ZyXEL

Superior, Integrated Modern In-room Services for Higher Customer Satisfaction

- **Unique back panel design that fits the majority of outlet boxes in the world**
- **Punch-down Ethernet interface for significantly reduced installation efforts**
- **2.4 GHz 802.11n technology providing data rates of up to 300 Mbps**
- **High-gain antenna that optimizes Wi-Fi services for mobile devices**
- **Extending phone and IPTV services with integrated interfaces**
- **LED suppress mode for comfortable room services**
- **Layer-2 isolation to secure personal data from leaking**

Typical Wi-Fi deployments in a hotel usually place access points in hallways and hidden plenum spaces; the main purposes are to prevent theft and to avoid design disagreement between the high-tech AP and tasteful hotel interior design. However, this commonly seen deployment method and the hotel building structure usually disrupt Wi-Fi service to cause unnecessary complaints from customers. The NWA5301-NJ with innovative wall-plate design has been conceived to provide Wi-Fi services from one room to another. To provide modern services for hotel guests, the NWA5301-NJ integrates PoE and phone connectivity in a box to extend services with minimized investment. ZyXEL's unified AP design enables NWA5301-NJ to perform as a stand-alone access point or a controller managed AP to provide deployment and management alternatives.

Benefits

Rapid universal wall-plate deployments

The ZyXEL NWA5301-NJ has the best-of-breed deployment feasibility. Compliant with the most commonly used outlet box standards, the ZyXEL NWA5301-NJ can be mounted with the majority of outlet boxes to provide high-quality in-room Wi-Fi coverage. An exquisite mounting plate is attached to the NWA5301-NJ for fast installation while the strong mechanism also prevents easy theft. The NWA5301-NJ also comes with Ethernet punch-down interfaces that facilitate speedy device fitting to minimize business downtime.

ZyXEL ONE Network experience

Aiming for relieving our customers from repetitive operations of deploying and managing a network, ZyXEL ONE Network is designed to simplify the configuration, management, and troubleshooting, allowing our customers to focus on the business priorities. ZyXEL ONE Network presents an easy-to-use tool, ZyXEL ONE Network Utility (ZON Utility), to realize speed network setup. ZyXEL Smart Connect allows ZyXEL networking equipment to be aware and recognize each other and further facilitating the network maintenance via one-click remote functions such as factory reset or power cycling. ZyXEL ONE Network redefines the network integration across multiple networking products from switch to Wi-Fi AP and to Gateway.

ZyXEL green

NWA5301-NJ
802.11 b/g/n Wall-Plate Unified Access Point

ZAC	ZON		
ZyXEL AP Configurator	ZON Utility	Neighbor Device Discovery	Web GUI Redirection

