

Datasheet

Cloud Industrial L2+ Managed Gigabit PoE Switch



WI-PCMS306GF-I | WI-PCMS310GF-I | WI-PCMS312GF-BT-I

Hardware version: V3.0

Overview

Wi-Tek cloud industrial L2+ managed switch provide 4/8 Gigabit PoE+/ PoE++ RJ-45 ports and 2/4 Gigabit SFP uplink slots. This series switch supports cloud management which can work with Wi-Tek cloud platform, makes it can be easily and remotely managed which supports L2+ management functions, such as VLAN, STP/ RSTP/ MSTP, port mirroring, IGMP, QoS, multicast, ACL, ERPS protocol, Static Routing, DHCP, IPv6, etc.

Professional design providing a flexible, easy to use and reliable industrial network solution.

Redundant power design with polarity reverse/over-voltage/over-current protection, guarantee the safe power supply. Solid shell, wide operation temperature from -40°C to 75°C , ensure its stable and reliable operation even in harsh environment.

It is the best choice for outdoor CCTV project, wireless coverage project and the projects of industrial application scenarios such as factory, park, roadway and transportation.

Features

Fast Ring Configuration Via the Wi-Tek Cloud

Cloud Fast Ring Configuration provides simple and user-friendly configuration feature based on ERPS. Just follow the steps to connect and configure to complete the configuration. Built for Continuous Industrial Operation.

Note:

1. The fast ring function is designed to address the loop issues caused by the use of backup links.
2. This function is only applicable to single-ring network topology.
3. This function requires internet connection.

$-40\sim 75^{\circ}\text{C}$ Operating Temperature

$-40\sim 75^{\circ}\text{C}$ working temperature design, makes it meet the requirement of harsh application environment.

Industrial Level Protection Design

6kV surge immunity, 8kV ESD protection, and $-40\sim 75^{\circ}\text{C}$ working temperature design make it an ideal choice for industrial application scenarios.

Cloud Management

It supports cloud management which can work with Wi-Tek cloud platform, makes it can be easily and remotely managed.

ONVIF-based IPC Detection and Automatic Topology Mapping

Effortlessly discover ONVIF IPCs and visualize their connections under the switch via the cloud platform, enabling intuitive network management and faster deployment.

Abundant L2+ Managed Features

The Cloud Industrial L2+ Managed PoE switches support a complete line up of L2 features, including 802.1Q VLAN, Port Mirroring, STP/RSTP/MSTP, ERPS, DHCP server, 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. Moreover, L2+ managed switches support L2+ feature static routing, which is a simple way to provide segmentation of the network with internal routing through the switch and helps network traffic for more efficient use.

Specifications



Model	WI-PCMS306GF-I	WI-PCMS310GF-I	WI-PCMS312GF-BT-I
Hardware Specifications			
Hardware Version	V3	V3	V3
Interfaces			
Downlink Ports	4 x 10/100/1000Mbps RJ45 ports	8 x 10/100/1000Mbps RJ45 ports	8 x 10/100/1000Mbps RJ45 ports
Uplink Ports	2 x 1000Mbps SFP ports	2 x 1000Mbps SFP ports	4 x 1000Mbps SFP ports
Management Port	1 x Console Port		
PoE			
PoE Port	Port 1–4	Port 1–8	Port 1–8
PoE Standard	802.3af/at		802.3af/at/bt
PoE Pin Assignment	1/2(-), 3/6(+)		1/2(-), 3/6(+), 4/5(+), 7/8(-)
PoE Power	30 W max for each port, 120 W Max. (PoE power budget)	30 W max for each port, 240 W Max. (PoE power budget)	90 W max for each port, 460 W Max. (PoE power budget)
Performance			
Memory and Flash	Memory: 128MB Flash: 32MB		
Switch Property			
Standards and Protocols	IEEE 802.3 IEEE 802.3u IEEE 802.3ab IEEE 802.3z IEEE 802.3x IEEE 802.1x IEEE 802.1q IEEE 802.1p IEEE 802.1d IEEE 802.1w IEEE 802.1s IEEE 802.1ab IEEE 802.3ad IEEE 802.3af IEEE 802.3at IEEE 802.3az		IEEE 802.3 IEEE 802.3u IEEE 802.3ab IEEE 802.3z IEEE 802.3x IEEE 802.1x IEEE 802.1q IEEE 802.1p IEEE 802.1d IEEE 802.1w IEEE 802.1s IEEE 802.1ab IEEE 802.3ad IEEE 802.3af IEEE 802.3at IEEE 802.3bt IEEE 802.3az
Forwarding Mode	Store and Forward		
Switching Capacity	12 Gbps	20 Gbps	24 Gbps
Packet Forwarding Rate	8.93 Mpps	14.88 Mpps	17.86 Mpps
MAC Address Table	8 k		
Packet Buffer Memory	4.1 Mbit		
Jumbo Frame	10 kB		

