

PAKEDGE WK-1-O

802.11AC 2X2 WIRELESS AP WITH BAKPAK LITE, OUTDOOR

Description

Pakedge outdoor series access points are high-performance 802.11ac APs designed to withstand the harshest outdoor environments.

The WK-1-O is a high-performance 802.11ac outdoor AP designed for outdoor coverage at a residential environment. The WK-1-O delivers 2x2 SU-MIMO internal omnidirectional antennas with a maximum aggregate data rate up to 1,200 Mbps (300 Mbps for 2.4 GHz; 867 Mbps for 5 GHz).

Designed to survive the harshest of outdoor environments, the WK-1-O features an IP67-rated aluminum housing to protect your AP from extreme temperatures, precipitation, and airborne elements—making it easy to bring high-speed wireless-AC to the outdoors.

The WK-1-O supports built-in BakPak Lite Remote Management. From a simple reboot or configuration change to a full firmware upgrade, dealers can remotely manage their customers' networks on a mobile device or web browser—no additional hardware required.

Feature and benefit highlights

- High-performance 802.11ac dual-band access point
- For small- to medium-density residential environments
- Built-in BakPak Lite Remote Management
- 2x2 SU-MIMO external directional antennas
- Data rate up to 1,200 Mbps (300 Mbps for 2.4 GHz; 867 Mbps for 5 GHz)
- Auto-channel and built-in site survey
- Multi-tiered roaming technologies for seamless client device handoffs
- Out-of-box optimized transmit power levels for proper WiFi band overlap
- 16 secure SSIDs (8 per band) + 2 guest SSIDs
- WPA and WPA2-PSK security encryption
- Compatible with NK-1 Wireless Controller
- Plenum-rated (IP67) weatherproof housing for outdoor installation
- Powered by 802.3at (PoE+) only

Check out the **What's New > Pakedge Wireless** page for up-to-date information.



Features

Quick setup

Places all access point settings and configurations onto a single page, streamlining and simplifying the setup process.

Multi-channel architecture

Enterprise-level architectural design that relies on non-overlapping wireless channels to minimize co-channel interference, reduce channel congestion, and deliver maximum throughput to every connected device.

Auto-channel selection

Scans WiFi and non-WiFi channels in the local environment to select the best channel with the least amount of interference and congestion.

Best practice is to run auto-channel first, followed by setting the channel to Fixed. This will ensure the AP remains connected to the best channel long after install.

Enhanced roaming technology

Multi-tiered roaming capabilities to deliver seamless roaming of every client device without compromising performance.

- Industry standards—Supports IEEE 802.11k and 802.11r (often referred to as fast roaming), designed to assist client devices in making a faster roaming decision when transitioning between access points.
- Pakedge roaming technology—With RSSI client reject, the AP assists sticky client devices in disconnecting from one AP and connecting to an AP with a stronger signal to ensure a continuous connection and uncompromised performance.

Optimized transmit power levels

Out-of-the-box transmit power settings optimized for proper overlap of the 2.4 GHz and 5 GHz wireless bands, balancing performance and coverage needs with seamless client device handoffs in a multi-AP system. By default, the transmit power levels are set to 13 dBm for 2.4 GHz and 18 dBm for 5 GHz.

VLAN support

Support of 6 pre-configured VLANs for AV traffic segmentation and prioritization, ensuring latency-sensitive traffic—such as streaming media and VoIP—is prioritized above less-sensitive traffic.

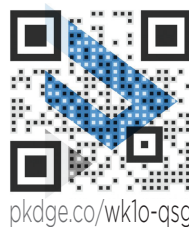
BakPak Lite Remote Management

BakPak Lite is supported on all Pakedge access points. BakPak enables dealers to remotely manage, configure, and monitor their customers' networks—from anywhere. With BakPak built in, individual access points can be managed directly from a web browser or mobile app—no additional hardware required. Perform a simple reboot, modify SSID or security profile configurations, upgrade firmware, and receive health status alerts. Must be on firmware v1.31 or later to unlock BakPak. For up-to-date information on BakPak, check out **What's New > BakPak**.

