

Cloud L3 Managed 10G Fiber Switch

WI-CFS6012-L3



Overview

Cloud L3 Managed 10G Fiber Switch provides high performance, powerful L2 and L3 functions, such as static routing, OSPF, RIP, EPRs, QoS, advanced security policies and other functions. The 10G port ensures high-speed data transmission and is backward compatible with Gigabit products, leaving room for network upgrades and ensuring long-term stable use. IP-MAC-Port Binding and Access Control List (ACL) features protect against broadcast storms, ARP, and Denial of Service (DoS) attacks, while Quality of Service (QoS, L2 to L4) provides enhanced traffic management capabilities for your Data transfer is smoother and faster. Cloud management capabilities help facilitate network management. Additionally, easy-to-use web management interface as well as CLI. Wi-Tek Cloud L3 Managed 10G Fiber Switch provides reliable and secure solutions for enterprise, campus, WLAN and small to medium-sized networks.

Features

Abundant Layer 3 Capabilities

Static Routing, RIP, and OSPF come with abundant Layer 3 routing protocols that support a scalable network. Multicast routing protocols guarantee efficient routing for multicast groups. DHCP Server and DHCP Relay are also supported.

Networking Security

Cloud L3 Managed 10G Fiber Switch provide IP-MAC-Port Binding, Port Security, Storm control and DHCP Snooping which protect against broadcast storms, ARP attacks, etc. It integrates some typical DoS attacks to select. You can protect these attacks more easily ever than before. In addition, the Access Control Lists (ACL, L2 to L4) feature restricts access to sensitive network resources by denying packets based on source and destination MAC address, IP address, TCP/UDP ports and even VLAN ID. Moreover, the switch supports 802.1X authentication, which is used in conjunction with a RADIUS/TACACS+ server to require some authentication information before access to the network is allowed.

Numberous L2 features

The L3 managed switches support a complete lineup of L2 features, including 802.1Q VLAN, Port Mirroring, STP/RSTP/MSTP, ERPS, Link Aggregation Control Protocol and 802.3x Flow Control function. Any more, the switch provides advanced features for network maintenance. Such as Loopback Detection, Cable Diagnostics and IGMP Snooping. IGMP snooping ensures the switch intelligently forward the multicast stream only to the appropriate subscribers while IGMP throttling & filtering restrict each subscriber on a port level to prevent unauthorized multicast access.

Enterprise Level Management Features

Cloud L3 Managed 10G Fiber Switch are easy to use and manage. It supports various user-friendly standard management features, such as intuitive web-based Graphical User Interface (GUI), standard Command Line Interface (CLI), SNMP (v1/v2c/v3), and RMON. This allows the switch to provide valuable status information and send reports on abnormal events.

Specifications



Model	WI-CFS6012-L3
Hardware Features	
Interfaces	
Ports	12* 10Gbps SFP+ Slots
Management Port	1*Console port
Performance	
Memory and Flash	DRAM 512MB Flash 32MB
Switch Property	
Standards and Protocols	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3ae, IEEE 802.3x, IEEE 802.1X, IEEE 802.1q, IEEE 802.1p, IEEE 802.1d, IEEE 802.1w, IEEE 802.3ad
Forwarding Mode	Store and Forward
Switching Capacity	240Gbps
Packet Packet Forwarding Rate	178.6Mpps
MAC Address Table	32k
Packet Buffer Memory	16MB
Jumbo Frame	12kB
Power Supply	
Input Power	100-240V AC, 50/60Hz, 2A Max
Power Consumption	11W



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Physical Characteristics

LED Indicators	<p>PWR Indicator: On: the device power on is normal Off: the device is power off or failed</p> <p>Sys Indicator: Off: The system is being started or abnormal Blinking: The system is working normally</p> <p>Link Indicator: Off: No device is connected to the corresponding port. On: Indicates the link through that port is successfully established Blinking: Indicates that the Switch is actively sending or receiving data over that port. On green light: indicates 10G link On orange light: indicates 1000M/2.5G link</p>
Button	Reset: Reset: Hold for >5 sec. to restore factory default.
Fan	2
Product Weight	2.38kg
Dimensions	330*230*44mm
Installation	Desktop, rack-mounted
Reliability	Surge Immunity: Common mode ±4KV Differential mode ±2KV
	ESD Protection: Contact discharge ±6KV Air discharge ±8KV
Operating Temperature	-10 ~ 50°C (14 ~ 122°F)
Storage Temperature	-40 ~ 70°C (-40 ~ 158°F)
Operating Humidity	10 ~ 90% RH non-condensing
Storage Humidity	10 ~ 90% RH non-condensing
Certification	
Certification	CE, FCC, RoHS, UKCA, RCM



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Software Features	
QoS	8 Queues of Priority
	Port Priority
	IEEE 802.1p Priority
	DSCP Priority
	Schedule Mode (SP, WRR, SP+WRR)
	Bandwidth Control
	Rate Limit
	Storm Control
	802.1P Remark
	Policy VLAN
L3 Features	IP Interfaces
	Ipv4: Max 32, IPv6: Max 32
	Static Routing
	Ipv4: Max 12K, IPv6: Max 12K
	Route Table
	RIP: Version v1/v2, Max 8,190
	OSPF: Version v2, Max 8,190
	Static ARP
	Dynamic ARP: 8,190 dynamic entries
	DHCP Server
	IP Pools
	Manual Binding
	DHCP Relay
	Relayed Interface
	BGP4
DHCP snooping	
DHCP client	