Superb mobile-optimized RF performance

The NWA5301-NJ adopts 802.11n technology to provide bandwidths of up to 300 Mbps. The implemented premium 11n features, including maximum likelihood, allows the NWA5301-NJ to eliminate dead spots in its coverage for the best network efficiency. In hotel environments today, most users use mobile devices to access the network. As the devices have lower signal power by nature to sustain longer battery life, APs are less likely to pick up data sent from the devices comparing to which from laptops. The NWA5301-NJ comes equipped with well-placed high-gain antenna to maximize the RF pattern for optimized performance communicating with mobile devices. With all the advanced RF design, the NWA5301-NJ can significantly reduce complaints and increase satisfaction from customers.
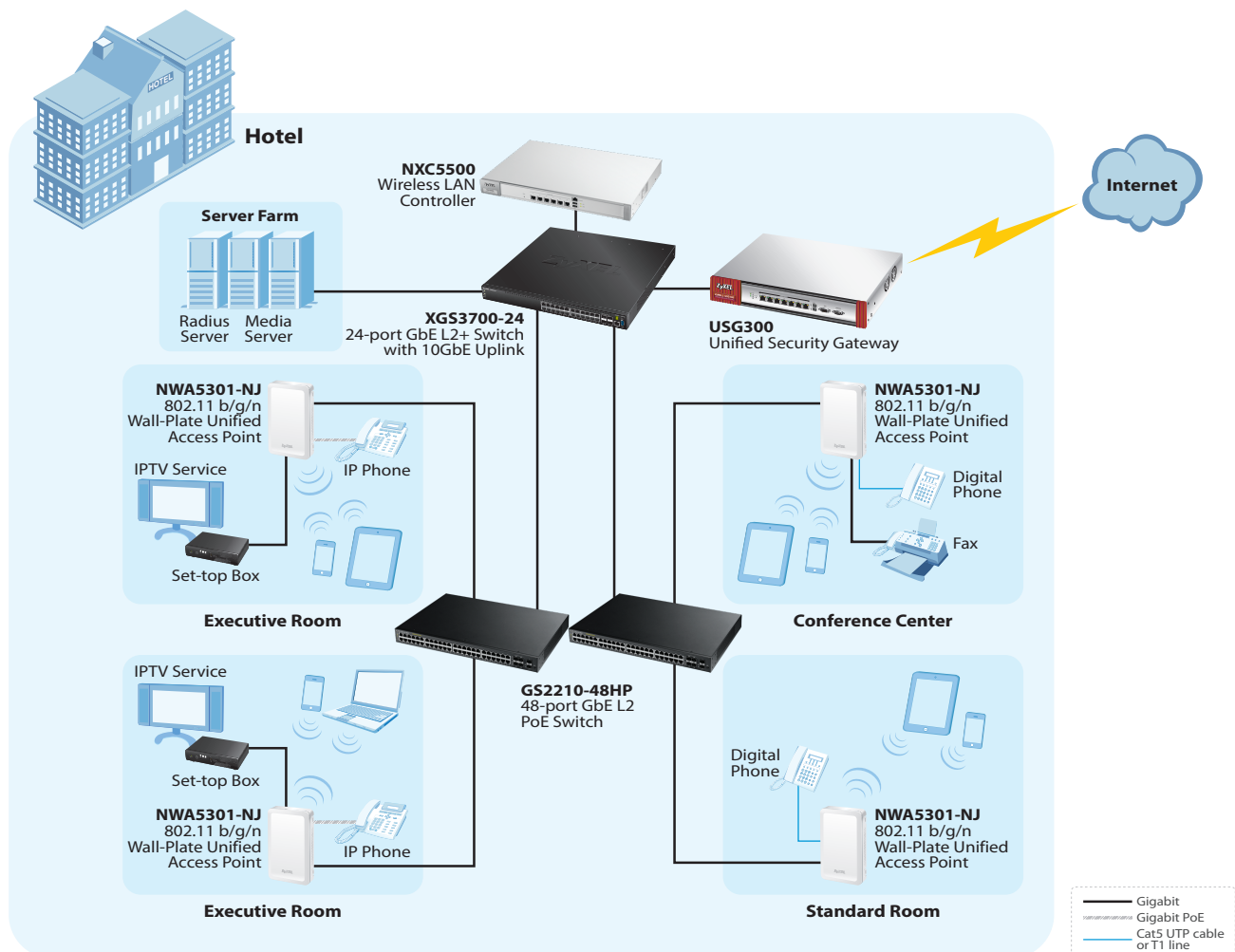
Extending modern in-room services with a box

Nowadays, hotel owners provide guests with a range of services including phone, IPTV and network for home-like comfort. For this purpose, each room would require several cables or a switch; both could not only need more investment but also a longer construction period that inevitably affects the hotel business. More than just a Wi-Fi AP serving high-speed networks, the NWA5301-NJ has additional RJ-45, PoE and RJ-48 phone pass through ports to connect different kinds of devices such as PCs, fax machines, printers, set-top boxes, and phones with ease. The PoE port enables deployment of Power Devices (PD) like VoIP phones without electric outlets and power cables. The NWA5301-NJ fulfills all kind of connectivity requirements to provide great in-room services.

