5GHz 300Mbps 802.11a/n Outdoor Wireless AP/Router (2 x RP-SMA Connector)

Cost-effective Wireless Solution with Superior Performance

This Outdoor Wireless AP / Router is designed to provide a highly-stable, better performance and cost-effective wireless solution in outdoor backhaul deployment. It offers significant range and excellent throughput compared to the traditional 802.11a wireless device while using the same transmission power. Via the adjustable output power which can be up to 500mW and RP-SMA antenna connectors, it can directly connect with various high gain antennas to extend wider coverage for outdoor long-ranging application and better noise immunity effect, thus increasing the real performance reaching over 100Mbps at 5km of long distance connection.

Designed for Various Requirements of Wireless LAN

The Outdoor Wireless AP / Router supports multiple wireless communication connectivities, including AP/Router, WDS PtP, WDS PtMP and WISP modes, that meet various application requirements to enable users to gain more comprehensive experience. It also helps users to easily build wireless network and extend the wireless range of the existing wireless network.

Industrial Compliant Wireless LAN and LAN

- Compliant with IEEE 802.11n wireless technology capable of up to 300Mbps data rate
- Backward compatible with 802.11a standard
- Equipped with 10/100Mbps RJ45 ports for LAN and WAN with auto MDI/ MDI-X supported

Fixed-network Broadband Router

- Supported connection types in WISP mode: Dynamic IP, Static IP, PPPoE
- Supports Virtual Server and DMZ for various networking applications
- Supports DHCP server, UPnP and PLANET Dynamic DNS

RF Interface Characteristics

- Built-in RP-SMA antenna connectors
- High Output Power up to 500mW with multiply-adjustable transmit power control

Outdoor Environmental Characteristics

- IP55 enclosure
- Passive Power over Ethernet design
- Operating temperature: -20~70℃

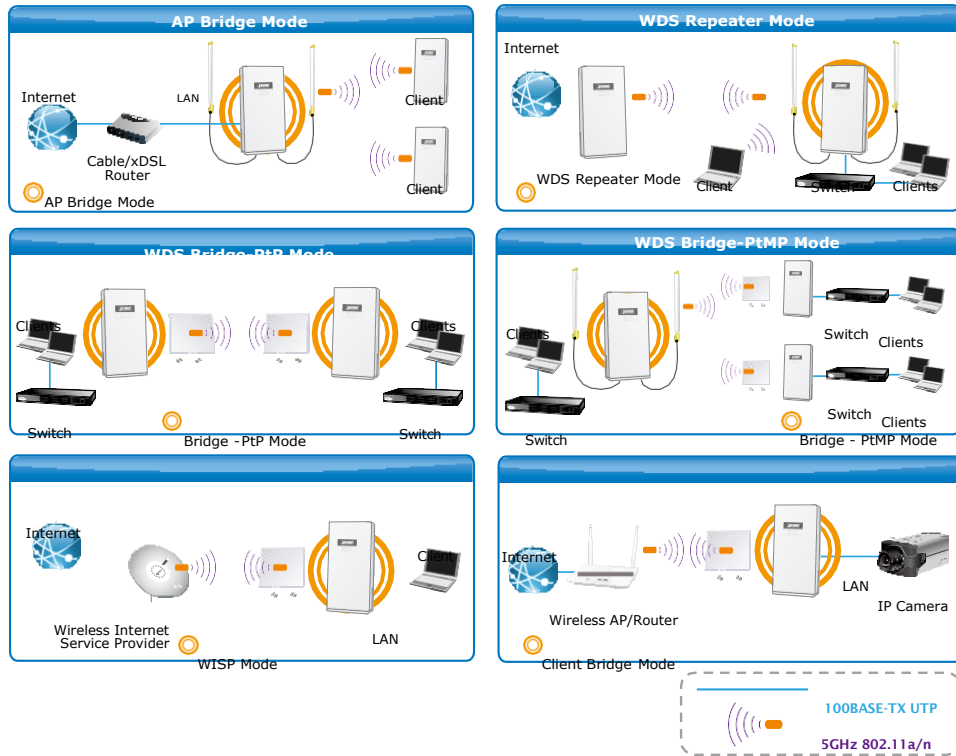## Multiple Operations and Wireless Modes