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Link Aggregation	Static link aggregation
	802.3ad LACP
	Up to 64 aggregation groups and up to 8 ports per group
Spanning Tree Protocol	802.1d STP
	802.1w RSTP
	802.1s MSTP
	STP Security: TC Protect, BPDU Filter, BPDU Protect, Root Protect, Loop Protect
Loopback Detection	Port-based
	VLAN based
Flow Control	802.3x Flow Control
	HOL Blocking Prevention
Mirroring	Port Mirroring
	One-to-One
	Many-to-One
	Tx/Rx/Both
	CPU Mirroring
	RSPAN
L2 Multicast	Supports IPv4/IPv6 IGMP groups
	IGMP Snooping
	IGMP v1/v2/v3 Snooping
	Immediately-leave
	IGMP Snooping Query
	IGMP Authentication
	Dynamic Multicast
	Static Multicast
Static Multicast IP	



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L2 Multicast	L2 Multicast Table
	IGMP Proxy
	MVR
	MLD Snooping
	MLD v1/v2 Snooping
	Immediately-leave
	MLD Snooping Query
	Static Group Configuration
	Limited IP Multicast
	Multicast Filtering
	VLAN
Max. 4K VLAN Groups	
802.1Q tag VLAN	
MAC VLAN	
Protocol VLAN	
GVRP	
Voice VLAN	
Port-Based QinQ	
Tunnel TPID (0x8100, 0x9100, 0x9200, Protocol ID)	
OUI-Based VLAN	
Management VLAN	
Multicast VLAN	
Private VLAN	
IP-Subnet based VLAN	



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Access Control List	MAC ACL
	Source MAC
	Destination MAC
	Packet Type (Untagged-eth2, Untagged-802.3, Tagged-eth2, Tagged-802.3)
	VLAN ID
	Ether Type
	IP ACL
	Source IP
	Destination IP
	Fragment Packet
	IP Protocol
	IP Precedence
	TCP/UDP Port
	DSCP/IP TOS
	Combined ACL
	Ipv6 ACL
	Policy
	ICMP/TCP/UDP
	Mirroring
	Attached Direction(Ingress/Traffic-statistic)
	QoS Remark
	ACL apply to Port/VLAN
	Time-based ACL



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Security	IP-MAC-Port Binding
	DHCP Snooping
	ARP Inspection
	Ipv4 secure-port
	DHCPv6 Snooping
	snooping remote-id
	snooping subscriber-id
	Ipv6 security-ra
	DoS Defend
	DHCP Filter
	Static/Dynamic Port Security
	Broadcast/Multicast/Unicast Storm Control
	kpps/pps control mode
	802.1X
	Port base authentication
	Mac base authentication
	VLAN Assignment
	Guest VLAN
	Support RADIUS authentication and accountability
	AAA (including TACACS+)
	Port Isolation
	Secure web management through HTTPS with SSLv3/TLS 1.2
Secure Command Line Interface (CLI) management with SSHv1/SSHv2	
IP/Port/MAC-based access control	



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IPv6	Ipv6 Dual IPv4/IPv6
	Multicast Listener Discovery (MLD) Snooping
	Ipv6 ACL
	Ipv6 Interface
	Static IPv6 Routing
	Ipv6 neighbor discovery (ND)
	Path maximum transmission unit (MTU) discovery
	Internet Control Message Protocol (ICMP) version 6
	TCPv6/UDPv6
	Ipv6 applications
	DHCPv6 Client
	Ping6
	Tracert6
	Telnet (v6)
	Ipv6 SNMP
	Ipv6 SSH
Ipv6 SSL	
Http/Https	
Advanced Features	802.3ah Ethernet Link OAM
	ERPS
	Cloud Management
	ONVIF(ONVIF Detection,ONVIF Server(NLM))



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Advanced Features	Batch Firmware Upgrading
	Intelligent Network Monitoring
	Abnormal Event Warnings
	Automatic Device Discovery
	Support Remote Management
	Support Cloud VLAN Configuration
	Support Topology Display
	Support Cloud Control Port Configuration
	Batch Configuration
	Unified Configuration
	Reboot Schedule
	DDM
	sFlow
EFM OAM	
Management Features	Web-based GUI
	Command Line Interface (CLI) through console port, telnet
	SNMPv1/v2c/v3
	Trap/Inform
	RMON (1, 2, 3, 9 groups)
	802.1ab LLDP/LLDP-MED
	Cable Diagnostics
	EEE
	Password Recovery
	NTP and SNTP



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Advanced	System Log
	Firmware Upgrade
	Ping
	Traceroute
	HTTP/HTTPS
	FTP and TFTP
	Dual Configuration
	System IP(Static IP, Dynamic IP)
	Debug
	User Management
	CPU/Memory Monitor
	Config Restore/Backup
	Link Layer Discovery Protocol (LLDP)

Package Contents

Welcome to order our products. After purchasing, you will receive:

Items	Quantity
Cloud L3 Managed Fiber Switch	1 pcs
Quick Installation Guide	1 pcs
Serial line	1 pcs
Power Cord	1 pcs
Mounting Accessories	Hooks x 2, MATS x 4, Screws x 8



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Technical Support



Cloud Management



Company Website