

Product Specifications

Enterprise-class Wireless LAN AP Controller

WAPC-500/WAPC-1000

Version 1.0

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Change History:

Revision:	Date:	Author:	Change List:
Version 1.0	2018-03-23	Miki Chou	Initial release

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1. PRODUCT DESCRIPTION



Large-scale Wireless LAN Management Solution

PLANET WAPC-500/WAPC-1000, a large-scale of Wireless LAN Access Point Controller (WLAN AP Controller), features **smart AP control** managing up to **512/1024** PLANET smart access points across indoor and outdoor series to provide wireless network management solution from medium to large enterprises. The WLAN controller enables service providers and IT managers to control all wireless APs at the same time in medium and large wireless network environments, such as hotels, villas, resorts and any public area.

Various Smart APs that Suit Every Enterprise's Needs

To fulfill various business needs, the WAPC-500/WAPC-1000 supports a maximum of **16** models of Smart APs for both indoor and outdoor series including ceiling-mount, wall-mount, in-wall, industrial, single-band, dual-band and high-power access points which able to adapt to different environments

Speeding Up Management and Monitoring

With the WLAN AP Controller, the system integrator is able to deploy from 512 to 1000 access points at a time, and centrally configures multiple PLANET smart access points through pre-defined SSID profile and radio profile with just one-click operation. The graphical and user-friendly management interface reduce system operation effort, thus simplifying the batch configuration without having to log on to each device.

Controlling Wireless Network within Minutes

The WAPC-500/WAPC-1000, equipped with an LCD with keypads, provides a brief system overview and basic status, and moreover, its integrated Smart AP Control software comes with a dashboard view of your wireless network management. It offers a valuable wireless network information at a glance with the help of the data-driven graphical chart. The dashboard retrieves the real-time visualizations including the system usage, wireless channel distribution, AP loading of Top 3 and active clients traffic status which enables IT engineers quickly drill down into specific information.

Wireless Cluster Management

To configure multiple Smart APs of the same model, the WAPC-500/WAPC-1000 allows clustering them to a managed group for unified management. According to requirements, wireless APs can be flexibly expanded or removed from a wireless AP group at any time. The AP cluster benefits bulk provision and bulk firmware upgrade through single entry point instead of having to configure settings in each of them separately.

Secure WLAN Access and User Control

The WLAN AP Controller can provide up to 1000 on-demand user accounts. The user accounts can be grouped according to a different access policy. The WLAN AP Controller's built-in RADIUS server is integrated for large-scale enterprises so as to provide secure user authentication through the managed RADIUS AP clients.

Optimizing Wi-Fi Deployment with Zone Maps

Importing your floor maps and locating each AP or AP group according to the field deployment can save your time and cost of on-site support and monitoring. It shows the real-time AP status and its signal heat map is capable of reflecting the actual coverage and helps the administrator to fine-tune the overlapping of the adjacent APs anytime to optimize the wireless network performance.

Real-time Monitoring to Speed Up Network Analysis

The WLAN AP Controller collects all the traffic statistics of the managed APs and displays both graphical and dynamic data information via graphs, charts and tables, reporting on a significant overview of your wireless network to make the daily monitoring more efficient.

Maintenance and Scalability

Through the local high-capacity HDD or mounted USB storage device, the administrator is able to back up or restore the managed device list and profiles, thus reducing effort for system recovery. In addition, PLANET provides unlimited system upgrade and AP license for free to support future added models and advanced features. The WAPC WLAN Controller series is no doubt the best choice for the enterprise.

