# PAKEDGE WK-1-C

# 802.11AC 2x2 WIRELESS AP WITH BAKPAK LITE, IN-CEILING

# **Description**

The WK-1-C is a high-performance 802.11ac indoor AP designed to meet the growing wireless demands of today's small- to medium-density connected homes. The WK-1 delivers 2x2 SU-MIMO omnidirectional antenna arrays and supports a maximum aggregate data rate up to 1,200 Mbps (300 Mbps for 2.4 GHz; 867 Mbps for 5 GHz).

The WK-1-C delivers a *Quick Setup* page for streamlining deployments and a suite of performance-enhancing features, including autochannel selection, enhanced roaming technologies, and default transmit power settings to deliver consistent, reliable performance to every connected device.

The WK-1-C 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.

The WK-1-C delivers a round, in-ceiling flush mount for a sleek, low-profile installation that seamlessly blends into any home decor.

# 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 internal omnidirectional 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
- Powered by 802.3at (PoE+) or standard AC
- Flush, in-ceiling mount for a low-profile installation

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 cochannel 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 continous 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.



pkdge.co/wk1c-ds







## PAKEDGE WK-1-C ACCESS POINT

#### FEATURES AND SPECIFICATIONS

FE	ATURES	DESCRIPTION

Radio settings • 0

- 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

- · 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

- 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 threshhold and client reject

Administration

- LED enable/disable (global/individual AP)
- · System log and report

#### **SPECIFICATIONS**

NK-1 compatible Yes

Input power PoE+ 802.3at or 12V/1.5A with included power supply

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

#### **MECHANICAL**

Mounting options In-ceiling

LEDs Power, 2× Ethernet, 2.4 GHz, 5 GHz

Buttons Reset

Ports Power, 2 LAN (1 PoE+)

Dimensions Ø 10.29 × 3" (Ø 26.1 × 7.6 cm)

Diameter × Depth, Radius Base: R4.5" (R11.4 cm)

Weight 4 lbs (1.81 kg)

Included accessories Quick Start Guide, Ethernet cable, power supply, wall bracket, T-bar brackets

Colors White

#### **ENVIRONMENTAL**

Operating temperature 32
Storage temperature -13
Humidity 10

32°F to 113°F (0°C to 45°C) -13°F to 140°F (-25°C to 60°C) 10%-90% non-condensing

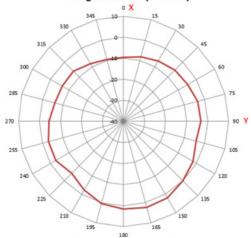




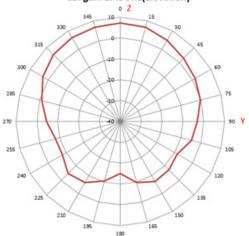
# 2.4 GHz RF performance

Values are dBm per chain	Max. transmit power	Receiver sensitivity			
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			
MSC7/15	22	-69			
802.11n HT40					
MCS 0/8	23	-86			
MSC7/15	22	-66			

#### dBi gain 2.45GHz(Azimuth)



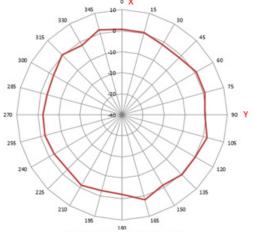
dBi gain 2.45GHz(Elevation)



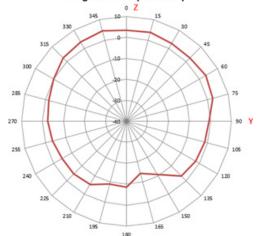
# 5 GHz RF performance

Values are dBm per chain	Max. transmit power	Receiver sensitivity			
5 GHz					
802.11a					
6 Mbps	24	-89			
54 Mbps	22	-71			
802.11n HT20					
MSCO/8	24	-89			
MCS7/15	20	-69			
802.11n HT40					
MSCO/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			

#### dBi gain 5.5GHz(Azimuth)

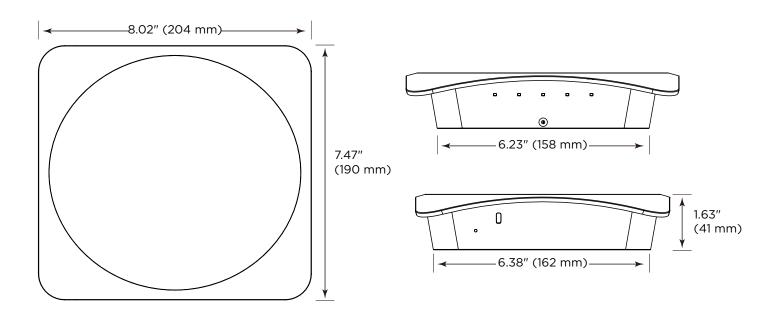


#### dBi gain 5.5GHz(Elevation)

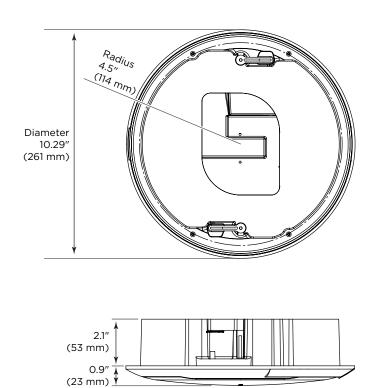




# WK-1 Access Point



WK-1-C bracket



Pre-construction bracket