- Multiple operation modes: Bridge, WISP
- Multiple wireless modes: AP, Client CPE (WISP), WDS PtP, WDS PtMP
- Supports WMM (Wi-Fi Multimedia)

Reliable and Secure Network Connection

- Supports Software Wi-Fi Protected Setup (WPS)
- Advanced Security: 64/128-bit WEP, WPA / WPA2, WPA-PSK / WPA2-PSK (TKIP/AES) and 802.1x RADIUS authentication
- Supports IP/Protocol-based access control and MAC filtering
- Supports self-healing (Schedule Reboot) mechanism for reliable connection

Easy Installation and Management

- Web-based UI and quick setup wizard for easy configuration
- Planet Smart Discovery Utility allows administrator to discover and locate each AP
- SNMP-based management interface
- System status monitoring includes DHCP Client and System Log

AP Bridge Mode

Internet — LAN — Cable/xDSL Router — AP Bridge Mode — Client — Client

WDS Repeater Mode

Internet — WDS Repeater Mode — Client — Switch — Clients

WDS Bridge-PtP Mode

Clients — Switch — Bridge - PtP Mode — Switch — Clients

WDS Bridge-PtMP Mode

Clients — Switch — Switch — Clients — Switch — Clients — Bridge - PtMP Mode

Internet — Wireless Internet Service Provider — WISP Mode — Client — LAN

Internet — Wireless AP/Router — Client Bridge Mode — LAN — IP Camera

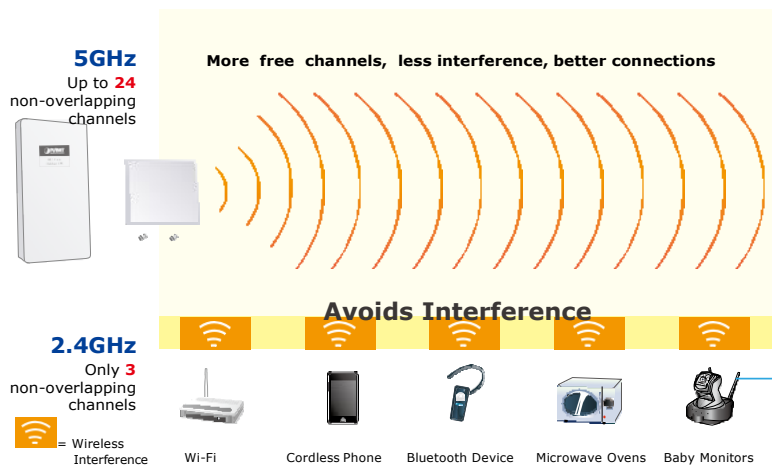100BASE-TX UTP
5GHz 802.11a/n

Advanced Security and Rigorous Authentication

The Outdoor Wireless AP / Router supports WEP, WPA / WPA2, WPA-PSK and WPA2-PSK wireless encryptions, the advanced WPA2-AES mechanism and 802.1x RADIUS authentication, which can effectively prevent eavesdropping by unauthorized users or bandwidth occupied by unauthenticated wireless access. Furthermore, any users are granted or denied access to the wireless LAN network based on the ACL (Access Control List) that the administrator pre-established.

Less Interference, Highly Reliable Connection

By using 5GHz frequency band, the Outdoor Wireless AP / Router can easily avoid much interference coming from the environment where there are a maximum of 24 non- overlapping channels. Therefore, the Outdoor Wireless AP / Router is definitely suitable for such applications as IP surveillance, backhaul link of building to building and backbone of public service. Additionally, the self-healing/schedule reboot capability keeps connection alive all the time

5GHz
Up to **24** non-overlapping channels

More free channels, less interference, better connections

Avoids Interference

2.4GHz
Only **3** non-overlapping channels

= Wireless Interference

Wi-Fi   Cordless Phone   Bluetooth Device   Microwave Ovens   Baby Monitors

*The 24 channels are defined by the theory. The actual application will vary based on the regulation in different regions and countries.

Flexible and Reliable Outdoor Characteristics

The Outdoor Wireless AP / Router is perfectly suitable to be installed in outdoor environments and harsh locations. With IP55 and outdoor UV resistance enclosure, the Outdoor Wireless AP / Router can perform normally under rigorous weather conditions. With the proprietary Power over Ethernet (PoE) design, the Outdoor Wireless AP / Router can be easily installed in the areas where power outlets are not available.

