



### **Outdoor series**

Models: WCAP-Outdoor / WCAP-AC-Outdoor / WCAP-AC-OS

The WisCloud Access Point is the innovative series of products with remarkable performance in their features. All configuration and management is centrally and effectively operated by the same set of WisCloud Controller. It would be much easier to monitor the massive APs and more efficient to maintain the enterprise networks.

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#### Integrated Fit AP + AC Architecture

WisCloud Controller is refined designed to suit all Wisnetworks enterprise class AP equipments. A single controller can centrally supervise and manage the WiFi networks and multiple, distributed APs could be taken care and work in a more effective way.

#### Easy-to-use Interface

No special training is required to operate the controller system. The main parameters of one/multi-WLAN networks is available on the dashboard. Simple design would also help to easily realize the real-time status monitoring and customized configurations.



Using the intelligent centrally management between Ac and AP can quickly synchronize wireless configuration into each AP to complete a unified construction of the wireless network.

#### Powerful and Various APs Optional

The wireless speed of WisCloud AP varies from 300Mbps to 1167Mbps due to different requirements. The diverse tx power, antenna gain and installation method of AP features can adapt to different environments.

#### Remarkable Performance

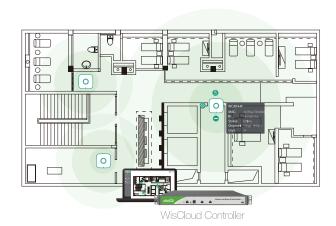
WisCloud AP possess enterprise class features and outstanding characters . Comparing to the same performance products in the market, WisCloud AP has significantly competitive price.

#### On-site & Cloud Management

The controller hardware can be installed either in networking room/rack or in the cloud bundled with software for local or remote management.

#### **Unlimited AP Numbers**

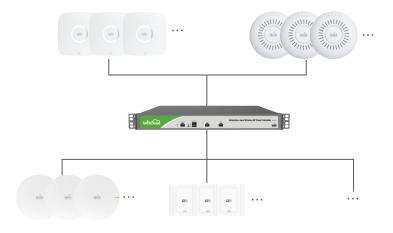
Unlimited AP numbers controlled by WisCloud controller would provide best experience for customers to plan and expand the WLAN networks.



Integrated Fit AP + AC Architecture



Easy-to-use Interface



One Wiscloud Controller Supports for Unlimited AP Numbers



#### **Enterprise Level Radio Chipset**

The high speed 720MHz Atheros CPU and 128MB DDR makes WisCloud access points much powerful to provide a stable connectivity and multifunctional wireless networks.

#### Supports Fat AP & Fit AP Mode

Fit AP has "zero-config" and all wireless network solution is completed by integrated fit ap and controller. While fat AP is quite perfect for users who owns a few APs, working with standalone. Fit AP is more suitable for enterprise / ISP level wireless network and massive deployment. WisCloud AP supports both alternatives.

#### **Easy Installation**

With our mounting kits, customers can easily mount it in different indoor conditions. While the AP is mounted on the ceiling or on the wall, you can avoid most interference and extend your Wi-Fi coverage.

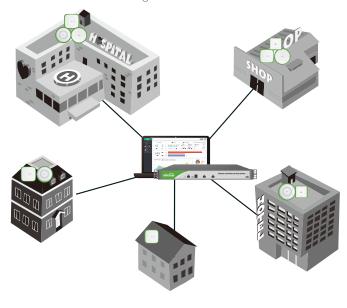
#### Support for Standard/Passive PoE

WisCloud Access Point is able to be supplied power by a power injector using 24VDC or 802.3af(48 VDC) PoE technology and make it more flexible to deploy the device in indoor ceiling environment.



#### All-in-one Design

Integrating outstanding functional antenna, WisCloud Access Point is easy to provide long range outdoor coverage for all smart phone and laptops. The Lightning/ESD protection, high durable temperature range and IP6x aluminum housing make it far more robust working in harsh outdoor environment.







