TERRABIT NETWORKS PD1-C61-SERIES WAC CONTROLLER

PD1-C61-32/64   **PD1-C61-256/512/1024**

PD1-C61-SERIES

Product Overview

PD1-C61-Series are wireless AC controllers with high performance and high reliability, which are invented by TERRABIT on the basis of the multi-core general hardware platform, and characteristic of versatile functions, various services and stability. PD1-C61-Series supports CAPWAP standard protocol, strong WLAN access control capability, automatic channel management, wireless radio frequency adjustment, user load balance, and user roaming and switching.

Besides, PD1-C61-Series also supports the authentication and charging interface, which can connects with the industry mainstream platform such as Radius and Portal.

Product Characteristics

Centralized Wireless Network Management

PD1-C61-Series can be deployed independently or deployed together with PD1-C81-Series NMS platform and PD1-C82-Series Cloud Platform, which provide carrier-level network administration. What's more, PD1-C61-Series can be used to manage APs and users, facilitating the deployment and maintenance of carriers' networks.

Well Seamless Roaming Characteristics

PD1-C61-Series supports multiple networking modes including centralized forwarding and local forwarding. PD1-C61-Series also supports layer-2 and layer-3 roaming function. In the networking mode of centralized forwarding, the roaming domain is not affected by the network IP plan, so that the user only needs to concentrate on the wireless coverage but not the topology. Such characteristics not only facilitates the user, but also reduces the threshold of network plan and construction.

Centralized and Secure Access of Wireless Networks

PD1-C61-Series supports following functions which ensure centralized and safe network access: WEP/WPA/WAP2/802.1x, wireless IPS/IDS, Layer-2 user isolation, centralized ACL control, 802.1x/MAC/Portal/PPPoE/WAPI authentication, illegal AP detection and processing, wireless attack prevention, white list and blacklist, which greatly reduce shocks over wireless network from illegal users.

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All-round QoS mechanism

PD1-C61-Series supports packet classification, flow control, DSCP flow schedule, end-to-end QoS mapping, 802.11e, load balance and reception control.

Diversified connecting and authentication interface

PD1-C61-Series supports Portal2.0 interface and WiFidog interface, which can realize functions including flexible networking, authentication and pushing service. These interfaces lay a firm foundation for constructing wireless cities and commercial WiFi.

Hardware Specifications

Model		PD1-C61-32	PD1-C61-64	PD1-C61-128	PD1-C61-256	PD1-C61-512	PD1-C61-1024
Interfaces	Standard interfaces	1*CON; 1*USB2.0; 2*GE Combo; 8*GE Base-T ports	1*CON; 1*USB2.0; 2*GE Combo; 8*GE Base-T ports	1*CON; 1*USB2.0; 8*GE Combo	1*CON; 1*USB2.0; 8*GE Combo	1*CON; 1*USB2.0; 8*GE Combo	1*CON; 1*USB2.0; 8*GE Combo
	Operation key	Reset	Reset	Power on-off	Power on-off	Power on-off	Power on-off
Basic performance	AP access	Built-in 32*Lic	Built-in 64*Lic	Built-in 128*Lic	Built-in 256*Lic	Built-in 512*Lic	Built-in 1K*Lic
	User access	Recommended ≤1K	Recommended ≤2K	Recommended ≤4K	Recommended ≤8K	Recommended ≤16K	Recommended ≤30K
	Data throughput	≥512Mbps	≥512Mbps	≥2Gbps	≥2Gbps	≥2Gbps	≥2Gbps
Hardware parameters	Dimensions (W×D×H)	300×200×44mm			443×208×66mm		
	Weight	≤1.8Kg			≤4.5Kg		
	Power supply	220V AC			220V AC, dual AC (optional)		
	Average power consumption	≤36W			≤90W		
	Working temperature	0ºC ~ 50ºC			0ºC ~ 50ºC		
	Working humidity	5% ~ 95% (non-condensing)			5% ~ 95% (non-condensing)		