Comfortable and considerate network services

With experience and expertise in the hospitality industry for years, ZyXEL implemented several thoughtful designs in NWA5301-NJ. The LED of NWA5301-NJ features a so-called "suppress mode" which stops blinking after system initialization is done; this gives the room guest a comfortable space with peace-of-mind. Moreover, the AP status can be checked with this LED indicator with a simple click of a button. To prevent leaking of personal data, layer-2 isolation can be enabled in NWA5301-NJ so the users can only access shared services and peripherals such as hotel fax machines and are blocked from reaching other guest devices in the hotel. All these superior designs of ZyXEL NWA5301-NJ help hotel businesses to provide integrated in-room services with quick, best-in-class installation and to facilitate deployment and management.
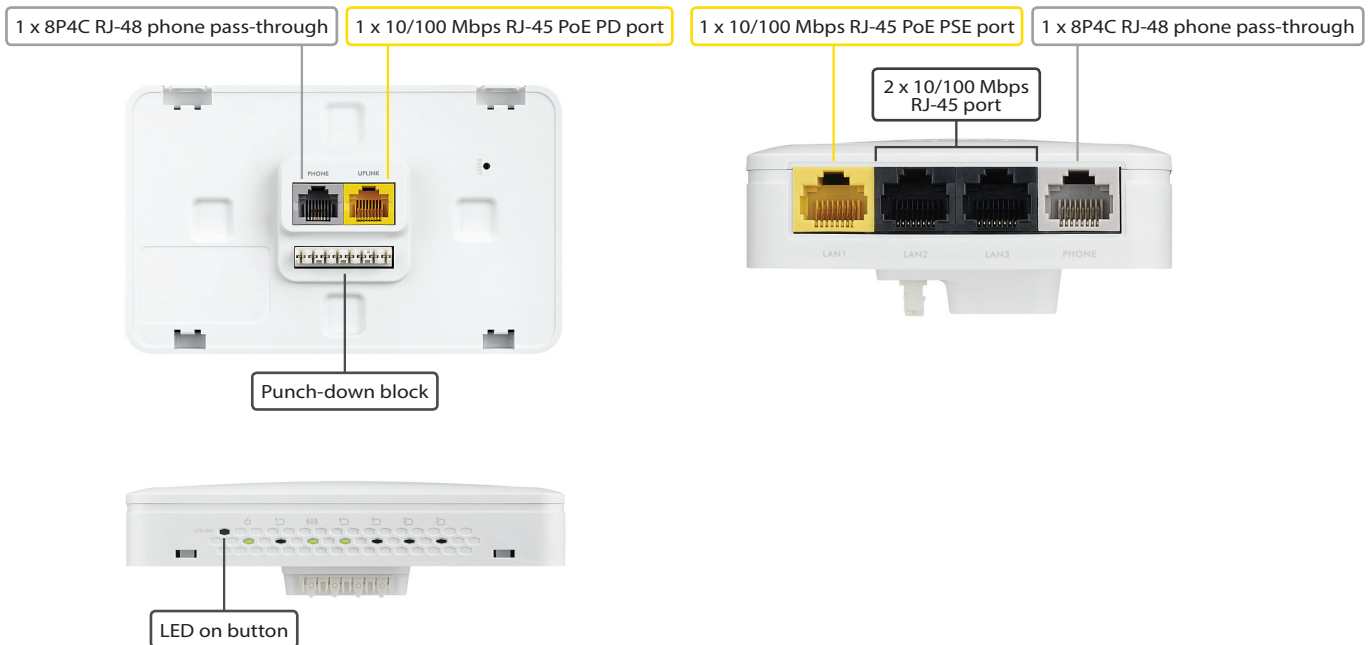
Application Diagram

