PLANET
Networking & Communication
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Product Specifications

300Mbps 802.11n In-wall Wireless Access Point

WNAP-W2200UE

Version 1.0

Change History:

Revision	Date	Author	Change List
1.0	2018/01/25	Solo	Preliminary

Author	Solo	Editor:	Solo
Reviewed by:	Miki	Approved by:	Kent

1. PRODUCT DESCRIPTION

All-in-One Manageable Wi-Fi Solution for Hotel Industry

PLANET WNAP-W2200UE enables the hospitality industry to build a high-speed wireless network with **802.1Q VLAN** and **PLANET AP controller**. Furthermore, it conforms to **standard 86-type** electrical junction box and **IEEE 802.3af/at PoE**, suitable for in-wall installation enabling to integrate the hotel network with its all-in-one interface. The WNAP-W2200UE also provides stable wireless signal that makes access to internet viable in regard to whatever nature of work you are into.

Easy Deployment with PLANET AP Controller

To expand the capability of in-wall AP, PLANET WNAP-W2200UE comes with centralized management, enabling the hospitality industry to deploy multiple APs with a single interface of **AP controller** and reducing repetitive tasks including **AP provisioning**, **AP status monitoring** and **AP maintenance**. In addition, by connecting with PLANET AP controller, PLANET WNAP-W2200UE helps hoteliers optimize their wireless network within minutes.

Suitable for Any Room Installation without Spoiling Interior Design

Featuring attractive in-wall design, the WNAP-W2200UE can be firmly installed into the wall via the standard **86 x 86 mm** European outlet box, which makes electrical wiring invisible and convenient for room installation without affecting the original interior design. It is ideal for hotels, residences, hospitals and more to establish any kind of wireless network.

Comprehensive Wireless Operation Modes

The WNAP-W2200UE supports multiple wireless communication connectivities such as **AP**, **Gateway**, **Repeater**, **WDS Point-to-Point (PtP)** and **WDS Point-to-Multipoint (PtMP)**, allowing users to comprehensively experience various applications.

Easy to Use Wi-Fi and USB Charger

Having a good night sleep is what we need in the hotel. It is easy to disable the Wi-Fi signal and LED on the front panel of the WNAP-W2200UE. When you don't need to use wireless LAN, just press the button to close the Wi-Fi and LED. To provide better services for travelers, the WNAP-W2200UE comes with a built-in USB 2.0 charger whose output of 5V DC power can charge any USB compliant mobile devices, e.g., cell phones, iPads, and other handheld devices. Thus, the WNAP-W2200 brings convenience to pedestrians, travelers and other users without having to worry about forgetting to carry an AC adapter.

2. PRODUCT FEATURES

➢ **Standard Compliant Hardware Interface**

- ■ Compliant with IEEE 802.11n wireless technology with data rate of up to 300Mbps
- ■ One 10/100BASE-TX port and one PoE powered device (PD) port
- ■ USB charger port for charging most of mobile devices easily
- ■ European 86-type wall outlet compatibility

➢ **Secure Network Connection**

- ■ Advanced security: 64-/128-bit WEP, WPA/WPA2 and WPA-PSK/WPA2-PSK (TKIP/AES encryption), 802.1x
- ■ Supports wireless MAC address filtering control to limit the connected wireless clients
- ■ Supports 802.1Q VLAN and SSID-to-VLAN mapping
- ■ Supports IP/Port/MAC address/URL filtering, DoS, SPI Firewall
- ■ Supports DMZ and port forwarding
- ■ Bandwidth control per IP address to increase network stability

➢ **Multiple Operation Modes and Wireless Features**

- ■ Multiple operation modes: AP, Gateway, Repeater, WDS
- ■ WMM (Wi-Fi multimedia) provides higher priority to multimedia transmitting over wireless
- ■ Coverage threshold to limit the weak signal of clients occupying session
- ■ Real-time Wi-Fi channel analysis chart and client limit control for better performance

➢ **Easy Deployment and Management**

- ■ Supports PLANET AP Controllers in AP mode
- ■ Easy discovery by PLANET Smart Discovery
- ■ Self-healing mechanism through system auto reboot setting
- ■ System status monitoring through remote Syslog Server
- ■ Supports PLANET DDNS/Easy DDNS

