

ZK1050F

CAPWAP Protocol Intelligent Gateway and AC controller



ZK1050F is a medium and large-scale enterprise use gateway based on CAPWAP protocol. Built-in Intel CPU, configured with up to 4 Gigabit WAN ports, with WAN port load balancing, multi-operator access, line backup, network overlay, policy routing and other multi-WAN features. At the same time, this product also supports intelligent flow control, Internet behavior management, network firewall, VPN settings, VLAN management, remote access control management and other functions, allowing 500 end users to access and provide high-speed network, to maximize protection against network storms, to ensure the normal operation of the entire network, is widely applied to large and medium-sized enterprises, villages, hotels, cafes, shopping malls and other places.

ZK1050F is also a very professional and intelligent AC control platform, which can be used as the main route in the network, or as a bypass AC, centrally manage and configure up to 500 thin APs, and can be remotely managed and maintained later. High performance, easy installation, easy maintenance, etc., greatly saving material and labor costs in the network layout.

Finally, the ZK1050F can be used as an authentication gateway to access the cloud platform to achieve advertising and WeChat authentication, WeChat with Wi-Fi authentication, user authentication, SMS authentication, Google authentication and other authentication methods.

Even as a bypass AC controller, the ZK1050F can be connected to the cloud platform. Although in different cities and in different networks, administrators can monitor, manage and configure the main page of the ZK1050F at any time.

Main Features

A. Multi-WAN and multi-WAN port load balancing

ZK1050F supports PPPoE/DHCP/static IP/PPTP access, supports multiple operators' telecom, China Unicom, mobile line access, and can access up to 500 end users.

Support multi-WAN, support multi-WAN port load balancing, line backup, network overlay and other functions to provide users with a more stable and faster network.

In addition, the ZK1050F supports policy routing based on rules such as IP address, MAC address, network interface, and domain name.

B. Online behavior control and intelligent flow control

Sometimes the public network bandwidth is plentiful, but users complain that the network speed is too slow. The ZK1050F solves this kind of problem well through the online behavior specification:

ZK1050F comprehensively intercepts P2P software such as BT, PPlive, QQlive, eMule and so on to liberate network bandwidth by detecting network packets; it can also allow some people or certain departments to use P2P software in a specific time, but limit their traffic to protect The overall network is smooth; file filtering and URL filtering are also supported to avoid the large bandwidth occupied by HTTP and FTP download uploads.

It can also comprehensively regulate users' online behaviors, such as page browsing, uploading and downloading files, P2P behaviors, online games, IM chat, email sending and receiving, etc. It can be divided according to different users and different departments' differentiated network access rights, so as to reserve more bandwidth resources for business use.

C. VLAN management

The ZK1050F supports VLAN management, which can trunk the VLAN ID of the VLAN switch, and then allows the AC controller to manage the wireless AP under the VLAN switch.

D. Powerful firewall function

The ZK1050F supports multiple firewalls, such as port forwarding, IP filtering, URL filtering, MAC address filtering, and DMZ to defend against network storms and provide users with a stable and secure network.

E. Cloud platform access and authentication

The ZK1050F supports cloud platform access in gateway mode and AC mode. Even if you are in a different city and are in different networks, the administrator can easily cut into the ZK1050F web page through the cloud platform for monitoring, modification, and maintenance.

In addition, in the gateway mode, the ZK1050F supports multiple authentication methods, such as WeChat authentication, user authentication, and SMS authentication, which make the entire network layout more professional and bring more advertising effects.

F. Others

ZK1050F supports real-time network speed monitoring, VPN over the wall, static IP, DDNS, etc., and more functions to meet more needs.

G:AP management function

Zero configuration and grouping

Add a zero configuration group before accessing wireless AP, and the wireless AP will automatically get the corresponding configuration from the group. No additional configuration is required, which is simple and convenient

Alternatively, you can add different groups throughout the network and send the configuration data to the corresponding wireless AP in the group

Built-in intelligent channel analyzer

The ZK1050F has a built-in intelligent channel analyzer to help the wireless AP detect and analyze the channels of the surrounding wireless network source, so that the wireless AP selects the channel with the least interference and achieves the most stable wireless coverage.

Automatically assign an IP address to the wireless AP

The ZK1050F has a built-in DHCP server that automatically assigns IP addresses to wireless APs, which avoids the possibility of IP address conflicts and saves manpower configuration costs.

Product characteristics

Model	ZK1050F
Standards and protocols	IEEE 802.3, 802.3u, 802.3ab TCP/IP, DHCP, ICMP, NAT, PPPoE, SNTP, HTTP, DDNS, IPsec, PPTP, L2TP CAPWAP Protocols
CPU	Celeron 525 chipset, Dual-core 1.8GHz
RAM	4G DDR3 1333\1600MHz (Max 8GB)
SSD	32G SSD
Heat dissipation	Ultra-quiet ball-bearing fan
Interface	1 * 10/100/1000 WAN, Up to 4 WAN ports
	5 * 10/100/1000 LAN, Minimum 2 LAN ports

Product characteristics

Interface	1 * Console
	2 * USB2.0
Power Supply	AC100`240V, Max 50W
Size	440mm*285mm*44mm
Weight	Volume 5KG, Actual 3KG
Operating Temperature	-20°C~55°C
Storage Temperature	-40°C ~ 70°C
Humidity	5% ~ 97%RH (No condensation)

Software functions

AP management	Maximum management 500PCS wireless AP
	Centralized and remote management, configure wireless AP
	View user status
WAN port connection	DHCP, Static IP, PPPoE, PPTP
DHCP	DHCP Server/client
MAC address cloning	Modify WAN/LAN/DMZ MAC address
VLAN management	Manage wireless AP by dividing VLAN IDs
Load balancing	Multi-WAN, multi-operator access
	Intelligent load balancing

Software functions	
Load balancing	Line backup
	Speed superposition
	Policy routing: based on source IP address, destination IP address, source mac address, network interface, domain name, destination port, external network interface, identity binding, etc.
	Protocol binding
	online test
Routing function	Static route
Behavior management	Completely block P2P software
	P2P flow control and bandwidth allocation
	File transfer and URL filtering
	Full control of network behavior
Bandwidth control	IP-based bandwidth control
	Guarantee/limit bandwidth
	Time strategy
	IP-based session restrictions
Security center	MAC address filtering URL/keyword filtering Web content filtering IP address filtering Port forwarding DMZ
Defense center	TCP/UDP/ICMP flood defense; Block TCP scanning Block PING WAN port

Software functions

ARP detection	Send a GARP packet
	ARP scanning of WAN/LAN port
	IP-MAC binding
Authentication	Local authentication Remote authentication (WeChat authentication, WeChat with Wi-Fi authentication, SMS authentication, user authentication, GOOGLE authentication, etc.)
Management	Web/CLI/Telnet management portal Remote Management Remote Management
Others	DDNS, VPN management
Package Contents	ZK1050F cable Mounting Accessories Instruction manual