	WCAP-Outdoor	WCAP-AC-Outdoor	WCAP-AC-OS
Frequency	2.4GHz	2.4GHz & 5GHz	2.4GHz & 5GHz
2.4GHz speed	300Mbps	300Mbps	300Mbps
2.4GHz MIMO	2*2	2*2	2*2
5GHz speed	-	867Mbps	867Mbps
5GHz MIMO	-	2*2	2*2
PoE	24VDC	802.3af(48VDC)	802.3af(48VDC)
Pole Mount	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Wall Mount	$\sqrt{}$	-	$\sqrt{}$
Tx power	27dBm	30dBm	30dBm
Distance	200m	250m	400m
Antenna Gain	5dBi	6dBi	13dBi
Enclosure	Weatherproof ASA	UV Outdoor Plastic	Die-cast Aluminum
ESD Protection	16kV	16kV	16kV
Lightning Protection	2kV	2kV	8kV
LAN Ports	1*10/100 Base-T Ethernet (RJ45 with Passive PoE)	1*10/100/1000 Base-T Ethernet (Gigabit LAN with Active PoE)	1*10/100/1000 Base-T Ethernet (Gigabit LAN with Active PoE)



WisCloud Controller is a carrier grade Wireless Network Management System developed by Wisnetworks. It supports the full range of Wiscloud APs centrally management and monitoring tasks for network administrator. It is integrated powerful features to control multiple and distributed APs in a high effective approach.

### **Features**

#### Real-time Status

Real-time statistics provide for network online APs / users signal and interference monitoring. For network history traffic record can be traced from 24hours to 30days.

#### L2 / L3 Auto-discovery

AP would be auto-detected by controller in the same WLAN network. In the condition of Layer 3 or access controller deployed in the could, using provided utility could make all AP devices being discovered by AC in few minutes.

#### Wireless Map

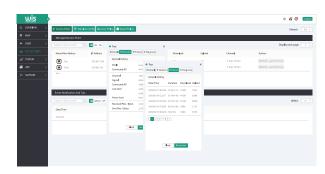
Through wireless map function, administrator is intuitive and convenient to monitor each AP health status in the network along with the number of users and network coverage quality. For the failure of AP can be quickly positioned so as to speed up the troubleshooting.

#### **Channel Optimization**

Channel utilization makes it applicable to equip user with RF optimization possessing auto-timing function as well as manual optimization to keep the Wireless network stay in a reasonably smooth state.

#### Load Balancing

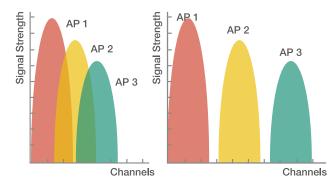
Wiscloud system is equipped with intelligent user load balancing, thus making the product either applicable to the sparsely populated rural condition or hi-density population city or large conference and exhibition and ensuring each AP to work in maximum efficiency to build a stable and permanent wireless network.



Real-time Statistics



Expedite Troubleshooting



Before Optimization

After Optimization



Wi-Fi System with Load Balancing

### WisCloud Controller

Physical Characteristics		
Processor	Dual-Core 1.8GHz CPU	
Memory	2GB DDR RAM	
Hardisk	8G SSD	
Ethernet	1*10/100/1000Mbps Data Port, 1*10/100/1000Mbps Management Port	
LED	Power& SSD Indicator	
Other Interface	2*USB2.0,1 Console RJ-45 port	
Power	Input: 110 - 240V AC,Output:12VDC/5A	
Weight	2.2 kg	
Temperature	Working Temperature: 10°C ~60°C, Storage Temperature: -20°C ~70°C	
Relative Humidity	5%-95%,no-condensing	
Installation	Desk-top & Rack-mount	
Dimension	430mm*250mm*46mm (19 inches, 1U)	
	Management	
Configuration	Web GUI, CLI	
AP Provisioning	L2 or L3 auto-discovery, Auto online software upgrade	
Traffic History	Supported	
	Capacity	
Managed APs	Unlimited	
Concurrent Users	Unlimited	
	Network Architecture	
IP	IPv4 / IPv6	
VLANs	802.1Q (8 BSSID per radio)	
Redundancy	1+1 with auto-synchronization	
	Wireless	
Wireless Security	WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES)	
Access Control	L2 (MAC address-based), L2 client isolation	
Wireless Intrusion Detection (WIDS)	Rogue AP detection	
802.11e/WMM	Supported	
Rate Limiting	Supported	
Wlan Group	Supported	
RF Management	Automatic channel and power optimization	
Client Load Balancing	Automatic	
Guest Access	Supported	
Captive Portal	Supported	
Mesh(Wireless Uplink)	Supported	

