

# Enterprise-class Wireless LAN Controller supporting more than 1000 APs



## Large-scale Wireless LAN Management Solution

PLANET WAPC-1000, a large-scale Wireless LAN Controller (WLAN Controller), features **PLANET Smart AP Control** managing up to **1024** PLANET smart access points across indoor and outdoor series to provide centralized 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 WLAN Controller supports a maximum of **16** models of Smart APs for both indoor and outdoor purposes including ceiling-mount, wall-mount, in-wall, industrial, single-band, dual-band and high-power access points which are able to adapt to different environments

## Speeding Up Management and Monitoring

With the WLAN Controller, the system integrator is able to deploy over 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 reduces system operation effort, thus simplifying the batch configuration without having to log on to each device.

## Controlling Wireless Network within Minutes

The WLAN Controller, 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.

## Industrial-grade Physical Hardware

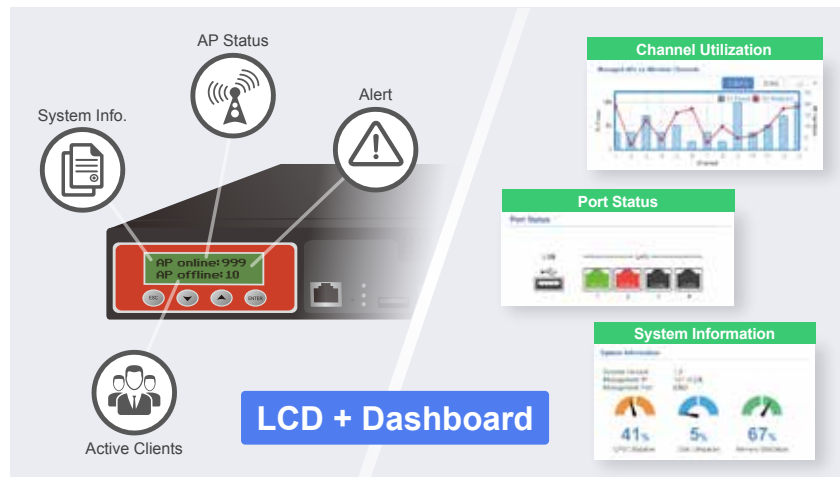
- 4 10/100/1000BASE-T Gigabit Ethernet RJ45 ports
- Intel® Celeron® J1900 up to 2.42 GHz
- RJ45 type console interface for basic management
- 1 USB 2.0 port for configuration backup and restore
- Built-in LCM panel for easy status monitoring
- 1U rack mount design

## 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 1,024 access points

## Network Management Characteristics

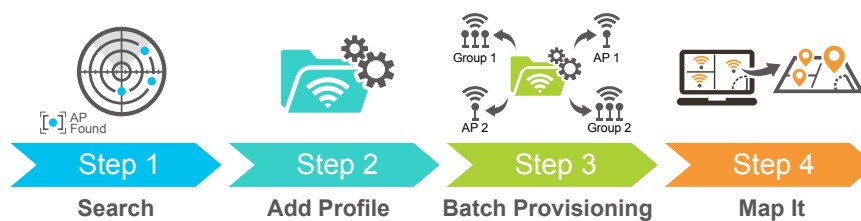
- Easy discovery by PLANET Smart Discovery
- Built-in DHCP Server
- Console/Telnet command line interface
- SSL secure access
- Web-based GUI management interface
- SNMP v1, v2c, and v3 management
- Supports PLANET DDNS/Easy DDNS



### Wireless Cluster Management

To configure multiple Smart APs of the same model, the WLAN Controller 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.