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Power Supply			
Input Power	Power 1 (Main): 48–57V DC, Power 2 (Backup): 48–57V DC		
Power Consumption	Idle: 6W 100% Traffic Rate with PoE: 126W	Idle: 4W 100% Traffic Rate with PoE: 244W	Idle: 15W 100% Traffic Rate with PoE: 475W
Physical Characteristics			
LED Indicators	<p>P(Green) Steady on: The device power on is normal Off: The device is power off or failed</p> <p>S(Green) Off: Device system initialization Blinking: The system is working properly</p> <p>Link(Green) Steady on: Ports link up Blinking: Data on TX/RX Off: Ports link down</p> <p>PoE(Orange) Steady on: PoE working Off: PoE not working</p> <p>SFP Ports Indicators(Green) Steady on: Ports link up Blinking: Data on TX/RX Off: Ports link down</p>		

Model		WI-PCMS306GF-I	WI-PCMS310GF-I	WI-PCMS312GF-BT-I
Buttons				
Reset	Hold for >5 sec.to restore factory default			
Fan Quantity	Fanless			
Switch Dimensions	66*109*143.5 mm			
Package Dimensions	234*190*86 mm			
Weight	Net Weight: 1 kg	Net Weight: 1.05 kg	Net Weight: 1.2 kg	
	Package Weight: 1.4 kg	Package Weight: 1.4 kg	Package Weight: 1.55 kg	
Installation	Desktop, DIN-rail, Wall-mounting			
Reliability	Surge Immunity	IEC 61000-4-5 Common mode ±6kV Differential mode ±2kV		
	ESD Protection	IEC 61000-4-2 Contact discharge ±6kV Air discharge ±8kV		
Operating Environment	-40°C~75°C, 5%~95% (Non-condensation)			
Storage Environment	-40°C~85°C, 0%~95% (Non-condensation)			
Certification				
Certification	CE, FCC, RoHS, UKCA, RCM			

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Software Features			
QoS	8 priority queues		
	802.1p CoS/DSCP priority		
	Queue scheduling(SP (Strict Priority);WRR (Weighted Round Robin);SP+WRR		
	Bandwidth Control(Port/Flow based Rating Limiting)		
	Policy Config		
	Class-Map Config		
	Policy-Map Config		
	Policy Mark Config		
	Policy Bandwidth		
	Policy VLAN		
L2+	IPv4/IPv6 Interfaces		
	Static Routing(512 static routes)		
	Static ARP		
	8K ARP Entries		
	ARP timeout		
	Gratuitous ARP		
	DHCP Server		
	DHCP Relay		
Link Aggregation	Static link aggregation		
	802.3ad LACP		
	Up to 8 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		

