

WNC6600 Series Access Controller Datasheet

Overview

The new WNC6600 series developed by Maipu is a new-generation wireless access controller that centrally manages FIT APs and wireless clients. By adopting a unified wired and wireless design approach, WNC6600 boasts high performance, seamless integration, extensive service capabilities, outstanding reliability, and robust security. This design caters to the comprehensive integration needs of wired and wireless networks for diverse industry clients. The new WNC6600 advanced software capabilities provide load balancing, automatic fault recovery, intelligent RF management, and L2&L3 roaming and fast roaming for users. Network administrators can utilize the web interface for configuration. The configuration process takes just three minutes to complete. As a unified wireless smart management platform, WNC6600 access controller collaborates with Maipu's data communication products to deliver comprehensive network solutions tailored to various enterprise users. This makes it suitable for a wide range of campus network scenarios.

Model Name	Specification
 WNC6600-4000-AC	<ul style="list-style-type: none"> ● 24*10/100/1000M Base-T Ports ● 8*1/10G SFP+ Ports ● 8*10/25G SFP28 Ports ● Dual Modular Power Slots ● One RJ45 Console Port/One DC0 Port/One USB3.0 Port
 WNC6600-2000-AC	<ul style="list-style-type: none"> ● 24*10/100/1000M Base-T Ports ● 8*1/10G SFP+ Ports ● 8*10/25G SFP28 Ports ● Dual Modular Power Slots ● One RJ45 Console Port/One DC0 Port/One USB3.0 Port
 WNC6600-1000-AC	<ul style="list-style-type: none"> ● 12*10/100/1000M Base-T Ports ● 8*10/25G SFP28 Ports ● Dual Modular Power Slots ● One RJ45 Console Port/One DC0 Port/One USB3.0 Port
 WNC6600-500-AC	<ul style="list-style-type: none"> ● 12*10/100/1000M Base-T Ports ● 8*10/25G SFP28 Ports ● Dual Modular Power Slots ● One RJ45 Console Port/One DC0 Port/One USB3.0 Port
 WNC6600-200-AC	<ul style="list-style-type: none"> ● 12*10/100/1000M Base-T Ports ● 8*10/25G SFP28 Ports ● Dual Modular Power Slots ● One RJ45 Console Port/One DC0 Port/One USB3.0 Port

Key Features

- **Zero-Configuration Plug-and-Play**

In Fit AP mode, zero-configuration Fit APs automatically discover and connect to the wireless controller via Layer 2 or Layer 3 network. WNC6600 wireless controller handles configuration, management, and maintenance of FIT APs. WNC6600 enables efficient management and monitoring of FIT APs across L2&L3 network.

- **High Availability**

Ensure uninterrupted network services with the WNC6600's HA support. It supports the 1+1 or 1:1 Backup configurations which can be guaranteed redundancy and uninterrupted connectivity, safeguarding your network's reliability.

- **RF Optimization**

Optimize your wireless network's performance by intelligently managing bandwidth, prioritizing 5G frequencies, and proactively disconnecting low-signal clients. The multicast to unicast conversion efficiently manages traffic, ensuring an excellent user experience.

- **Seamless Roaming**

Enhance user mobility within your network using robust Layer 2&3 roaming, and 802.11k/v roaming support. Users can move effortlessly, maintaining their connection without disruption as they traverse your wireless landscape.

- **Unified Wired & Wireless Features**

WNC6600 wireless controller possesses robust Layer 2 and Layer 3 wired device functionality. Equipped with high capacity switching interfaces, it accommodates the access management of numerous wireless APs and terminals, while also supporting substantial data forwarding in wired networks.

- **BYOD Functionality**

WNC6600 wireless controller independently achieves BYOD functionality without the need for collaboration with other devices. It can identify different terminal types based on DHCP-Feature. The WNC6600 enables the implementation of distinct security policies tailored to each terminal type.

- **Smooth Network Upgrades**

WNC6600 supports various complex network environments and enables seamless, secure wireless network deployment without disrupting existing wired networks. It also serves as the aggregation device for smaller wired networks, ensuring smooth network upgrades and maximizing return on investment.

- **Comprehensive Security Policy**

WNC6600 provides various authentication modes, access control, and inbuilt WIDS to detect and suppress potential threats. It also offers strict user access control policies, including PSK authentication, 802.1x authentication, MAC authentication, portal authentication working together with Maipu AAS radius server.