### Simplified Cluster Management with 4 Steps



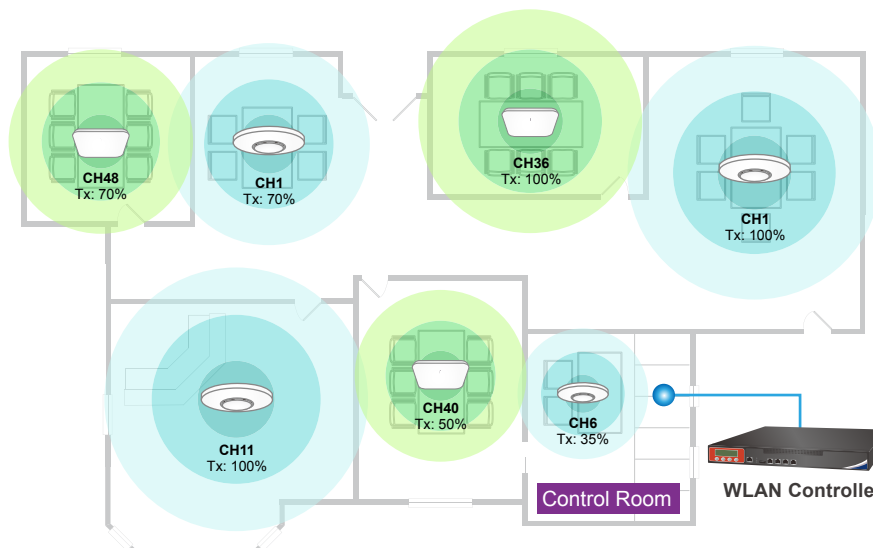
### Secure WLAN Access and User Control

The WLAN Controller can provide up to 1000 on-demand user accounts. The user accounts can be grouped according to a different access policy. The WLAN 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 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.

### Visualizing Wi-Fi Signals through Map



### Real-time Monitoring to Speed Up Network Analysis

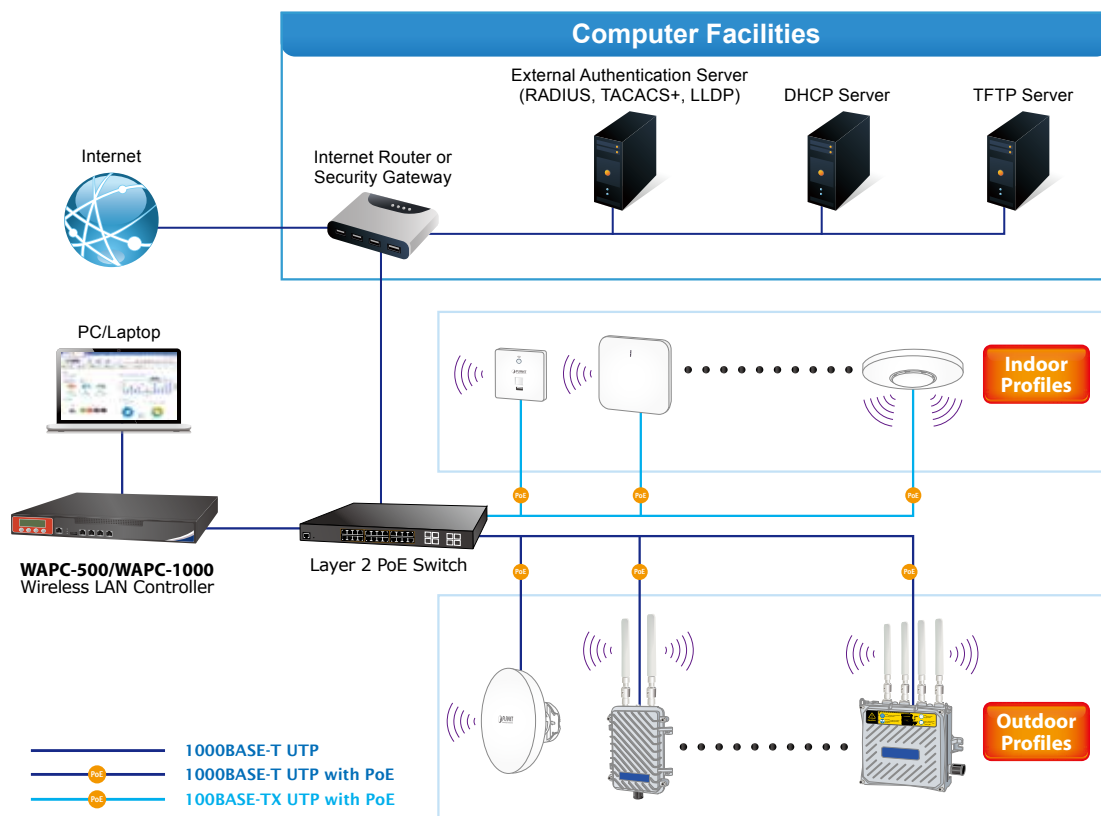
The WLAN Controller collects all the traffic statistics of the managed APs and displays both graphical and dynamic data information via graphs, charts and tables, reporting on a significant overview of your wireless network to make the daily monitoring more efficient.