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Loopback Detection	Port-based		
	VLAN based		
Flow Control	802.3x Flow Control		
	HOL Blocking Prevention		
Mirroring	Port Mirroring		
	CPU Mirroring		
	One-to-One		
	Many-to-One		
	Tx/Rx/Both		
L2 Multicast	Supports IPv4/IPv6 IGMP groups		
	IGMP Snooping		
	IGMP v1/v2/v3 Snooping		
	Immediately-leave		
	IGMP Snooping Querier		
	IGMP Authentication		
	IGMP Proxy		
	MVR		
	MLD Snooping		
	MLD v1/v2 Snooping		
	Immediately-leave		
	MLD Snooping Querier		
	Static Group Config		
	Limited IP Multicast		
Multicast Filtering			

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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		
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		
icmp/tcp/udp			
Mirroring			
Attached Direction(Ingress/Traffic-statistic)			

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Access Control List	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		
	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(includingTACACS+)		
Port Isolation			
Secure web management through HTTPS with SSLv3/TLS1.2			
Secure Command Line Interface (CLI) management with SSHv1/SSHv2			
IP/Port/MAC-based access control			

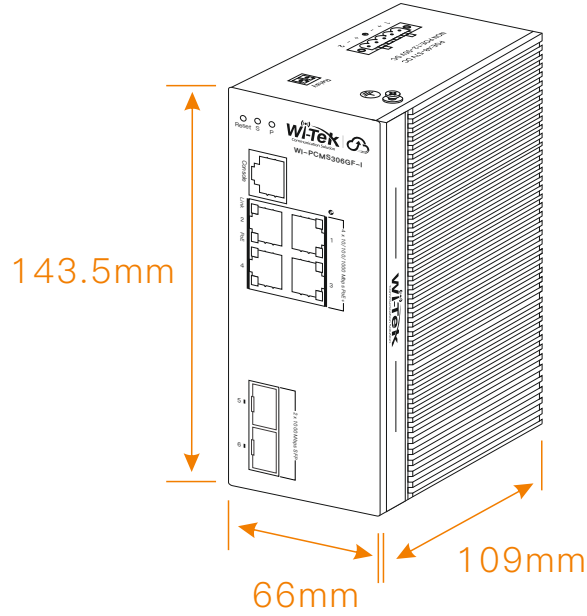
Model	WI-PCMS306GF-I	WI-PCMS310GF-I	WI-PCMS312GF-BT-I
IPv6	IPv6 Dual IPv4/IPv6		
	Multicast Listener Discovery (MLD) Snooping		
	IPv6 ACL		
	IPv6 Interface		
	Static IPv6 Routing		
	IPv6 neighbor discovery (ND)		
	Path maximum transmission unit (MTU) discovery		
	Internet Control Message Protocol (ICMP) version 6		
	TCPv6/UDPv6		
	IPv6 applications		
	DHCPv6 Client		
	Ping(v6)		
	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			

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Management Features	Web-based GUI		
	Command Line Interface(CLI) through consoleport,telnet		
	SNMPv1/v2c/v3		
	Trap/Inform		
	RMON(1,2,3,9groups)		
	DHCP/BOOTP Client		
	802.1ab LLDP/LLDP-MED		
	CPU Monitoring		
	Cable Diagnostics		
	EEE		
	Password Recovery		
	SNTP		
	System Log		
System	Ping		
	Traceroute		
	Firmware Upgrade		
	DDMI		

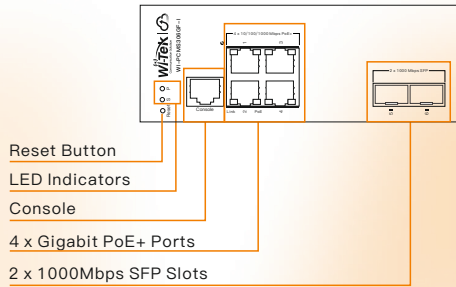
Appearances and Dimensions

WI-PCMS306GF-I

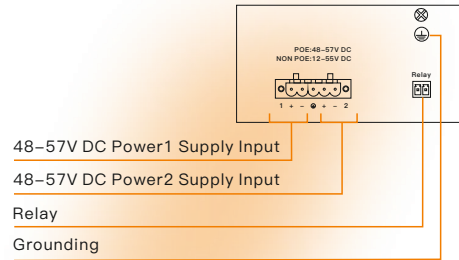
Dimensions (mm)