- **Large scale AP management performance**

WNC6600 can manage up to 6656 units of AP, it is suitable for large scale wireless scenarios such as university, government, healthcare, chain store group, etc.

- **Intelligent Management**

WNC6600's advanced smart management capabilities include automatic software upgrades, configuration delivery, and SNMP, SDN, Cloud management for monitored APs, significantly reducing deployment costs and network maintenance complexity.

Technical Specifications

Product Model	WNC6600-200-AC	WNC6600-500-AC	WNC6600-1000-AC	WNC6600-2000-AC	WNC6600-4000-AC
Version	V2	V2	V2	V3	V1
Hardware Specification					
CPU Specification	8-Core	8-Core	8-Core	8-Core	8-Core
Hardware Interfaces	12*10/100/1000 M Base-T, 8*10/25G SFP28 Ports	12*10/100/1000 M Base-T, 8*10/25G SFP28 Ports	12*10/100/1000M Base-T, 8*10/25G SFP28 Ports	24*10/100/1000 M Base-T, 8*1/10G SFP+, 8*10/25G SFP28 Ports	24*10/100/1000 M Base-T, 8*1/10G SFP+, 8*10/25G SFP28 Ports
Management Interfaces	1*RJ45 Console 1*RJ45 DC0 1* USB3.0	1*RJ45 Console 1*RJ45 DC0 1* USB3.0	1*RJ45 Console 1*RJ45 DC0 1* USB3.0	1*RJ45 Console 1*RJ45 DC0 1* USB3.0	1*RJ45 Console 1*RJ45 DC0 1* USB3.0
Switching Capacity	424Gbps	424Gbps	424Gbps	608Gbps	608Gbps
Wireless Throughput	20Gbps	20Gbps	20Gbps	40Gbps	40Gbps
Default Managed APs	64	64	128	128	128
Max. Managed APs	448	832	1664	2560	6656
Max. STA Users (Central/Local Forwarding)	4K/9K	8K/16K	15K/30K	20K/40K	40K/80K
MAC Address Entry	128K				
ARP Entry	60K				
VLAN Entry	4K				
Max. Static Routing Entry	10K				
Max. OSPF Routing Entry	70K				
Power Supply Slots	2				
Power Supply	AC:100~240V 50/60Hz				
Power Hot Swap	Yes				
Power Consumption	≤73W	≤73W	≤73W	≤95W	≤95W
Dimension (W*D*H)	442*420*44.3(mm)				
Weight (with 2*power supplies)	7.15kg	7.15kg	7.15kg	7.5kg	7.5kg
Lightning Protection	Common-mode, differential-mode 6KV				
Work Humidity	5~85% (No-condensing)				
Work Temperature	0~45°C				
Software Specification					
L2 Protocol	LACP Link Aggregation, Port Isolation, VLAN, STP/RSTP/MSTP, Error-Disable				
L3 Protocol	Static Route for IPv4/IPv6, RIP/RIPng, OSPFv2/v3, Routing Based Policy, DHCP Client/Server, DHCP Relay, CAPWAP IPv6				
Network Security	Port Security, ISG (IP Source Guard), DAI (Dynamic ARP Inspection), DHCP Snooping, DHCP Option82, ACL, AAA, Radius, TACACS, 802.1X				
802.11 Protocol	Support IEEE 802.11a/b/g/n/ac/ax				
Network Reliability	VRRP, Track, BFD				
Forwarding Mode	Distributed Forwarding (Local Forwarding), Centralized Forwarding				