### **WisCloud Outdoor Access Point**

	Physical C	haracteristics
Processor		Atheros SoC 600MHz
Flash / Memory		64MB DDR,16MB Flash
LAN Port		1*10/100M Base-T
Button		Reset
Power		24VDC/0.75A Passive PoE
Max Power Consumption		10W
Working Temperature		-40°C~70°C
Working Humidity		10%~95% non-condensing
Dimension		164*92*32mm
Mounting		Pole Mount/Wall Mount
Certification		CE/RoHS
	Wireless C	Characteristics
Wi-Fi Standard		802.11n/g/b
Frequency		2.4GHz
Speed		300Mbps
Max Tx Power		27dBm
Antenna		5dBi Dual-pola Omni
Multi-SSID		up to 8 SSID Per Radio
Wireless Security		WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES)
Concurrent Clients		100+
Coverage Range		200m
	Advanced	Characteristics
Mode		Fat AP/Fit AP
VLAN		802.1q
Guest Policy		Web Portal/Password
MAC Filter		Blacklist
User QoS		Speed Limit by User Group
Traffic History		Duration/Download/Upload
Load Balance		Online User / Bandwidth
Wireless Uplink		Supported

# WisCloud 802.11ac Dual-Band Outdoor Access Point with Omni Antenna

	Physical C	Characteristics
Processor		Atheros SoC 720MHz
Flash / Memory		128MB DDR, 16MB Flash
LAN Port		1*10/100/1000M Gigabit
Button		Reset
Power		48VDC/0.32A 802.3at
Max Power Consumption		15W
Working Temperature		-40°C~70°C
Working Humidity		10%~95% non-condensing
Dimension		178×178×238mm
Mounting		Pole Mount
Certification		CE/RoHS
	Wireless C	Characteristics
Wi-Fi Standard		802.11ac/n/a/g/b
Frequency		2.4GHz&5GHz
Speed		1167Mbps
Max Tx Power		30dBm
Antenna		6dBi Dual-band Omni
Multi-SSID		up to 8 SSID Per Radio
Wireless Security		WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES)
Concurrent Clients		150+
Coverage Range		250m
	Advanced	Characteristics
Mode		Fat AP/Fit AP
VLAN		802.1q
Guest Policy		Web Portal/Password
MAC Filter		Blacklist
User QoS		Speed Limit by User Group
Traffic History		Duration/Download/Upload
Load Balance		Online User / Bandwidth
Wireless Uplink		Supported

# WisCloud 802.11ac Dual-Band Outdoor Access Point with Sector Antenna

	Physical C	Characteristics
Processor		Atheros SoC 720MHz
Flash / Memory		128MB DDR, 16MB Flash
LAN Port		1*10/100/1000M Gigabit
Button		Reset
Power		48VDC/0.32A 802.3af
Max Power Consumption		15W
Working Temperature		-40°C~70°C
Working Humidity		10%~95% non-condensing
Dimension		450*650*87.5mm
Mounting		Pole/Wall Mount
Certification		CE/RoHS
	Wireless C	Characteristics
Wi-Fi Standard		802.11ac/n/a/g/b
Frequency		2.4GHz&5GHz
Speed		1167Mbps
Max Tx Power		30dBm
Antenna		13dBi Dual-Pola 90° Sector
Multi-SSID		up to 8 SSID Per Radio
Wireless Security		WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES)
Concurrent Clients		150+
Coverage Range		400m
	Advanced	Characteristics
Mode		Fat AP/Fit AP
VLAN		802.1q
Guest Policy		Web Portal/Password
MAC Filter		Blacklist
User QoS		Speed Limit by User Group
Traffic History		Duration/Download/Upload
Load Balance		Online User / Bandwidth
Wireless Uplink		Supported