

WAP-7500

802.11a Wireless LAN Outdoor AP/Extender



Long Distance Wireless with Excellent Performance

PLANET Technology introduces the latest long distance outdoor 5GHz wireless LAN solution, the WAP-7500, the outdoor wireless AP/Extender that provides **higher transmit power**, **better performance**, and **less interference**. The WAP-7500 is compatible with **IEEE 802.11a** to deliver an affordable and reliable rural connectivity solution. The WAP-7500 not only has built-in 23dBi panel Antenna but also reserves one N-Type External Antenna Connector to allow stronger antenna upgrades. Moreover, it adopts TDMA and link aggregation technologies; therefore, its wireless extensibility can reach at least 40km while ensures transmission quality.

Multiple Operation Modes

The WAP-7500 supports multiple operation modes including **Base Station**, **CPE**, **Relay**, **Point to Point**, and **Point to Multiple Point** to conveniently configure versatile solutions in a wide range of wireless scenarios. The WAP-7500 can have relay setting when two devices connect to each other without affecting wireless performance. It also supports Super mode for fast frames, bursting compression to enhance the throughput.

Advanced Security and Management

In aspect of security, besides 64/128/152 bits WEP encryption, the WAP-7500 integrates WPA / WPA2, WPA-PSK / WPA2-PSK authority to secure and protect your wireless LAN. Furthermore, the WAP-7500 is easily to be managed and configured remotely by its user-friendly Web and SNMP-Based management interface.

Highly Reliable Outdoor Device

The WAP-7500 is quite suitable for wireless LAN applications in widely open space, exposed and long distance locations. With its **IP-67** casing protection, the WAP-7500 can perform normally under rigorous weather conditions including heavy rain and wind. With the standard 802.3af Power over Ethernet (PoE) design, the WAP-7500 can be easily applied in the areas where power outlets are not available. The best application of the WAP-7500 is to build outdoor wireless network between buildings on campuses, business, rural areas and etc.

KEY FEATURES

- IEEE 802.11a standard compliant
- Wide delivery of 5GHz wireless network and better connections with less interference
- Dual-Radio: Built-in 23dBi panel Antenna, and one External N-Type Connector
- · Adopts TDMA and link aggregation technologies
- IEEE 802.3af Power over Ethernet compliant
- IP-67 casing protection against rigorous weather conditions
- Wide range of temperature tolerance for low or high temperature environment
- High Transmit Output Power up to 1000mW with multiple adjustable transmit power control
- Multiple operating modes including Base Station, CPE, Relay, Point to Point, and Point to Multiple Point
- Operates on bridge and relay modes concurrently
- Supports 64/128/152-bit WEP and WPA, WPA2, WPA-PSK, WPA2-PSK Authentication
- · Comply with DFS II
- User-friendly Web and SNMP-Based management interface



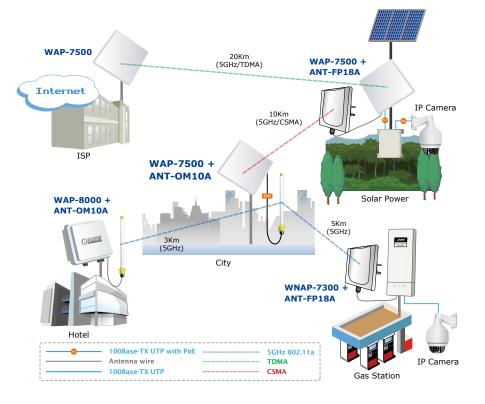
APPLICATIONS

Higher coverage & long distance between LAN connections

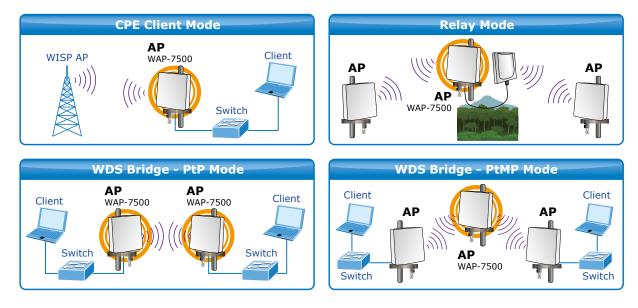
The WAP-7500 is a cost-effective outdoor wireless solution for widely open space applications. It is best suitable to outdoor wireless connections between buildings.

With Multiple Antenna choices and adjustable output power controller, the WAP-7500 provides higher coverage and long distance wireless connection and also allows CPE users to easily install and adjust the suitable value in appropriate locations.

**Sincerely suggest matching the same model in outdoor wireless bridge application for getting best performance.



The WAP-7500 supports multiple operation modes to conveniently configure versatile solutions in a wide range of wireless scenarios.