2. PRODUCT FEATURES

➤ **Industrial-grade Physical Hardware**

- 4 10/100/1000BASE-T Gigabit Ethernet RJ45 ports
- Intel® Celeron® J1900 up to 2.42 GHz
- RJ45 type console interface for basic management
- 1 USB 2.0 port for configuration backup and restore
- Built-in LCM panel for easy status monitoring
- 1U rack mount design

➤ **Wireless LAN AP Management**

- Dashboard: provides at-a-glance view of system and wireless network status
- AP Discovery: one key to discover the managed APs on the managed LAN
- Customized Profile: allows multiple wireless profiles creation and maintenance
- Auto Provision: multi-AP provisioning with one click
- Cluster Management: simplifies high-density AP management
- Zone Plan: optimizes AP deployment with actual signal coverage
- Analysis: real-time AP status monitoring
- Authentication: built-in RADIUS server seamlessly integrated into the enterprise network
- User Control: allows on-demand account creation and user defined access policy
- Scalability: free system upgrade and AP firmware bulk upgrade capability
- Management Capacity: monitoring and management of 512 to 1,024 access points

➤ **Network Management Characteristics**

- Easy discovery by PLANET Smart Discovery
- Built-in DHCP Server
- Console/Telnet command line interface
- SSL secure access
- Web-based GUI management interface
- SNMP v1, v2c, and v3 management
- Supports PLANET DDNS/Easy DDNS

3. PRODUCT SPECIFICATIONS

3.1 MAIN COMPONENTS

CPU	Intel® Celeron® J1900 up to 2.42 GHz
Memory	2GB DDR3(L) 1333 SODIMM

3.2 SPECIFICATIONS

Product	WAPC-500	WAPC-1000
		Enterprise-class Wireless LAN Controller
Platform		
Form Factor	1U Rack-mount chassis	
Processor	Intel® Celeron® J1900 up to 2.42 GHz	
Memory	2GB DDR3(L) 1333 SODIMM	
Physical Specifications		
I/O Interface	Four 10/100/1000BASE-T RJ45 ports with auto-MDI/MDI-X	
	1 USB 2.0 port	
	1 RS232-to-RJ45 console port (115200, 8, N, 1)	
	LCM display with keypad	
	1 AC power input	
	1 power switch	
Storage	2.5", 500GB SATA HDD	
Thermal Fan	1	
Dimensions (W x D x H)	430 x 200 x 44 mm	
Weight	3kg	
Enclosure	Metal	
Power Requirement	100W ATX PSU AC 100~240V, 50/60Hz, 8A max.	
Environment & Certification		
Temperature	Operating: 0 ~ 40 degrees C Storage: -20 ~ 60 degrees C	
Humidity	Operating: 10 ~ 80% (non-condensing) Storage: 10 ~ 80% @ 40 degrees C (non-condensing)	
Vibration	0.5 Grms/ 5 ~ 500Hz when operating 1.5 Grms/ 5 ~ 500Hz when not operating	
Shock	10G peak acceleration (duration of 11 msec.) when operating 20G peak acceleration (duration of 11 msec.) when not operating	
MTBF (Hours)	110,000	

