a traditional access point servicing clients. For organizations wishing to establish high speed point-to-point or point-to-multipoint links, the OWL530 can be coupled with directional antennas to form encrypted WDS bridges. If coverage extension is needed, the OWL530 can act as a wireless repeater and propagate wireless signals with minimal configuration. And lastly, for wireless ISPs looking to provide last mile solutions, the OWL530 can act as a wireless CPE with bandwidth limitations that can be assigned by the service provider.

The OWL530's exterior is an IP68 rated, rust-resistant metal housing that is extremely sturdy and flexible to deploy. With U-shaped mounting brackets, the OWL530 can be easily fixed to walls or mounted on poles. The two 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, the OWL530 offers an unparalleled deployment flexibility.

When used with the 4ipnet WHG Controller, the OWL530 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 OWL530 becomes the ideal choice for wireless connectivity in all types of outdoor deployments.

HIGHLIGHTS

- Selectable dual-band 2.4/5 GHz
- 802.11n 2x2 MIMO supporting up to 300 Mbps
- Pole mountable IP68 weatherproof metal housing
- 802.3af Power over Ethernet (PoE) compatible
- Standalone or centrally managed by 4ipnet WHG Controller
- Integrated enterprise-grade, standards-based security
- Up to 8 ESSIDs with 802.1Q VLAN
- Captive portal and Guest provisioning¹
- Rogue AP detection & Load balancing¹
- Fast Layer 2/Layer 3 roaming¹

¹: When used in conjunction with 4ipnet WHG Controller

FEATURES

Maximum Deployment Flexibility

Supporting 802.3af PoE, the OWL530 can be easily placed in outdoor locations where traditional power sources are unavailable. Furthermore, the OWL530's protective vent plug can prevent salt corrosion and moderate condensation, while the ground wire can prevent damage caused by potential power surges. Along with the IP68 rated housing, the OWL530 can be placed in virtually any climate, altitude, or geographic location.

Multiple Operational Modes

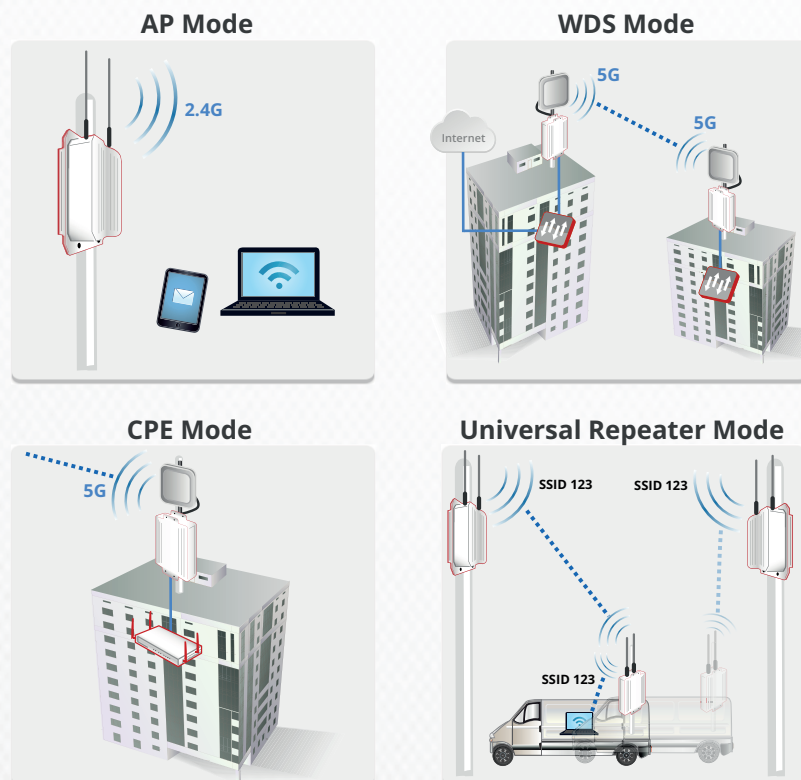
In addition to the traditional AP mode, the OWL530 can also operate in WDS, Universal Repeater, or CPE mode. In WDS mode, the OWL530 can establish multiple WDS links and bridge neighboring 4ipnet APs together. In Universal Repeater mode, the AP can expand wireless coverage with minimal configuration effort. Lastly, the OWL530 can be configured in CPE mode as an ideal last-mile solution for wireless ISPs (WISPs). The diversity of applications makes the OWL530 a perfect choice for any outdoor deployment.