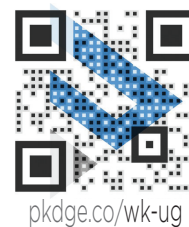
MOST RECENT DATA SHEET



QUICK START GUIDE



USER GUIDE



PAKEDGE WK-1-O ACCESS POINT

FEATURES AND SPECIFICATIONS

Features	Description
Radio settings	<ul style="list-style-type: none">• Operating frequencies: Dual-band (2.4 GHz and 5 GHz)• 2x2 SU-MIMO internal omnidirectional antennas• Data rate up to 1,200 Mbps (300 Mbps for 2.4 GHz; 867 Mbps for 5 GHz)• Operation modes: AP and WDS (AP, repeater, and bridge)• Channel width: 2.4 GHz: HT 20 & 40 MHz; 5 GHz: VHT 20, 40, 80 MHz• Auto-channel• DFS channels• Band steering
Management	<ul style="list-style-type: none">• Quick setup, intuitive web interface• BakPak Lite Remote Management• Local and cloud firmware and configuration management• VLAN support, management VLAN• SNMP• Diagnostics: Ping and traceroute• Remote reboot and reset
Wireless settings	<ul style="list-style-type: none">• 8 SSIDs per radio, 1 secure guest network per radio• WPA2-PSK security encryption• Hide SSID• Client isolation• Spanning Tree Protocol• AP detection (site survey)• Industry roaming standards 802.11r and 802.11k• RSSI threshold and client reject
Administration	<ul style="list-style-type: none">• LED enable/disable (global/individual AP)• System log and report
<u>SPECIFICATIONS</u>	
NK-1 compatible	Yes
Input power	PoE+ 802.3at
Transmit power	27 dBm on 2.4 GHz, 27 dBm on 5 GHz
Power draw (average/peak)	10.99W/13.1W
Receive sensitivity	-91 dBm
Encryption options	WPA-PSK, WPA2-PSK, WPA/WPA2 mixed using TKIP or AES
<u>MECHANICAL</u>	
Mounting options	Outdoor
LEDs	Power, 2x Ethernet, 2.4 GHz, 5 GHz
Buttons	Reset
Ports	Power, LAN (PoE+)
Dimensions	10.59 × 9.41 × 3.26" (wingspan: 25.22") (269 × 239 × 828 mm (wingspan: 641 mm)
Weight	9 lbs (4.08 kg)
Included accessories	Quick Start Guide, Ethernet cable, 4 external antennas, mounting brackets, waterproof cable tube
Color	White
<u>ENVIRONMENTAL</u>	
Operating temperature	32°F to 113°F (0°C to 45°C)
Storage temperature	-13°F to 140°F (-25°C to 60°C)
Humidity	10%-90% non-condensing

2.4 GHz RF performance

<i>Values are dBm per chain</i>	<i>Max. transmit power</i>	<i>Receiver sensitivity</i>
2.4 GHz		
802.11b		
1 Mbps	24	-96
11 Mbps	24	-88
802.11g		
6 Mbps	24	-90
54 Mbps	22	-73
802.11n HT20		
MCS 0/8	24	-90
MCS7/15	22	-69
802.11n HT40		
MCS 0/8	23	-86
MCS7/15	22	-66

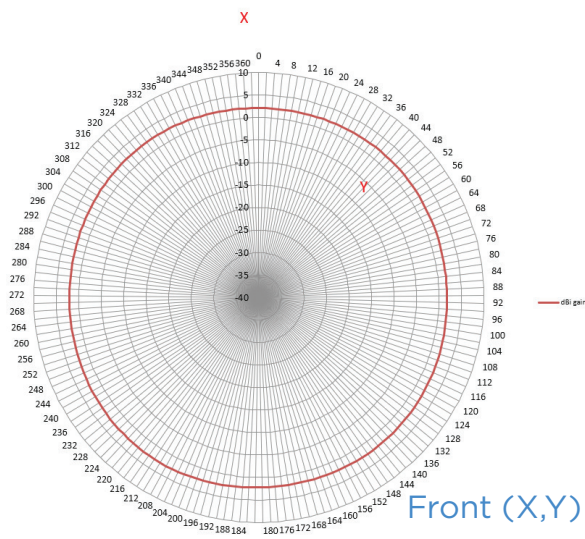
5 GHz RF performance

<i>Values are dBm per chain</i>	<i>Max. transmit power</i>	<i>Receiver sensitivity</i>
5 GHz		
802.11a		
6 Mbps	24	-89
54 Mbps	22	-71
802.11n HT20		
MSC0/8	24	-89
MCS7/15	20	-69
802.11n HT40		
MSC0/8	23	-85
MCS7/15	20	-66
802.11ac VHT20		
MSC0	24	-89
MSC8	18	-62
802.11ac VHT40		
MSC0	23	-85
MSC9	18	-59
802.11ac VHT80		
MSC0	22	-82
MSC9	17	-56