Easy Deployment and Management

With user-friendly Web UI and the Planet Smart Discovery Utility, the Outdoor Wireless AP / Router is easy to install, even for users who never experience in setting up a wireless network. Furthermore, with the Dynamic DNS service and SNMP-based management interface, the Outdoor Wireless AP / Router is convenient to be managed and configured remotely.

Applications

Longer Distance Coverage between LAN Connections

The Outdoor Wireless AP / Router is a cost-effective outdoor wireless LAN solution for widely open space applications. It is definitely suitable for outdoor wireless connections between buildings and IP surveillance facilities.

Wi-Fi City

5GHz 802.11a/n
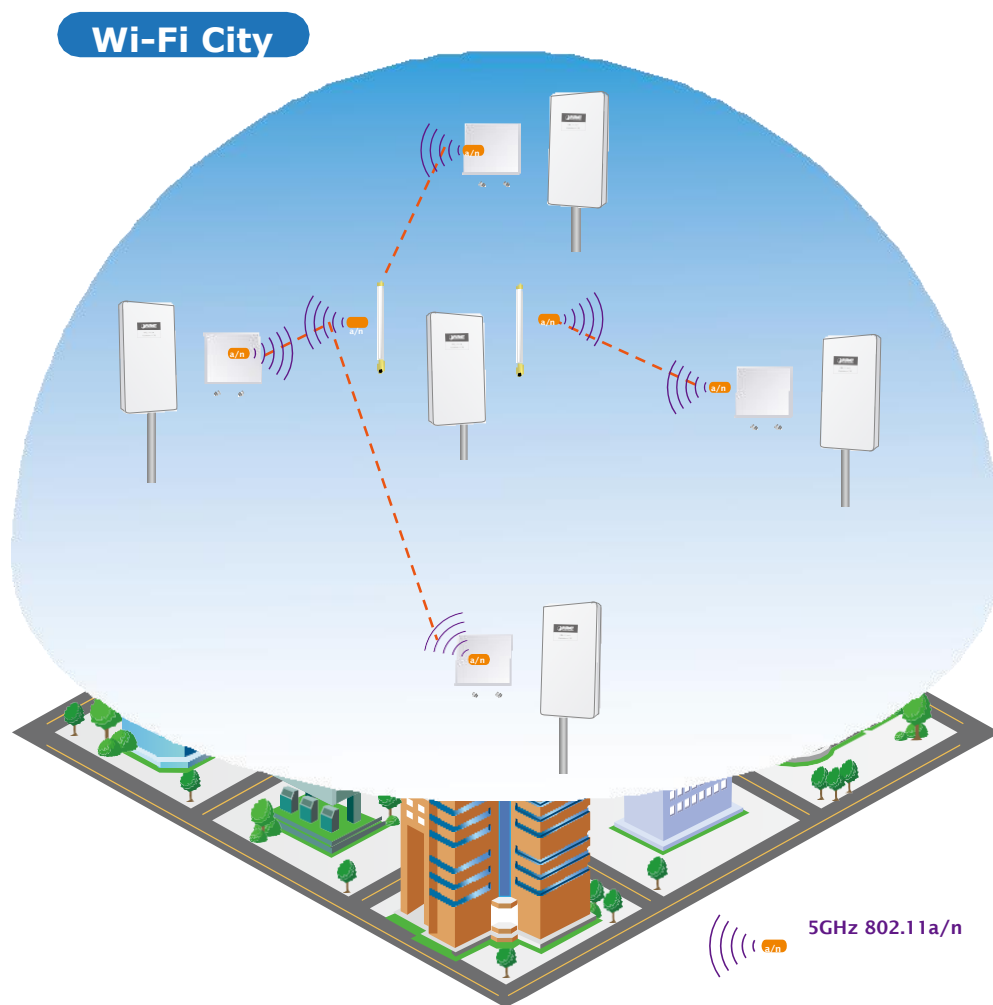
With built-in RP-SMA connectors, the Outdoor Wireless AP / Router can equip with various antennas that will bring higher performance and longer distance of wireless connection. The Outdoor Wireless AP / Router provides high output power with multiply-adjustable Tx controller, which allows CPE users to easily install and adjust the suitable power output in appropriate locations. Moreover, the Outdoor Wireless AP / Router supports WISP mode to enable CPE users to connect to Internet via local WISP provider.
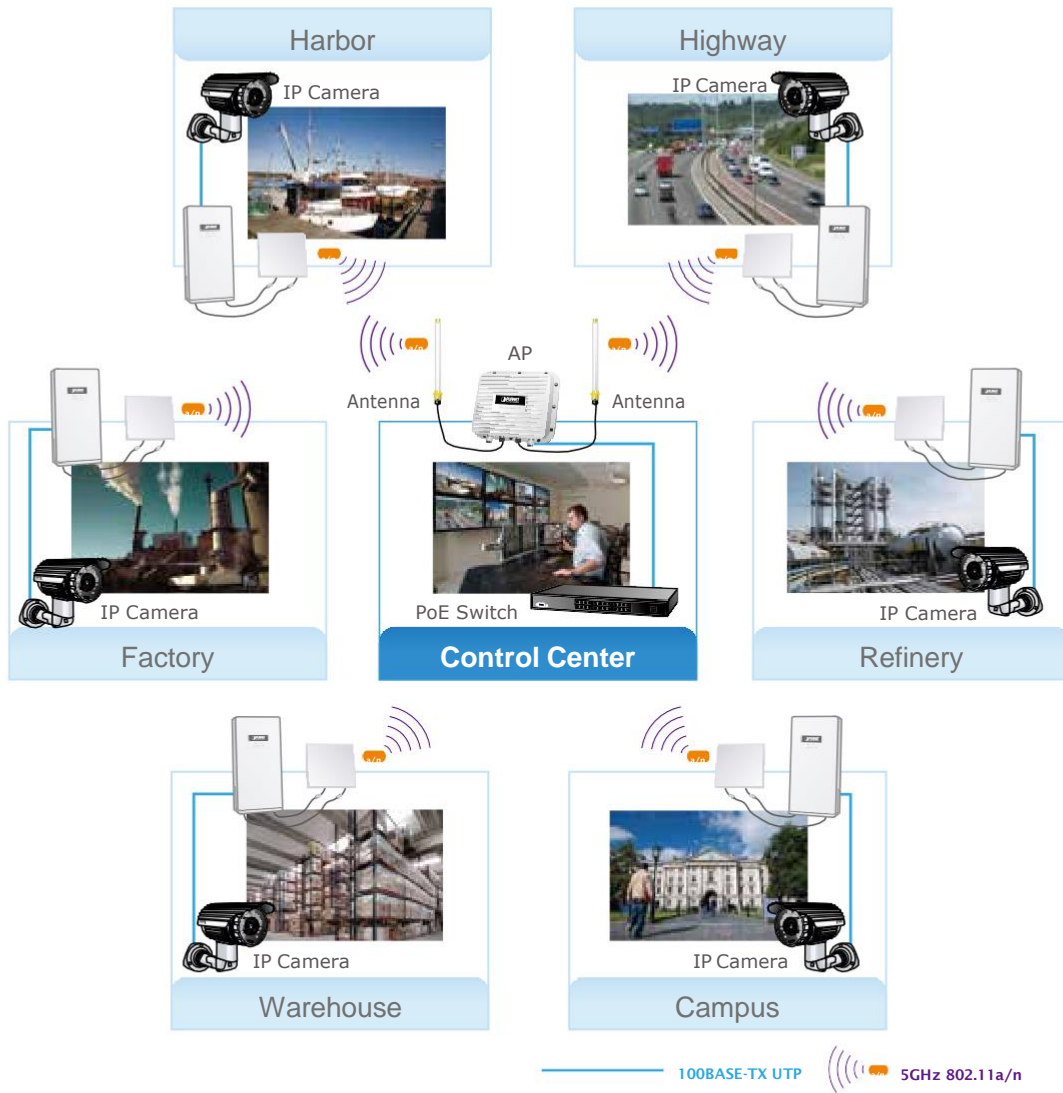
**To get the best result, matching the Outdoor Wireless AP / Router with related products is recommended.