Reduced Interference & Improved Performance

By supporting Wi-Fi operation in the 5 GHz frequency band, neighboring access points can operate on non-overlapping 40 MHz channels, providing double the throughput of 20 Mhz channels without inducing adjacent channel interference. Furthermore, 5 GHz networks offer more stable performance, as they are less susceptible to interference from other devices that emit RF signals in the 2.4 GHz band, such as bluetooth devices, microwave ovens, and wireless peripherals.

Enterprise-grade, Standards-based Security

With 802.1X authentication and a backend RADIUS server, the OWL530 can prevent unauthorized users from accessing the network. 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.



SPECIFICATIONS

PHYSICAL	
Power	<ul style="list-style-type: none"> • PoE: 802.3af compliant (PoE injector optional)
Dimensions	<ul style="list-style-type: none"> • 18.2 cm (L) x 11.1 cm (W) x 4.5 cm (H)
Weight	<ul style="list-style-type: none"> • 0.90 kg (1.98 lbs)
Interfaces	<ul style="list-style-type: none"> • Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3af PoE
Environmental Conditions	<ul style="list-style-type: none"> • Operating Temperature: 0°C (32°F) to 50°C (122°F) • Operating Humidity: 10% to 90% non-condensing • IP68 Rating
Power Consumption	<ul style="list-style-type: none"> • 12W max.
Antenna	<ul style="list-style-type: none"> • Type: 2 x External N-type connectors
Mounting	<ul style="list-style-type: none"> • Pole/wall mount (Mounting kit included)
Protective Vent Plug	

WI-FI	
Standards	<ul style="list-style-type: none"> • 802.11 a/b/g/n • Selectable dual-band 2.4/5 GHz
Supported Data Rates	<ul style="list-style-type: none"> • 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps • 802.11b: 1, 2, 5.5, 11 Mbps • 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps • 802.11n: 6.5 – 144.4 Mbps (20 MHz), 13.5 – 300 Mbps (40 MHz)
Radio Chains	<ul style="list-style-type: none"> • 2 x 2
Spatial Streams	<ul style="list-style-type: none"> • 2
Output Power	<ul style="list-style-type: none"> • 2.4 GHz: Up to 27 dBm¹ • 5 GHz: Up to 23 dBm¹
Channelization	<ul style="list-style-type: none"> • 20 MHz • 40 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 GHz²: 36 – 165 (US), 36 – 140 (Europe), 100 – 140 (Japan)
ESSIDs	<ul style="list-style-type: none"> • Up to 8
Operating Modes	<ul style="list-style-type: none"> • AP Mode • WDS Mode • CPE Mode • Universal Repeater Mode
CPE Mode Features	<ul style="list-style-type: none"> • Built-in NAT functionality • Built-in DHCP server • Uplink/downlink bandwidth management • IP/Port forwarding and DMZ • Built-in DNS/DDNS client
Certifications	<ul style="list-style-type: none"> • FCC (United States), CE (Europe) • RoHS compliant

PERFORMANCE	
Physical Data Rate	<ul style="list-style-type: none"> • Up to 300 Mbps
Concurrent Users	<ul style="list-style-type: none"> • Up to 128

1: Maximum power is limited by local regulatory requirements
 2: Some channels are restricted by local regulatory requirements

SECURITY

Wireless Security	<ul style="list-style-type: none"> • WEP • WPA/WPA2 Mixed • WPA2-Personal • WPA2-Enterprise (802.1X) • TKIP and AES Encryption
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VLAN Tagging (802.1Q)

Station Isolation

DHCP Snooping

Layer-2 Firewall

QUALITY OF SERVICE

Wireless QoS (802.11e/WMM)

DSCP (802.1p)

Airtime Fairness

MOBILITY/ROAMING

802.1X Preauthentication

Layer 2/Layer 3 Fast Roaming

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

RECEIVE SENSITIVITY

Operating Mode	Data Rate	Receive Sensitivity (dBm)
802.11b	1 Mbps	-93
	11 Mbps	-87
802.11a	6 Mbps	-89
	54 Mbps	-70
802.11g	6 Mbps	-91
	54 Mbps	-72
802.11n (HT20)	MCS0	-95
	MCS7	-82
	MCS8	-95
	MCS15	-82
802.11n (HT40)	MCS0	-95
	MCS7	-78
	MCS8	-95
	MCS15	-78