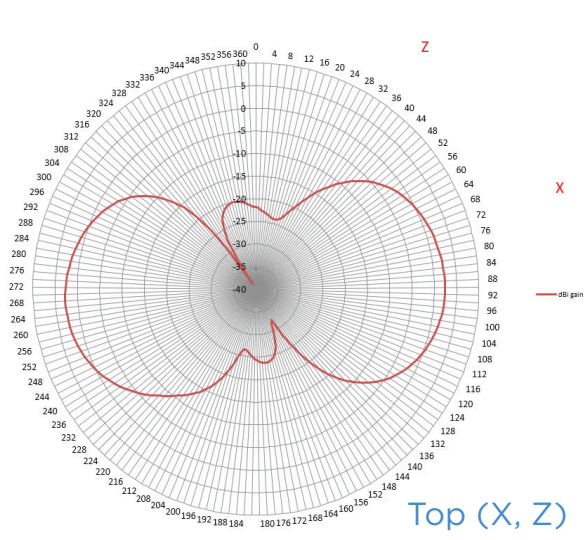
PAKEDGE WK-1-O ACCESS POINT

2.4 GHz RF performance

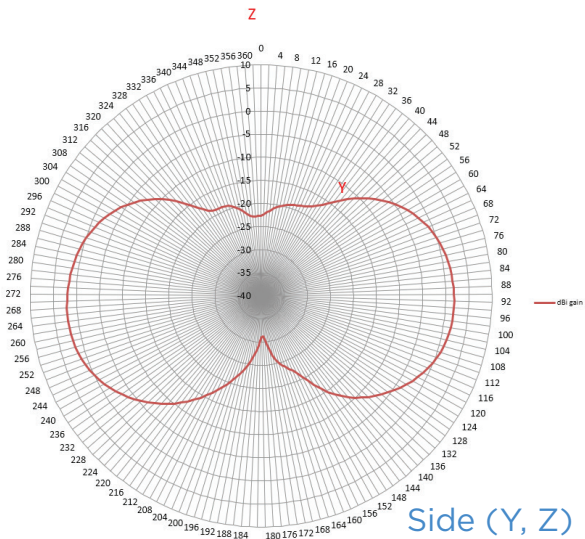
dBi gain 2.4 GHz (XY plane)



dBi gain 2.4 GHz (XZ plane)

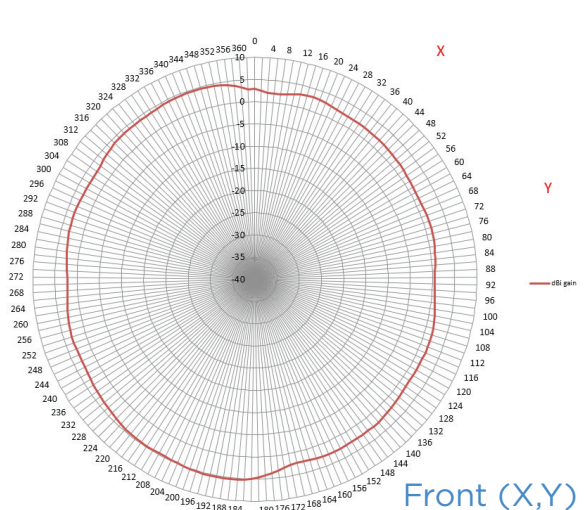


dBi gain 2.4 GHz (YZ plane)

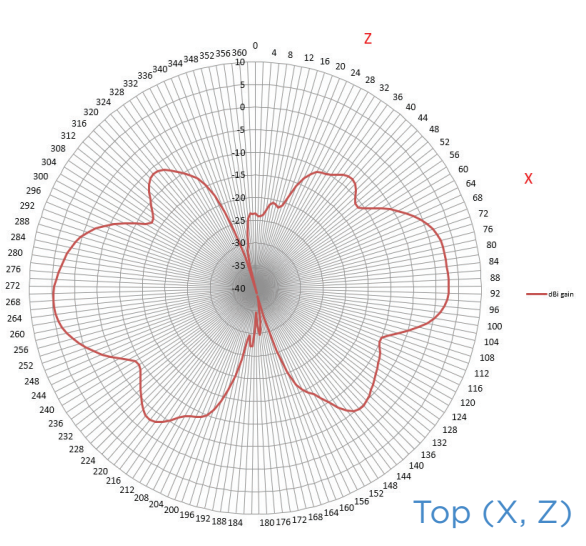


5 GHz RF performance

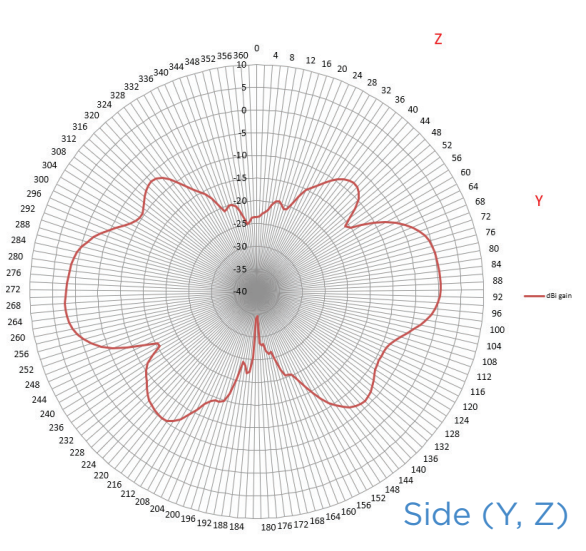
dBi gain 5.15 GHz (XY plane)



dBi gain 5.15 GHz (XZ plane)



dBi gain 5.15 GHz (YZ plane)



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