

## Feature-rich functionality in an innovative package:

- High-throughput 802.11b/g/n radio configuration with trapezoid face housing design for optimal antenna positioning.
- Versatile form factor (wall mount, desktop, 1U rack)
- Multiple SSID and VLAN support
- Industry-leading, software-controlled, variable power output (20dBm) for maximum performance, range, and security
- Multiple operating modes: Wireless Access Point, Wireless Bridge (point-to-point and point-to-multipoint), Wireless Repeater, Universal and WDS Repeater (WAP to WAP)
- Supports the latest security standards: WPA, WPA2, AES, TKIP, WEP, RADIUS, MAC Filtering, SSID Hide.
- Remote management, remote update, file configuration upload capability.
- Power-over-Ethernet: fully compatible with IEEE 802.3af. Accepts PoE power from any 802.3af switch or power supply. Overload and short-circuit protection shuts down power immediately if a short circuit is detected, with no harm to the PoE system.
- Rugged aluminum housing designed for maximum protection from interference and efficient cooling.

# WAP-W3N

## ENTERPRISE-CLASS, ULTRA HIGH-THROUGHPUT RACKMOUNT & WALL MOUNT WIRELESS-N ACCESS POINT

The Pakedge WAP-W3N enterprise-class, ultra-high-power wireless access point delivers unprecedented technology.



### **Versatility is the WAP-W3N's middle name:**

The WAP-W3N was designed for utmost flexibility. The WAP-W3N supports VLANs and multiple SSIDs, enabling you to segment your wireless network for diverse clients, including computers, touch panels, and guests. The WAP-W3N was designed for exceptional functionality with touch panels and other control devices.

The WAP-W3N's innovative "trapezoid face" housing facilitates the optimal antenna positions for the highest 802.11n throughput. The rugged heavy-gauge aluminum enclosure is attractive and subtle, yet suitable for any interior environment, e.g., attics and wiring closets. It can be wall- or rack-mounted (1U rack), or placed on a desk.

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## Optimal Antenna Positioning



### The WAP-W3N can be configured in four modes:

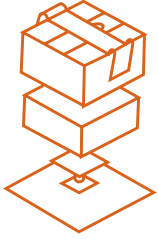
- (1) Wireless Access Point (WAP),
- (2) Wireless Bridge,
- (3) Wireless Repeater, or
- (4) Wireless Distribution System (WDS).

Power output and range are fully configurable, and the WAP-W3N is fully 802.3af-compliant, so it can be powered by any 802.3af PoE switch on the market.

Finally – custom installations are easy, because the WAP-W3N uses a single Cat-5e cable for power and networking.

### PACKAGE CONTENTS

- Wireless Access Point
- 5dBi Omni-directional Antenna (3)
- DC Power Supply
- Wall-mount Hardware
- Rack-mount Brackets
- Quickstart Guide
- Category 5e Cable
- PoE Power Injector sold separately - please contact your sales representative for options



# Specifications - WAP-W3N

## STANDARDS

IEEE802.11n, IEEE802.11b/g, IEEE802.3, IEEE802.3u, IEEE802.3af, IEEE802.1f, IEEE802.1x

## DATA RATES AND FREQUENCY BAND

**IEEE 802.11b**- DSSS 11, 5.5, 2, 1 Mbps (auto fallback)  
**IEEE 802.11g**- 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54 Mbps (auto fallback), Modulation- DBPSK @ 1Mbps, DQPSK @2Mbps, CCK @ 5.5 & 11Mbps, BPSK @ 6 and 9 Mbps, QPSK @ 12 and 18 Mbps, 16-QAM @ 24 and 36 Mbps, 64-QAM @ 48 and 54 Mbps

**IEEE 802.11n**- Bandwidth Selection

MCS Index	Spatial Streams	Modulation Type	Data Rate Mb/s			
			20 MHz channel		40 MHz channel	
			800ns GI	400ns GI	800ns GI	400ns GI
0	1	BPSK	6.50	7.20	13.50	15.00
1	1	QPSK	13.00	14.40	27.00	30.00
2	1	QPSK	19.50	21.70	40.50	45.00
3	1	16-QAM	26.00	28.90	54.00	60.00
4	1	16-QAM	39.00	43.30	81.00	90.00
5	1	64-QAM	52.00	57.80	108.00	120.00
6	1	64-QAM	58.50	65.00	121.50	135.00
7	1	64-QAM	65.00	72.20	135.00	150.00
8	2	BPSK	13.00	14.40	27.00	30.00
9	2	QPSK	26.00	28.90	54.00	60.00
10	2	QPSK	39.00	43.30	81.00	90.00
11	2	16-QAM	52.00	57.80	108.00	120.00
12	2	16-QAM	78.00	86.70	162.00	180.00
13	2	64-QAM	104.00	115.60	216.00	240.00
14	2	64-QAM	117.00	130.00	243.00	270.00
15	2	64-QAM	130.00	144.40	270.00	300.00

## RF INFORMATION

### Frequency Band - 2.400 - 2.484 GHz:

U.S., Europe and Japan product covering 2.4 to 2.484 GHz, hardware for different country regulations  
Operating Channels - 11 for North America, 14 for Japan, 13 for Europe.

### Receive Sensitivity (Typical):

2.412~2.472G (IEEE802.11n): Up to -91dBm  
2.412~2.472G(IEEE802.11g)- Up to -92dBm  
2.412~2.472G(IEEE802.11b)- Up to -93dBm

### Available Transmit Power (Typical)

2.412~2.472G (IEEE802.11g/n), Up to 20dBm  
2.412~2.472G (IEEE802.11b), Up to 19dBm

## ETHERNET CONNECTION

10/100/1000 Gigabit Ethernet port  
DHCP Server

## POWER REQUIREMENTS

Ethernet POE in: 48VDC/0.375A for IEEE 802.3af compliance  
WAP-W3X device: 12V / 1.0 A  
Power supply: 90 to 240 VDC ± 10% (varies by country)

## OPERATIONS

Up to Four Multiple SSIDs  
Supports 802.1Q VLANs  
Access Point Mode  
Bridge Mode  
WDS Model  
Universal Repeater Mode

## MANAGEMENT AND SECURITY

Remote mangement via HTTP, SNMP v1/v2c, Telnet  
Security:

IEEE802.1x Authenticator / RADIUS Client (EAP-MD5/TLS/TTLS) support in AP Mode

WEP- 64/128 bit, WPA/WPA2 supplicant support in Client Bridge mode

WPA2/WPA / Pre-share Key (PSK)/AES/TKIP, WPA-Enterprise

MAC address filtering (AP mode)

Hide SSID in beacons

L2 Isolation

IP Auto-configuration- DHCP client/server

Firmware upgrade via HTTP

QoS- WMM

## MECHANICAL

**Dimensions** - 7.5"L x 5.5"W x 1.75"H

**1U Rack Mount**

**Weight** - 17 oz.

**Housing** - 14 gauge Anodized Aluminum Electronic Housing

**Antenna** - Three 5 dbi Omni Directional;  
Connection- RP-TNC Female

**Interface** - One 10/100Mbps RJ-45 LAN or LAN/PoE Port,  
DC power option if PoE is not used

## ENVIRONMENTAL

**Temperature Range** -

Operating: -10°C to 50°C (14°F to 132°F)

Storage: -40°C to 70°C (-40°F to 158°F)

**Humidity** - 5%~95% Non-condensing

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