Data Sheet

2



WAP-7500

SPECIFICATION

Product	802.11a Wireless LAN Outdoor AP/Extender
Model	WAP-7500
Hardware Specification	
Standard Support	IEEE 802.11a
Standard Support	IEEE 802.3u
Network Interface	LAN: 1x 10/100Base-TX RJ-45, Auto-MDI/MDIX
Network interface	IEEE 802.3af Power over Ethernet PD compliant
Interface	RS-232 (COM): 1x RS-232 (UART) in RJ45 Form Factor
IP Level	67
Power	IEEE 802.3af Power over Ethernet (Output 20Watts, 48V/0.4A)
Wireless Interface Specifica	
Wireless Technology	IEEE 802.11a compliant
Data Rates	802.11a: 54/48/36/24/18/12/9/6Mbps
Antenna	Internal: 23dBi (Default for FCC)
	HPBW (Horizontal): 10 degree
	HPBW (Vertical): 10 degree
	External: 1x N-type Connector
	FCC:
	5.725 ~ 5.850 GHz
Frequency Range	CE :
	5.470 ~ 5.600 GHz
	5.660 ~ 5.725 GHz
	(Programmable for different country regulations)
Channel Spacing	40/20/10/5 MHz
	24dBm at Radio for FCC (Band 4)
RF Output Power	30dBm EIRP for ETSI 301 893 (Band 3)
	(Controllable for different country regulations)
Receiver Sensitivity	6Mbps: -90dBm
	54Mbps: -73dBm
Modulation	OFDM with BPSK, QPSK, 16-QAM, 64-QAM
Management Feature	
	Web-Based Management (Secure SSL)
Management	Command Line Interface(SSH)
	SNMPv2
Eirmuara Ungrada	Windows-Based Utility
Firmware Upgrade	Web / Windows management tool Base Station
	CPE
Operation mode	• CrE • Relay
operation mode	Point to Point
	Point to Point Point
Radio Bandwidth Control	5/10/20/40MHz
Super Mode	Enable it for Fast Frames, Bursting Compression
TDM Coordination	Traffic Management
Link Aggregation	Throughput Enhancement
TDMA	For long distance transmission
Distance in Meters	Auto ACK-Time adjustment
Wireless Isolation	Yes
Management Statistics	Wireless and Ethernet
Link Test	Self-Wireless Connection test
Wireless Security	64/128/152-bit WEP, WPA, WPA-PSK, WPA2, WPA2-PSK
	HTTPS login
User Authentication	802.11i (WPA, WPA2)
	802.1x (EAP-TLS / TTLS)
	802.1Q VLAN
	Remote RADIUS server authentication
	5 levels adjustable:
	Full = 24dBm
Output Power Control	50% = 21dBm
	25% = 18dBm
	12.5% = 15dBm
	Min. = 12dBm

3





WMM	802.11e WMM (Wi-Fi Multimedia)
STP	Spanning Tree Protocol with Fast Forwarding
GPS Coordinate Setting	The GPS Coordinate Setting can mark the latitude and longitude of the device.
Diagnostic tool	System Log
Environment	
Operating Temperature	-30 ~ 70 Degree C
Operating Humidity	10 ~ 95% non-condensing
Certification	
EMI	FCC: part 15, subpart B&C CE: EN301 893(5G)
EMS	CE EN301 489-1/17
Safety	EN60950
Accessory	
Standard Accessories	 48V / 0.4A 802.3af PoE injector x 1 AC Power cord x 1 Grounding Wire with screw x 1 Mounting Kit x 1
	Water Proof RI-45 Connector Kit x 1
Certification	
EMI	FCC: part 15, subpart B&C CE: EN301 893 (5G)
EMS	CE: EN301 489-1/17
Safety	CE: EN60950
DFS	CE: EN301 893 V1.5.1 (DFS-3)

ORDERING INFORMATION

WAP-7500-EG	802.11a Dual RF Wireless LAN Outdoor AP - FCC
	802.11a Dual RF Wireless LAN Outdoor AP - ETSI

RELATED PRODUCT

 CB-STP-25
 25 Meters STP Cat5 Cable

 ELA-100
 Ethernet Lightning Arrest Box

ACCESSORIES

ANT-OM10A	5GHz 10dBi Omni-directional Antenna
ANT-SE17A	5GHz 16.5dBi Sector Antenna
ANT-FP18A	5GHz 18dBi Flat Panel Antenna

Data Sheet

05-11

<u>PLANET Technology Corporation</u> 11F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)

Tel: 886-2-2219-9518

Email: sales@planet.com.tw

Fax: 886-2-2219-9528 www.planet.com.tw



PLANET reserves the right to change specifications without prior notice. All brand names and trademarks are property of their respective owners. Copyright © 2011 PLANET Technology Corp. All rights reserved.

4