Specifications

Model				
	300Mbps 802.11a/n wireless outdoor CPE			
Hardware				
Standard Support	IEEE 802.11a/n IEEE 802.3 IEEE 802.3u IEEE 802.3x			
Memory	64 Mbytes DDR SDRAM 16 Mbytes Flash			
PoE	Passive PoE			
Interface	Wireless IEEE802.11a/n, 2T2R PoE LAN (LAN 1): 1 x 10/100BASE-TX, auto-MDI/MDIX, passive PoE LAN 2: 1 x 10/100BASE-TX, auto-MDI/MDIX, passive PoE pass-through			
Antenna	Built-in RP-SMA antenna connectors			
Wireless RF Specifications				
Wireless Technology	IEEE 802.11a IEEE 802.11n			
Data Rate	IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps IEEE 802.11n (20MHz): up to 150Mbps IEEE 802.11n (40MHz): up to 300Mbp			
Media Access Control	CSMA/CA			
Modulation	Transmission/Emission type: OFDM Data modulation type: OFDM with BPSK, QPSK, 16-QAM, 64-QAM			
Frequency Band	5.180GHz ~ 5.825GHz			
Operating Channel	5.180GHz	CH36	5.580GHz	CH116
	5.200GHz	CH40	5.600GHz	CH120
	5.220GHz	CH44	5.620GHz	CH124
	5.240GHz	CH48	5.640GHz	CH128
	5.260GHz	CH52	5.660GHz	CH132
	5.280GHz	CH56	5.680GHz	CH136
	5.300GHz	CH60	5.700GHz	CH140
	5.320GHz	CH64	5.745GHz	CH149
	5.500GHz	CH100	5.765GHz	CH153
	5.520GHz	CH104	5.785GHz	CH157
	5.540GHz	CH108	5.805GHz	CH161
	5.560GHz	CH112	5.825GHz	CH165
	*The 24 channels are defined by the theory. The actual application will vary based on the regulation in different regions and countries.			
RF Output Power (Max.)	802.11a	25 ±1dBm		
	802.11n	24 ±1dBm		
Receiver Sensitivity (dBm)	802.11a	-94dBm		
	802.11n	-93dBm		
Output Power Control	12~27dBm			
Software Features				
LAN	Built-in DHCP server supporting static IP address distribution			
	Supports 802.1d STP (Spanning Tree)			
WAN	• Static IP • Dynamic IP • PPPoE			
Operating Mode	• Bridge • WISP			
Firewall	NAT firewall with SPI (Stateful Packet Inspection)			
	Built-in NAT server supporting virtual server and DMZ			
	Built-in firewall with port/ IP address/ MAC/ URL filtering			
Wireless Mode	• AP/ Router • Client • WDS PTP • WDS PTMP • WISP			
Channel Width	20MHz / 40MHz			
Wireless Isolation	Enable to isolate each connected wireless client to let them cannot access mutually			
Encryption Type	64/128-bits WEP, WPA, WPA-PSK, WPA2, WPA2-PSK, 802.1x			

Wireless Security	Wireless LAN ACL (Access Control List) filtering
	Wireless MAC address filtering
	Enable/Disable SSID Broadcast
Max. Wireless Clients	25
Max. WDS APs	8
Max. Wired Clients	60
WMM	Supports Wi-Fi multimedia
QoS	Supports Quality of Service for bandwidth control
NTP	Network Time Management
Self Healing	Supports Schedule Reboot
Management	Web UI, DHCP Client, Configuration Backup and Restore, Dynamic DNS, and SNMP
Diagnostic Tool	System Log, Ping Watchdog
Mechanical and Power	
IP Level	IP55
Material	Outdoor UV Stabilized Enclosure
Dimensions (W x D x H)	127 x 63 x 254 mm
Weight	366g
Installation	Pole mounting or wall mounting
Power Requirements	LAN1 • 24V DC, 1A/ Passive PoE • Pin 4,5 V DC+ • Pin 7,8 V DC- • Pin 3 Reset
Power Consumption	12W
Environment and Certification	
Operating Temperature	-20~70°C
Operating Humidity	10~95% non-condensing
Regulatory	CE, FCC, RoHS
Accessory	
Standard Accessories	• 24V DC Passive PoE Injector & Power Cord x 1 • Plastic Strap x 1 • Quick Installation Guide x 1