

# Enterprise-level Multi-Service Smart Wireless Controller

(TN8WC)



## PRODUCT INTRODUCTION

TN8WC is a high-performance network management device designed specifically for large networks. It not only supports traditional wireless controller functions but also offers powerful routing capabilities, allowing it to be used as an edge router, providing a wired and wireless integrated solution. The product is equipped with 6 2.5Gbps ports, supporting WAN/LAN interchange, and can be configured for multiple WANs, with features such as WAN port load balancing, multi-carrier access, line backup, network overlay, and policy routing.

TN8WC supports both routing and bypass modes, capable of managing and configuring up to 512 APs. Combined with a cloud platform, it enables remote management and maintenance, allowing network administrators to monitor, manage, and configure device homepages anytime and anywhere. The product features high performance, ease of installation, and ease of maintenance, significantly reducing human and material costs in network layout.

Through a unified management platform, batch configuration delivery, firmware upgrades, and fault troubleshooting can be achieved, significantly improving operational efficiency. It is suitable for complex network scenarios such as smart parks, hospitals, schools, hotels, and large enterprises, meeting the stringent demands of high-density access and stable operation.

## MAIN FEATURES

- 6 x 2.5Gbps ports for a faster network experience
- Integrates gateway, AC controller and Portal authentication server in one device
- Supports dual-stack IPv4/IPv6 protocols
- Dual WAN access for broadband backup redundancy and traffic load balancing
- Cloud platform and APP for remote centralized management

## HIGHLIGHT FEATURES

### **Simplified Network Architecture**

It serves as both a gateway and an AC (Access Controller) for easy network deployment ; APs support zero-configuration access management for plug-and-play functionality. Enabling simple deployment and maintenance with high cost-effectiveness.

### **Wireless Management for Faster, Smarter Networks**

APs connect seamlessly and are centrally monitored, with the AC's intelligent algorithms ensuring load balancing and smart roaming for optimal user experiences. The AC also supports network-wide RF optimization, staggering AP channels to avoid interference, significantly boosting wireless data forwarding efficiency and maximizing bandwidth utilization.

### **Built-in Firewall**

With built-in functions including terminal IP-MAC address binding, endpoint access blacklist/whitelist, and internal/external network attack protection, it effectively prevents ARP spoofing, suspicious terminal access, DoS attacks, and other various types of malicious behaviors.

### **Multiple VPN Options**

Supports PPTP/L2TP VPN for stable connectivity to corporate intranets, enabling seamless access to office OA systems and data servers for efficient collaboration without restrictions. It also allows remote connection to home NAS devices, letting you enjoy movies and series from airports or hotels adding fun to your travels.

## Portal Authentication for Precision Advertising Marketing

The device integrates built-in Portal authentication services, supporting multiple authentication methods. When users authenticate to access the network, enterprises can push product and corporate information through the authentication page for secondary marketing, significantly improving user conversion rates.

## Remote Operation and Maintenance Solution

Users can manage networks remotely via cloud platforms and apps, enabling direct monitoring of all device information within the network. The solution supports remote configuration and management of devices through the cloud platform, making remote maintenance more convenient and efficient.

## SPECIFICATIONS

Hardware Characteristics	
<b>Size</b>	440mm× 255mm× 45mm
<b>RAM</b>	16GB
<b>Flash</b>	32GB
<b>Installation</b>	1U Rack
<b>FAN</b>	Fan Cooling
<b>Interfaces</b>	6 10/100M/1000M/2.5G Ethernet ports 1 Console port, 2 USB3.0 ports, 1 VGA interface
<b>Physical Button</b>	Power switch
<b>LED</b>	PWR、Status、Port status light
<b>Power Supply</b>	100-240V~50 / 60Hz
<b>AP Management</b>	Max 512 APs
<b>Concurrent Clients</b>	Max 5,000 Clients

## Operating Environment

<b>Electrostatic Standard</b>	Air 8kV, Contact 6kV
<b>Port Surge</b>	±6kV
<b>Operating Temperature</b>	0°C~60°C
<b>Operating Humidity</b>	10%-90%RH (non-considering)
<b>Storage Temperature</b>	-10°C~70°C
<b>Storage Humidity</b>	5%~95%RH(non-considering)

## Software Functions

<b>Status Monitoring</b>	Equipment information(model, firmware version, SN 、 IP、 MAC、 Uptime、 CPU、 Memory)
<b>Network Settings</b>	IPv4 、 IPv6 PPPoE、 Static IP、 DHCP for WAN Automatic detection of WAN port access methods Dual WAN redundant links Port status monitoring Hardware acceleration for forwarding DHCP Server Static routing Network diagnostics Bypass mode
<b>Network-Wide Management</b>	Automatic identification of internal network devices and topology information
<b>Centralized AP Management</b>	AP Information Monitoring Country Code Switching for APs Unified Configuration Template Deployment

Software Functions	
<b>Centralized AP Management</b>	Restart APs
	Reset APs
	Remove APs
	Upgrade APs
	AP Radio mode switching
	Wireless load balancing
	Wireless roaming
	Forced disconnection of weak-signal clients
	Roaming handover threshold configuration
<b>Clients Management</b>	RF optimization
	Monitoring of connected terminals' IP, MAC, and online duration
	Speed limiting
<b>Authentication</b>	Non-authentication, local Portal, and cloud-based Portal
	Authentication user management
	Authentication blacklist
	Authentication whitelist (non-authentication)
<b>VPN</b>	L2TP、PPTP VPDN
<b>Application</b>	QoS DDNS
<b>System Management</b>	NTP
	System logs
	Kernel logs
	Configuration backup
	Reset
	Restart
<b>Equipment Upgrade</b>	Local firmware Upgrade Online firmware Upgrade