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3. PRODUCT SPECIFICATIONS

3.1 MAIN COMPONENTS

CPU	Qualcomm QCA9531
RAM	64MB SDRAM
Flash	16MB

3.2 FUNCTIONAL SPECIFICATIONS

Product	WNAP-W2200UE		
	300Mbps 802.11n In-Wall Wireless Access Point with USB Charger		
Hardware Specifications			
Interfaces	LAN	1 x 10/100BASE-TX RJ45 port Auto-negotiation and auto MDI/MDI-X	
	PoE Port	1 x 10/100Mbps auto MDI/MDI-X RJ45 port (rear panel) ※ IEEE 802.3af/at PD port	
	USB Port	USB 2.0, Type A, 5V DC, 0.5A output	
Antennas	Gain	2 x 2dBi antenna	
Button	Reset button (Press over 15 seconds to reset the device to the factory default)		
LED Indicators	Wireless		
Dimensions (Φ x H)	86 x 35 x 86 mm		
Weight	106 ±5g		
Power Requirements	48V 0.5A, IEEE 802.3af/at PoE+		
Power Consumption	< 5W		
Mounting	In-wall mount		
Wireless Interface Specifications			
Standard	IEEE 802.11b/g/n 2.4GHz		
Media Access Control	CSMA/CA		
Data Modulation	Transmission/emission type: DSSS/OFDM Data modulation type: OFDM: BPSK, QPSK, 16-QAM, 64-QAM, DBPSK, DQPSK, CCK		
Frequency Range	FCC: 2.412~2.462GHz ETSI: 2.412~2.472GHz		
Operating Channels	FCC: 1~11 ETSI: 1~13		
RF Power	< 20dBm (EIRP)		
Receive Sensitivity	Network Mode	Data Rate	Receive Sensitivity (dBm)
	2.4GHz		
	802.11b	1Mbps	-88
		11Mbps	-85
	802.11g	6Mbps	-88
		54Mbps	-68

802.11n	MCS0/MCS8	-68
	MCS7/MCS15	-68

Software Features		
LAN	Static IP	
	Supports IP-MAC binding	
Wireless Mode	Access Point	
	Gateway	
	Repeater	
	WDS (AP/Bridge/Station)	
Channel Width	20MHz, 40MHz,	
Encryption Security	64-/128-bit WEP, WPA, WPA-PSK, WPA2, WPA2-PSK, 802.1X	
Wireless Security	Enable/Disable SSID Broadcast	
	Wireless MAC address filtering	
	User Isolation	
Wireless Advanced	WMM (Wi-Fi Multimedia): 802.11e Wireless QoS	
	Multiple SSIDs: up to 4	
	Wireless Isolation: Enables to isolate each connected wireless client from communicating with each other	
	Provides wireless statistics	
Max. SSIDs	4	
Max. Clients	64 (20 is suggested, depending on usage)	
Max. WDS Peers	4	
Wireless QoS	Supports Wi-Fi Multimedia (WMM)	
Wireless Advanced	Auto channel selection	
	5-level transmit power control (100%, 75%, 50%, 25%, 12.5%)	
	Client limit control, coverage threshold	
	Wi-Fi channel analysis chart	
Status Monitoring	Device status, wireless client list	
	PLANET Smart Discovery	
	DHCP client table	
	System Log supports remote syslog server	
VLAN	IEEE 802.1Q VLAN (VID: 3~4094)	
	SSID-to-VLAN mapping to up to 4 SSIDs	
Self-healing	Supports auto reboot settings per day/hour	
System Management	Supports PLANET Hardware AP Controller/ Software AP Controller Applicable controllers[1]: WAPC-500, SAPC	
	Remote management through PLANET DDNS/Easy DDNS	
	Configuration backup and restore	
	Supports UPnP	
	Supports IGMP Proxy	

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	Supports PPTP/L2TP/IPSec VPN pass-through
	SNMP v1/v2c/v3 support, MIB I/II, Private MIB
Remarks	1. ^ the feature will be supported through firmware/system upgrade.
Environment & Certification	
Temperature	Operating: -20 ~ 55 degrees C
	Storage: -40 ~ 70 degrees C
Humidity	Operating: 10 ~ 90% (non-condensing)
	Storage: 5 ~ 95% (non-condensing)
Regulatory	CE, RoHS

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3.3 Physical Specifications

Dimensions
   86 x 35 x 86 mm (W x D x H)