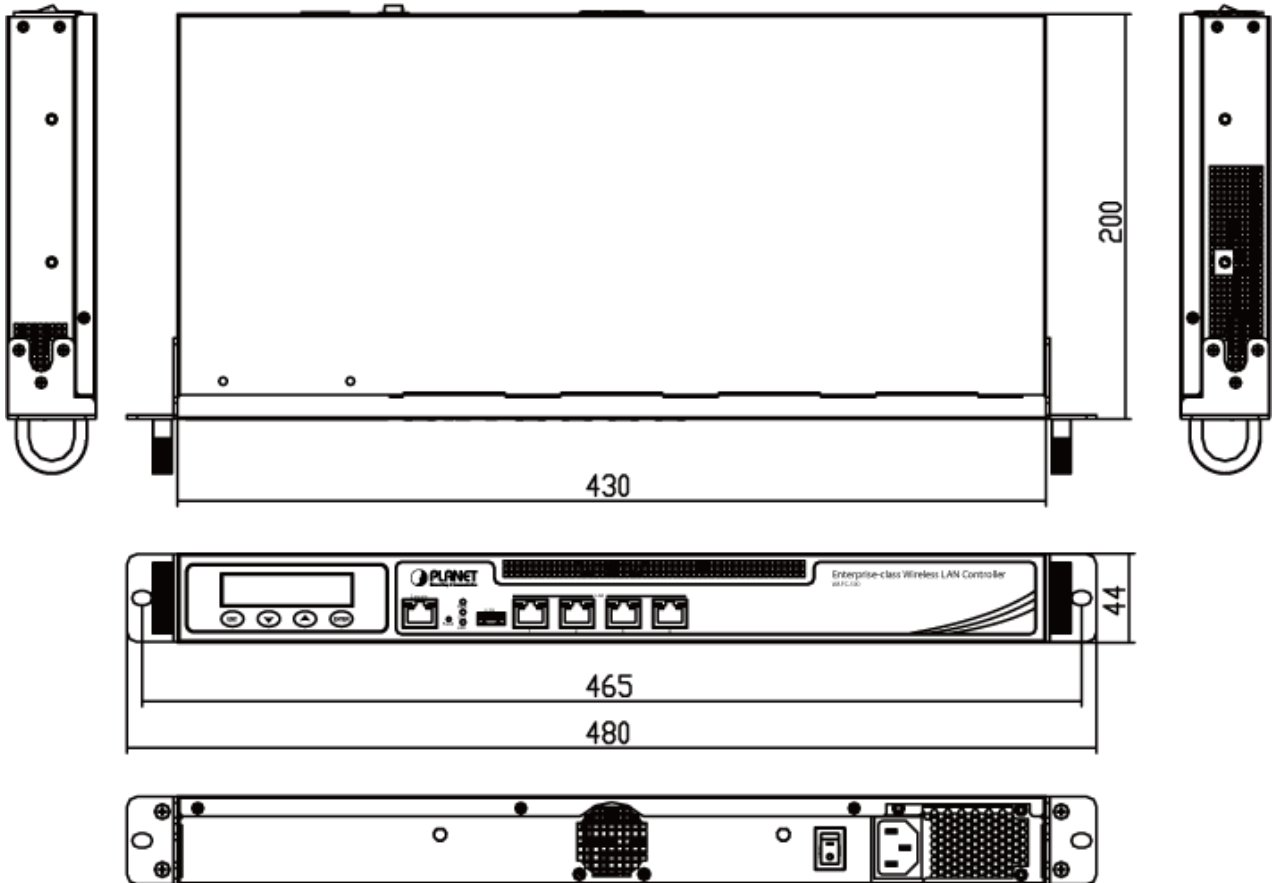
AP Management		WAPC-500	WAPC-1000
Number of managed APs		512	1024
Number of RADIUS clients		512	1024
Number of user accounts		500	1000
AP Auto Discovery		Supports AP auto discovery	
Dashboard		Summarized system overview includes online AP numbers, activated client number	
SSID/RF Profile		Allows multiple wireless profiles creation and maintenance	
Cluster Management		Allows AP grouping for bulk provisioning and batch upgrading	
Bulk AP Provisioning		Supports bulk AP provisioning with user-defined profiles	
Bulk AP Firmware Upgrade		Supports bulk AP firmware upgrade	
Coverage Heat Map		Enables real signal coverage of managed AP reflecting on the uploaded zone maps	
Topology View		Provides visual topology view of connected PLANET devices	
Status Monitoring		Real-time traffic statistics reporting of AP and activated clients	
Graphical Statistics		Real-time and historical visibility of traffic flow	
Profile Backup/Restore		Provides SSID, radio profile backup/restore	
SSIDs-to-VLANs Mapping		Allows to configure SSIDs-to-VLANs mapping in supported APs	
RADIUS Authentication		RADIUS server is integrated for client authentication in a large-scale enterprise network	
User Account Management		Supports on-demand account creation per user defined access policy	
Network Services			
Network	DDNS	Supports PLANET DDNS/Easy DDNS	
	DHCP	Built-in DHCP Server for auto IP assignment to APs	
	Management	Console; Telnet; SSL; Web browser (Chrome is recommended); SNMP v1, v2c, v3	
	Discovery	Supports PLANET Smart Discovery	
Maintenance	Backup	System backup and restore to local or USB HDD	
	Reboot	Provides system reboot manually or automatically per power schedule	
	Diagnostic	Provides IPv4/IPv6 ping and trace route	