Specifications

Model		NWA5301-NJ
Product name		802.11 b/g/n Wall-Plate Unified Access Point
Main Design		
Wireless frequency		2.4 GHz
Radio		1
Antenna		Embedded 2x2
RF Specifications		
Frequency band	**2.4 GHz (11 g/n)**	2.4 GHz (IEEE 802.11 b/g/n); USA (FCC): 2.412 to 2.462 GHz; Europe (ETSI): 2.412 to 2.472 GHz
802.11n premium features		• 2x2 multiple-input multiple-output (MIMO) with two spatial streams • Maximal Ratio Combining (MRC) • 20- and 40-MHz channels • PHY data rates up to 300 Mbps • Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx) • Cyclic Delay diversity (CSD) support
Maximum transmit power (Max. total channel)	**US (FCC) 2.4 GHz**	23 dBm, 2 antennas
	EU (ETSI) 2.4 GHz	17 dBm, 2 antennas
Antenna gain		5 dBi
Support data rate		• 802.11g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps • 802.11n: up to 300 Mbps in MCS15 (40 MHz; GI = 400 ns)
Receive sensitivity		2.4 GHz: • 802.11b/g, min. up to -95 dBm • 802.11n/20 MHz, min. up to -93 dBm • 802.11n/40 MHz, min. up to -92 dBm
LAN		
Number of 10/100 Mbps LAN ports	**Uplink**	1 x 10/100 Mbps POE port (PD)
	Downlink	3 x 10/100 Mbps RJ-45 ports (including one PoE PSE)
PoE		Yes
PoE power draw		13 W (Include 7 W for PoE PSE)
WLAN Security		
WMM (Wi-Fi certified)		Yes
WEP		Yes
WPA/WPA2-PSK		Yes
WPA2 (Wi-Fi certified)		Yes
WPA/WPA2-Enterprise		Yes
EAP types		TLS, TTLS, PEAP, FAST, AKA and SIM
Number of multiple SSID		8
IEEE 802.1x		Yes
MAC filtering		Yes
Layer-2 isolation		Yes, multiple profiles
RADIUS authentication		Yes
Rogue AP detection		Yes
Network		
VLANs		Yes
DHCP client		Yes
QoS		
WMM		Yes
WMM power saving		Yes
ZyXEL ONE Network		
ZON Utility		• Discovery of ZyXEL switches, APs and gateways* • Centralized and batch configurations ▪ IP configuration ▪ IP renew ▪ Device reboot ▪ Device locating ▪ Web GUI access ▪ Firmware upgrade ▪ Password configuration ▪ One-click quick association with ZyXEL AP Configurator (ZAC)
Smart Connect		• Discover neighboring devices • One-click remote management access to the neighboring ZyXEL devices
Management		
ZAC		• Batch AP configuration • Batch AP firmware upgrade • Batch AP profile backup
Standalone AP mode		Yes
Managed AP mode**		Yes
CLI		Yes
Web GUI		Yes
SNMP		Yes

* Gateway supporting ZON utility is scheduled for future release.

** Managed AP mode works with ZyXEL Controller with firmware version V4.10 or above.

Certification	
Radio	ETSI EN 300 328, FCC Part 15C, LP0002, EN 60601-1-2
EMC	EN 301 489-1, EN 301 489-17, EN55022, EN55024, EN61000-3-2/-3, FCC Part B, BSMI CNS13438
Safety	EN 60950-1, IEC 60950-1, BSMI CNS14336-1

Physical Specifications		
Item	Dimensions (WxDxH)(mm/in.)	85 x 138 x 37.4/3.35 x 5.43 x 1.47
	Weight (g/lb.)	172/0.38
Packing	Dimensions (WxDxH)(mm/in.)	200 x 141 x 64/7.87 x 5.55 x 2.52
	Weight (g/lb.)	440/0.96
Included accessories		Wall/ceiling mount plate

Environmental Specifications	
Operating temperature	0°C to 50°C/32°F to 122°F
Storage temperature	-30°C to 70°C/-22°F to 158°F
Operating humidity	10% to 90% (non-condensing)
MTBF (hr)	531,785

Ports and LED Indicators

1 x 8P4C RJ-48 phone pass-through   1 x 10/100 Mbps RJ-45 PoE PD port   1 x 10/100 Mbps RJ-45 PoE PSE port   1 x 8P4C RJ-48 phone pass-through

2 x 10/100 Mbps RJ-45 port

Punch-down block

LED on button

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