Software Specifications

Item	PD1-C61-Series
IP functions	Direct IP connection, static route. RIP v1/v2. NAT/NPAT. DHCP Server/Client/Relay. NTP Server. FTP Server
AP/AC networking	Connecting AP/AC via L3 security tunnel. Centralized, distributive and hybrid exchanges of L2 services
Roaming	Inner-AC or inter-AC roaming
Internetworking	L2 or L3 forwarding between AC and external network. STP/802.1Q L2 forwarding. RIP/OSPF L3 forwarding
Forwarding mode	Centralized forwarding. Forwarding all services after being centralized on AC. Distributive forwarding. Forwarding some AP or SSID services on a thin AP locally
QoS control	User's flow control: Support the domain-based flow control (taking VLAN or SSID as the configuration domain). Support user-level flow control or flow control based on the contract information of the Radius server.
	Service priority: Support 802.11e, which provides different services according to session's priority. Support to map users' QoS levels according to SSID. Support 802.1p and L2 packet's priority mapping
	Load balance and control: Support AP/AC interconnection based on priority and load. Support load balance between adjacent APs on the basis of user quantity and flow.
RF RF management	Automatic channel: Support static channel configuration. Support automatic channel configuration when AP is powered. Support automatic channel configuration when AP is running. Support to set an automatic channel choice list.
	Automatic transmitting power: Support to set the static transmitting power. Support the automatic transmitting power for coverage remedy. Support the STA-based automatic transmitting power to improve the throughput.
	Automatic rate: Support the STA-based automatic rate choice. Support to limit the maximum transmitting rate.

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Item	PD1-C61-Series
AAA	RADIUS Client. Multi-domain configuration of the authentication server. Connection of active and standby authentication/charging servers. Isolation of the authentication server and the charging server
Authentication and charging	PPPoE authentication. Portal authentication. AAA charging
Network security	Open system. WEP. WPA/WPA2 PSK. 802.1x. 802.11i. WAPI. DDOS prevention. ACL. Wireless IPS/IDS. Illegal AP detection. Illegal terminal checkup. Isolation of users' services. White list. Static/dynamic blacklist
Network management	Local interconnection based on WEB/SSH. Remote control via SNMP access. Uniform network management via OMC. SNMP v2/v3. MIB-II (RFC1213), which is based on TCP/IP Internet management base. RFC1537, which is a developing protocol of MIB-II. RFC1643. ISO/IEC 8802-11:1999, IEEE802.11b. ISO/IEC 8802-11:1999/Amd 1:2000. MIB that is defined by IEEE 802.11g and IEEE 802.11i
AC redundancy	"N+1" backup based on load sharing. Load sharing on each AC in normal cases. Switching load from troubled AC to another normal AC (The switchover policy can be set). Port redundancy: multi-port binding
MAC-layer protocols	802.1d, 802.1s, 802.1p, 802.1q, 802.1w, 802.3, 802.3ab, 802.3u, 802.3x, 802.3z, ARP, Reverse ARP, multi-LAN ARP/Proxy ARP
802.11 protocols	802.11n, 802.11b, 802.11a, 802.11g, 802.11d, 802.11h, 802.11i, 802.11e
IP-layer protocols	RFC791 IP, RFC792 ICMP, RFC793 TCP, RFC768 UDP, RFC854 Telnet, RFC1542 BOOTP, RFC1191 Path MTU Discovery, RFC1519 Classless Inter-Domain Routing (CIDR), RFC1812 IP router requirements, RFC2236 IGMP&IGMPv2

Ordering Information

Model	Description
PD1-C61-32	PD1-C61-32 enterprise-level intelligent WAC (1 CON, 1 USB, 2 gigabit SFP/Base-T combo ports, 8 gigabit LAN ports, up to 32 APs, 220V AC power supply)
PD1-C61-64	PD1-C61-64 enterprise-level intelligent WAC (1 CON, 1 USB, 2 gigabit SFP/Base-T combo ports, 8 gigabit LAN ports, up to 64 APs, 220V AC power supply)
PD1-C61-128	PD1-C61-128 enterprise-level intelligent WAC (1 CON, 1 USB, 8 gigabit SFP/Base-T combo ports, up to 128 APs, 220V AC power supply)
PD1-C61-256	PD1-C61-256 enterprise-level intelligent WAC (1 CON, 1 USB, 8 gigabit SFP/Base-T ports, up to 256 APs, 220V AC power supply)
PD1-C61-256-2AC	PD1-C61-256-2AC enterprise-level intelligent WAC (1 CON, 1 USB, 8 gigabit SFP/Base-T combo ports, up to 256 APs, dual-way 220V AC power supply)
PD1-C61-512	PD1-C61-512 enterprise-level intelligent WAC (1 CON, 1 USB, 8 gigabit SFP/Base-T combo ports, up to 512 APs, 220V AC power supply)
PD1-C61-512-2AC	PD1-C61-512-2AC enterprise-level intelligent WAC (1 CON, 1 USB, 8 gigabit SFP/Base-T combo ports, up to 512 APs, dual-way 220V AC power supply)
PD1-C61-1024	PD1-C61-1024 enterprise-level intelligent WAC (1 CON, 1 USB, 8 gigabit SFP/Base-T combo ports, up to 1024 APs, 220V AC power supply)
PD1-C61-1024-2AC	PD1-C61-1024-2AC enterprise-level intelligent WAC (1 CON, 1 USB, 8 gigabit SFP/Base-T combo ports, up to 1024 APs, dual-way 220V AC power supply)