Supported Access Point Models [*]			
Managed AP Series	Smart AP E Series	Smart AP OE Series	Smart AP OW Series
WDAP-C7200AC	WDAP-C7200E	WDAP-802AC	WAP-500N
WDAP-W7200AC	WNAP-C3220E	WDAP-702AC	WAP-200N
WNAP-C3220A	WNAP-W2200UE	WBS-502AC	WBS-500N
WNAP-W2201A		WAP-552N	WBS-200N
		WAP-252N	WBS-502N
			WBS-202N
Standards Conformance			
Regulatory Compliance	CE, FCC		
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab Gigabit 1000BASE-T IEEE 802.3x Flow control and back pressure		
[Remarks]			
The supported AP models may be changed after a firmware upgrade. The following AP models are classified according to their specification.			
Managed AP Series	The AP can be managed in the "Managed AP" mode		
Smart AP E Series	"E" stands for " Enhanced ", meaning indoor smart AP with enhanced features		
Smart AP OE Series	"OE" stands for " Outdoor Enhanced ", meaning outdoor smart AP with enhanced features		
Smart AP OW Series	"OW" stands for " Outdoor Wireless ", meaning outdoor smart AP/CPE		

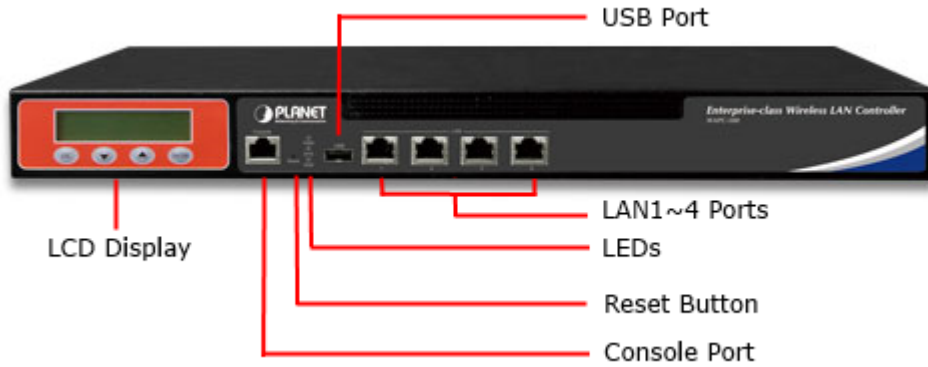
3.3 PHYSICAL SPECIFICATIONS

Physical Specifications	
Dimensions (W x D x H)	430 x 200 x 44mm
Weight	3kg

Mechanical Drawing



Physical Interface



Hardware Interface Definition

Interface	Description
Reset Button	< 5 sec: System reboot > 5 sec: Factory default
PWR LED	Indicates that the device is powered on
SYS LED	Indicates that the system is activated
HDD LED	Indicates that the HDD is activated
Console Port	Connect PC through the RS232 to RJ45 serial cable (115200, 8, N, 1) to enter the management interface
USB Port	Connect the USB HDD to enable USB backup/restore function
LAN Ports (1~4)	10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
Power Switch	Press the power switch to power on the device
LCD	Indicates the current status and provides basic operations Press the direction button below the LCD for basic operations

3.4 ENVIRONMENTAL SPECIFICATIONS

Environmental Specifications	
Temperature	Operating: 0 ~ 40 degrees C Storage: -20 ~ 60 degrees C
Humidity	Operating: 10 ~ 80% (non-condensing) Storage: 10 ~ 80% @ 40 degrees C (non-condensing)

3.5 BASIC PACKAGING

- The WLAN Controller x 1
- Quick Installation Guide x 1
- RS232 to RJ45 Console Cable x 1
- Two Rack-mounting Brackets with Attachment Screws x 1
- Power Cord x 1

3.6 PACKAGING INFORMATION

Packaging Information	
Dimensions (W x D x H)	554 x 308 x 95mm
Weight	3.76kg (gross weight)
Quantity	4pcs in one carton