Weight
   106 ±5g

Front Panel

Power LED/
WiFi Button/
Reset Button

RJ45 LAN Port

USB Charging Port

Rear Panel

PoE Port
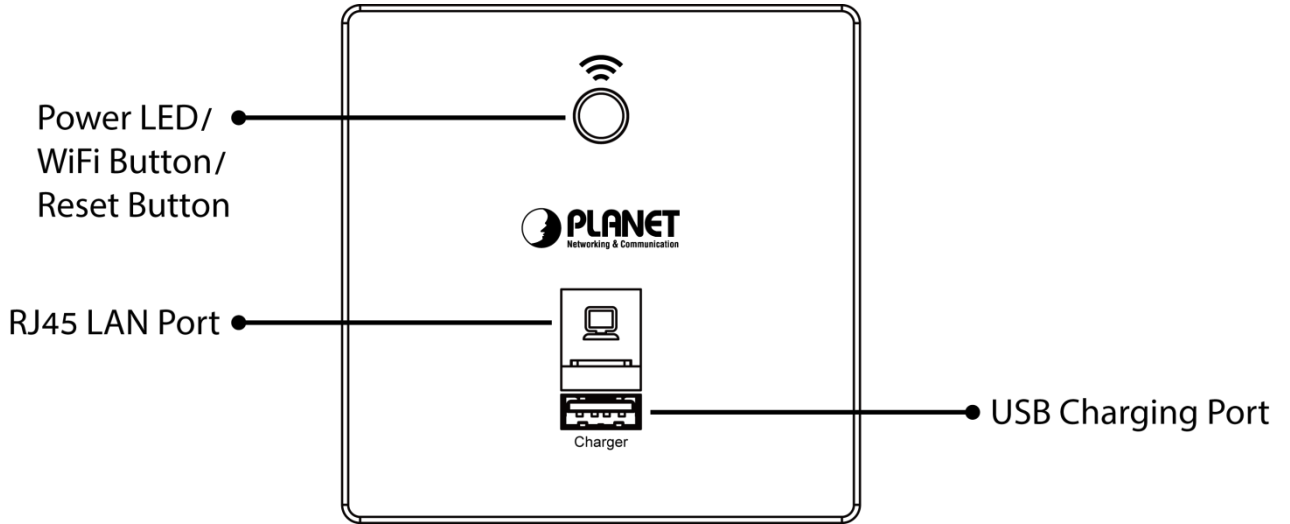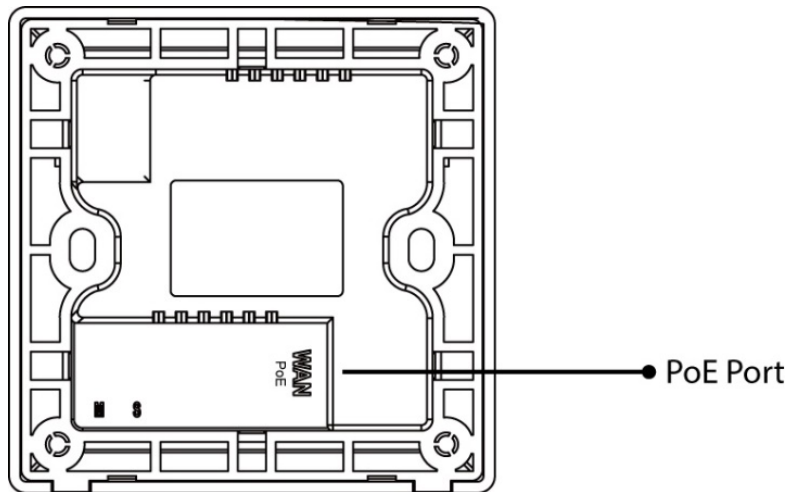
LED definition

LED	STATE	FUNCTION
Wi-Fi	On	Press the button one second to turn Wi-Fi on
	Off	Press the button one second to turn Wi-Fi off

Button definition

Object	Description
Reset	Press the Reset button for over 15 seconds and then release it to restore system to the factory default settings.

H/W Interface definition

Object	Description
PoE Port (802.3af/at PoE+)	10/100bps RJ45 port, auto MDI/ MDI-X Connect PoE port to the IEEE 802.3af/at PoE+ switch to power on the device.
LAN Port	10/100Mbps RJ-45 port, auto MDI/ MDI-X Connect this port to the network equipment.
USB Port	USB 2.0, Type A, 5V DC/0.5A output Connect this port to charge the mobile device.

3.4 Environmental Specifications

Temperature

Operating: -20 ~ 55 degrees C

Storage: -40 ~ 70 degrees C

Humidity

Operating: 10 ~ 90% (non-condensing)

Storage: 5 ~ 95% (non-condensing)

3.5 Regulatory Compliance

CE, RoHS

3.6 BASIC PACKAGING

- WNAP-W2200UE x 1
- Screws x 2
- Quick Installation Guide x 1

3.7 PACKAGING INFORMATION

Dimensions (W x D x H)	120 x 110 x 65 mm
Weight	181 ±5g

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APPENDIX: Default Settings

Device Name	WNAP-W2200UE
Operation Mode	AP mode
IP Address	192.168.1.253
Subnet Mask	255.255.255.0
DHCP	Disabled
Default SSID	PLANET_2.4G
Default Channel	6
Default Channel List	FCC: 1~11 ETSI: 1~13
Default Channel Bandwidth	20MHz
Default Security	Disable
Default TX Power Percentage	100
WMM Capability	Enable
SSID Broadcast	Enable
User Isolation	OFF
Time Zone	FCC: (GMT+8:00) ETSI: (GMT)