

# Cloud L3 Managed Switch



WI-CMS528F-L3 | WI-CMS554F-L3

## Overview

Cloud L3 Managed Switch provides high performance, powerful L2 and L3 functions, such as static routing, OSPF, RIP, ERPS, 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 which makes your data transfer smoother and faster. Cloud management capabilities help facilitate network management. Additionally, Cloud L3 Managed Switch supports easy-to-use web management interface as well as CLI. Wi-Tek Cloud L3 Managed Switch provides reliable and secure solutions for enterprise, campus, 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 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 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-CMS528F-L3	WI-CMS554F-L3
Hardware Specifications		
Interfaces		
Downlink Ports	24*10/100/1000Mbps RJ45 Ports	48*10/100/1000Mbps RJ45 Ports
Uplink Ports	4*10Gbps SFP+ Slots	6*10Gbps SFP+ Slots
Management Port	1 Console port	1 Console port
Performance		
Memory and Flash	DRAM 512MB Flash 32MB	
Switch Property		
Standards and Protocols	IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE802.3x, IEEE802.1x, IEEE802.1q, IEEE802.1p, IEEE802.1d, IEEE802.1w, IEEE802.3ad, 802.3az	
Forwarding Mode	Store and Forward	
Switching Capacity	128 Gbps	216 Gbps
Packet Forwarding Rate	96 Mpps	161 Mpps
MAC Address Table	16 k	32 k
Packet Buffer Memory	12 Mbit	16 Mbit
Jumbo Frame	12 kB	



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Power Supply		
Input Power	AC 100–240V, 50/60Hz	
Power Consumption	23.2W(Full load)	52.6W(Full load)
Physical Characteristics		
LED Indicators	<p><b>PWR Indicator:</b>                      Off: No power supply                      On: Indicates the switch has power</p> <p><b>Link Indicator:</b>                      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</p> <p><b>SYS Indicator:</b>                      Blinking: The system is working properly                      Off: The system is being started or is abnormal</p> <p><b>SFP+ Indicator:</b>                      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</p>	
Buttons	Reset: Hold for >5 sec. to restore factory default	
Fan Quantity	Fanless	1
Dimensions (W*D*H)	440*207*44mm	440*330*44mm
Weight	Net Weight: 2.75kg	Net Weight: 3.63kg
	Package Weight: 3.05kg	Package Weight: 3.9kg
Installation	Desktop, Rack-mounted	
Reliability	Surge Immunity: Differential mode $\pm 2KV$ Common mode $\pm 4KV$	
	ESD Protection: Contact discharge $\pm 6KV$ Air discharge $\pm 8KV$	



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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 6K, IPv6: Max 2K (For WI-CMS528F-L3) IPv4: Max 12K, IPv6: Max 12K (For WI-CMS554F-L3)	
	Route Table RIP: Version v1/v2, Max 2048 (For WI-CMS528F-L3) RIP: Version v1/v2, Max 8192 (For WI-CMS554F-L3) OSPF: Version v2, Max 2048 (For WI-CMS528F-L3) OSPF: Version v2, Max 8192 (For WI-CMS554F-L3)	
	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	
	L2 Multicast Table	



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L2 Multicast	IGMP Proxy	
	MVR	
	MLD Snooping	
	MLD v1/v2 Snooping	
	Immediately-leave	
	MLD Snooping Query	
	Static Group Configuration	
	Limited IP Multicast	
VLAN	VLAN Group	
	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		
Access Control List	MAC ACL	
	Source MAC	
	Destination MAC	
	Packet Type ( Untagged-eth2, Untagged-802.3, Tagged-eth2, Tagged-802.3 )	



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Access Control List	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		
Security	IP-MAC-Port Binding	
	DHCP Snooping	
	ARP Inspection	
	IPv4 secure-port	
	DHCPv6 Snooping	
	Snooping remote-id	
	Snooping subscriber-id	
	IPv6 security-ra	



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Security	DoS Defend	
	DHCP Filter	
	Static/Dynamic Port Security	
	Broadcast/Multicast/Unicast Storm Control	
	kpbs/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		
IPv6	Ipv6 Dual IPv4/IPv6	
	Multicast Listener Discovery (MLD) Snooping	
	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	
Ping(v6)		



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IPv6	Tracert(v6)	
	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))	
	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		
Intermediate Agent in PPPoE		
Management Features	Web-based GUI	
	Command Line Interface (CLI) through console port, telnet	
	SNMPv1/v2c/v3	