### 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.

## Applications



\*\*We recommend you to match the WAPC-1000 with our related Smart AP series to get the best results.

## Specifications

Product	WAPC-1000	
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		
Number of managed APs	1024	
Number of RADIUS client devices	1024	
Number of RADIUS user accounts	20000	
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-200N
WDAP-W7200AC	WNAP-C3220E	WDAP-702AC	WAP-500N
WNAP-C3220A	WNAP-W2200UE	WBS-502AC	WBS-200N
WNAP-W2201A		WAP-552N	WBS-500N
		WAP-252N	WBS-202N
			WBS-502N

#### 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:

[1] Managed AP Series: The AP can be managed in the **"Managed AP"** mode.

[2] Smart AP E Series: **"E"** stands for **"Enhanced"**, meaning indoor smart AP with enhanced features.

[3] Smart AP OE Series: **"OE"** stands for **"Outdoor Enhanced"**, meaning outdoor smart AP with enhanced features.

[4] Smart AP OW Series: **"OW"** stands for **"Outdoor Wireless"**, meaning outdoor smart AP/CPE.

## Ordering Information

WAPC-1000	Enterprise-class Wireless LAN Controller supporting more than 1000 APs (4-port 10/100/1000T LAN, LCD)
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## Related Products

WAPC-500	Enterprise-class Wireless LAN Controller supporting up to 500 APs (4 10/100/1000T LAN, LCD)
WAPC-1232HP	Wireless AP Controller with 8-Port 802.3at PoE+
WAPC-2864HP	Wireless AP Controller with 24-Port 802.3at PoE + 4-Port 10G SFP+
Smart AP Control	PLANET Smart Wireless AP Controller Software
CS-950	UTM Content Security Gateway
WDAP-C7200E	1200Mbps 802.11ac Dual Band Ceiling-mount Wireless Access Point
WNAP-C3220E	2.4GHz 300Mbps 802.11n Ceiling-mount Wireless Access Point
WNAP-W2200UE	2.4GHz 300Mbps 802.11n In-Wall Wireless Access Point w/USB Charger
WDAP-W7200AC	1200Mbps 802.11ac Dual Band Wall-mount Wireless Access Point
WDAP-C7200AC	1200Mbps 802.11ac Dual Band Ceiling-mount Wireless Access Point
WNAP-C3220A	2.4GHz 300Mbps 802.11n Ceiling-mount Wireless Access Point
WNAP-W2201A	2.4GHz 300Mbps 802.11n In-Wall Wireless Access Point
WDAP-802AC	1200Mbps Dual Band 802.11ac Outdoor Wireless AP
WDAP-702AC	1200Mbps Dual Band 802.11ac Outdoor Wireless AP
WAP-252N	2.4GHz 802.11n 300Mbps Outdoor Wireless AP
WBS-200N	2.4GHz 300Mbps 802.11n Outdoor Wireless CPE
WBS-202N	2.4GHz 300Mbps 802.11n Outdoor Wireless CPE
WAP-500N	5GHz 300Mbps 802.11n Outdoor Wireless AP
WAP-552N	5GHz 802.11a/n 300Mbps Outdoor Wireless AP
WBS-500N	5GHz 300Mbps 802.11n Outdoor Wireless CPE
WBS-502N	5GHz 300Mbps 802.11n Outdoor Wireless CPE
WBS-502AC	5GHz 900Mbps 802.11ac Outdoor Wireless CPE

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