Authentication	Open, WPA-PSK, WPA-802.1X, WPA2-PSK, WPA2-802.1X, WPA3-PSK, WPA3-802.1X, Portal Authentication (External Portal, Local Portal, MAC Authentication, No-perception Authentication.), Portal URL Redirection, Portal Server Escape
Wireless Security	WIDS, User Isolation, SSID Hidden, SAVI, Anti-Rogue, Service Status Control, Wireless Access Control, ARP Attack Suppression, DTLS
RF Management	RRM, Set Working Channel Manually, Set Transmit Power Manually, Power Auto Adjust, Channel Auto Adjust
Wireless Roaming	L2 Roaming & L3 Roaming, 802.11k/v Fast Roaming, PMK Caching
Wireless Control	WLAN ACL, BYOD, Timing AP Rebooting, Timing Radio Rebooting, Timing Open/Close SSID, STA Number Control, Load Balancing between RF/User/Traffic, 5G Priority, RSSI Threshold, Weak Signal Force Offline, STA Blacklist/Whitelist, Country-code Support, AP LED Control, AP LLDP Control, STA IPv6 Service, ARP Proxy Answer, ARP Broadcast to Unicast, DHCP Broadcast to Unicast
Wireless QoS	WMM (Wi-Fi Multimedia, Sub-set of 802.11e), WMF (Wireless Multicast Forwarding, Alias Multicast to Unicast), BSS Bandwidth Limitation, User Bandwidth Limitation
Wireless Reliability	1+1 Backup, 1:1 Backup, HAP (Hybrid Access Point, AP Escape), Uplink Integrity Detection, Uplink Track Check, Wireless-related Configuration Synchronization
Advanced Wireless Features	RF Detection, Packet Air Capture
SDN Integration	Integration with BD-Campus SDN Controller Platform
Network Management	SNMP v1/v2/v3, SNMP Trap, MIB, SYSLOG, Telemetry, Netconf, WEB (HTTP/HTTPS), CLI (Telnet, SSH), Cloud Management, Ping, Tracert, FTP/TFTP, Debug, Keepalive Gateway, SLA, SPAN, RSPAN, LLDP, NDSP, RMON, IPFIX, BSM, Resource Alert, NTP Server/Client, DNS, Configuration Backup & Restore, Factory Reset, Reboot

Order Information

Model	Description
WNC6600 Series Access Controller	
WNC6600-200-AC	WNC6600-200-AC access controller, support 64*APs by default, max 448 APs. 12*10/100/1000M RJ45 ports and 8*10/25G SFP28 ports. Dual power supply slots.
WNC6600-500-AC	WNC6600-500-AC access controller, support 64*APs by default, max 832 APs. 12*10/100/1000M RJ45 ports and 8*10/25G SFP28 ports. Dual power supply slots.
WNC6600-1000-AC	WNC6600-1000-AC access controller, support 128*APs by default, max 1664 APs. 12*10/100/1000M RJ45 ports and 8*10/25G SFP28 ports. Dual power supply slots.
WNC6600-2000-AC	WNC6600-2000-AC access controller, support 128*APs by default, max 2560 APs. 24*10/100/1000M RJ45 ports, 8*1/10G SFP+ and 8*10/25G SFP28 ports. Dual power supply slots.
WNC6600-4000-AC	WNC6600-4000-AC access controller, support 128*APs by default, max 6656 APs. 24*10/100/1000M RJ45 ports, 8*1/10G SFP+ and 8*10/25G SFP28 ports. Dual power supply slots.
Power Module	
AD75M-HS0N	75W power module, AC input 100~240V, Hot swap supported. (For WNC6600-200/500/1000 Series)
AD150M-HS0N	150W power module, AC input 100~240V, Hot swap supported. (For WNC6600-2000/4000 Series)
License	
WNC6000-L-32	WNC6600-L-32 for 32 Units APs licenses
WNC6000-L-64	WNC6600-L-64 for 64 Units APs licenses
WNC6000-L-128	WNC6600-L-128 for 128 Units APs licenses

All rights reserved. Printed in the People's Republic of China.

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise without the prior written consent of Maipu Communication Technology Co., Ltd.

Maipu makes no representations or warranties with respect to this document contents and specifically disclaims any implied warranties of merchantability or fitness for any specific purpose. Further, Maipu reserves the right to revise this document and to make changes from time to time in its content without being obligated to notify any person of such revisions or changes.

Maipu values and appreciates comments you may have concerning our products or this document. Please address comments to:

Maipu Communication Technology Co., Ltd

No.16, Jiuxing avenue

Hi-Tech Zone

Chengdu, Sichuan Province

P. R. China

610041

Tel: (86) 28-65544850,

Fax: (86) 28-65544948,

URL: [http:// www.maipu.com](http://www.maipu.com)

Email: overseas@maipu.com

All other products or services mentioned herein may be registered trademarks, trademarks, or service marks of their respective manufacturers, companies, or organizations.