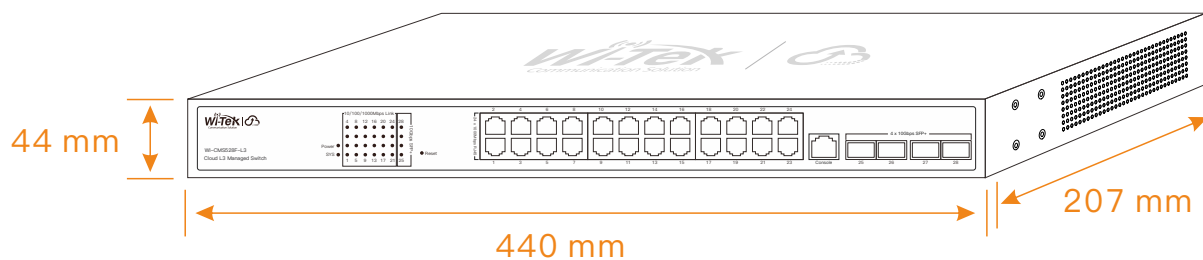


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Management Features	Trap/Inform	
	RMON (1, 2, 3, 9 groups)	
	802.1ab LLDP/LLDP-MED	
	Cable Diagnostics	
	EEE	
	Password Recovery	
	NTP and SNTP	
	System Log	
	Firmware Upgrade	
	Ping	
	Traceroute	
	HTTP/HTTPS	
	FTP and TFTP	
	Dual Configuration	
	System IP(Static IP, Dynamic IP)	
	Debug	
	User Management	
	CPU/Memory Monitor	
Config Restore/Backup		
Link Layer Discovery Protocol (LLDP)		

# Appearances and Dimensions

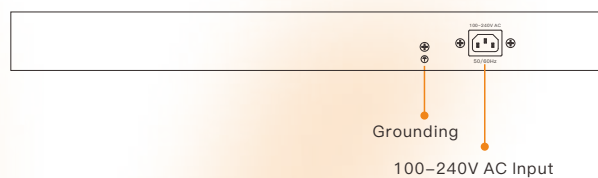
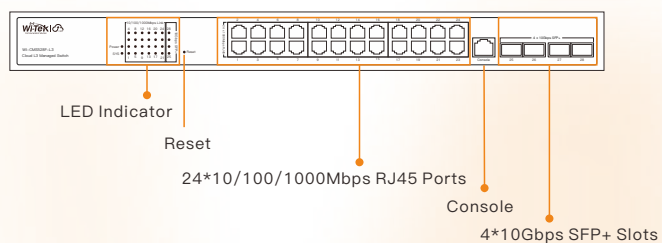
WI-CMS528F-L3

Dimensions (mm)



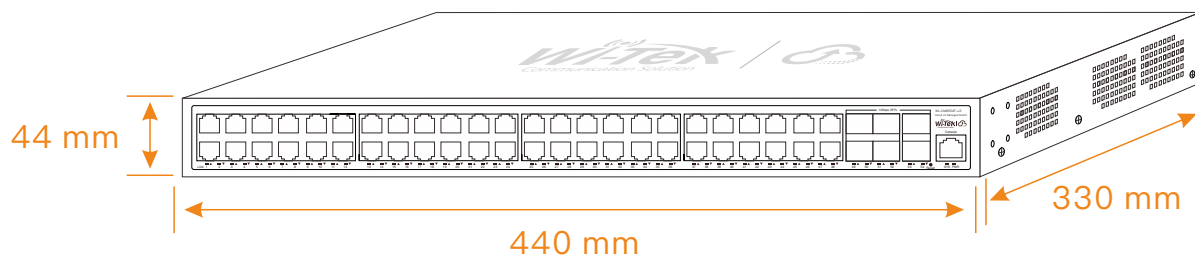
Front Panel

Back Panel

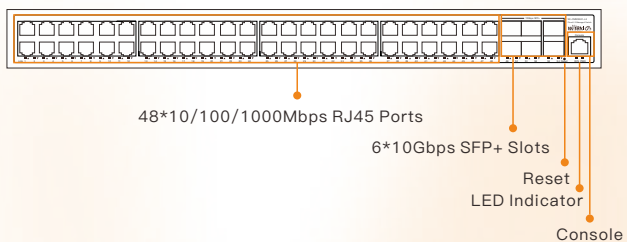


WI-CMS554F-L3

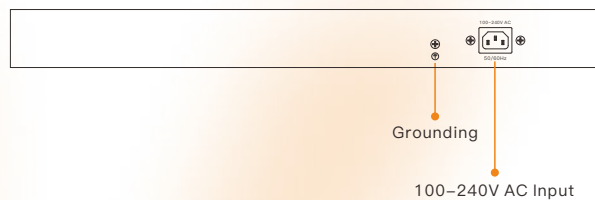
Dimensions (mm)



Front Panel



Back Panel



## Package Contents

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

Items	Quantity
Cloud L3 Managed 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