Front Panel

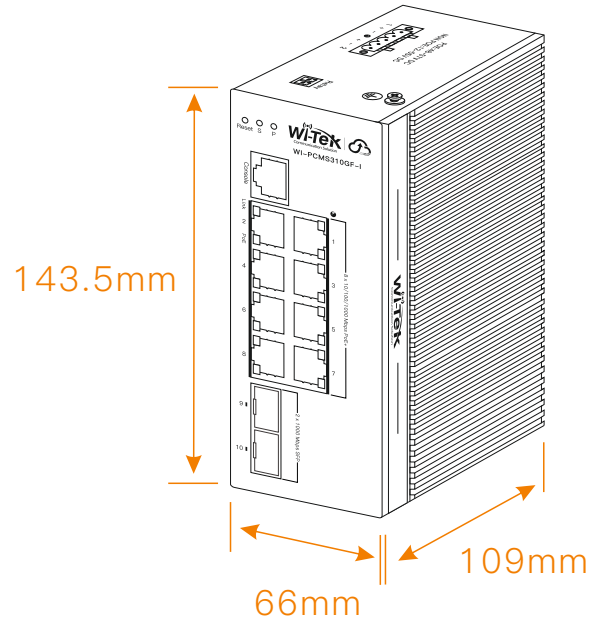


Side Panel

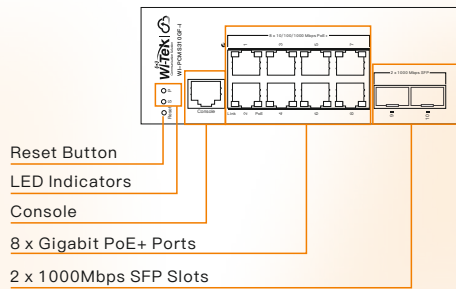


WI-PCMS310GF-I

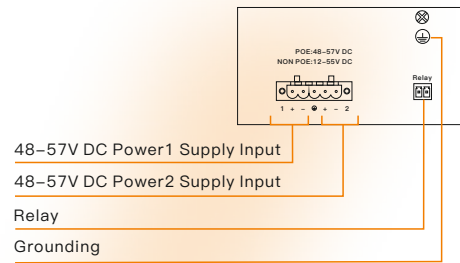
Dimensions (mm)



Front Panel

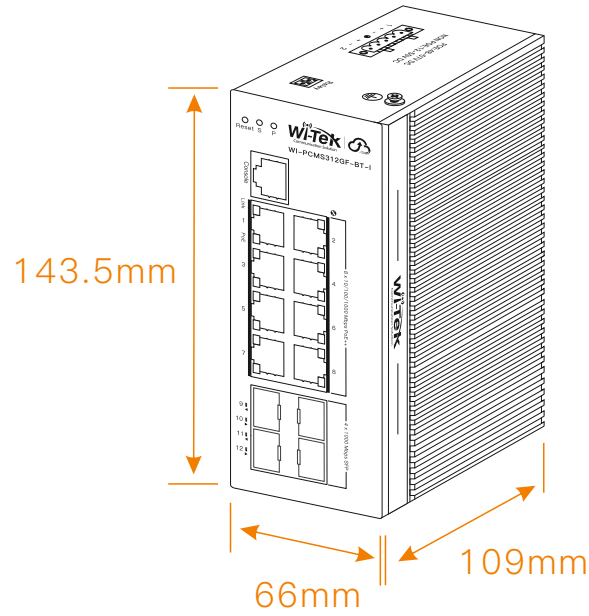


Side Panel

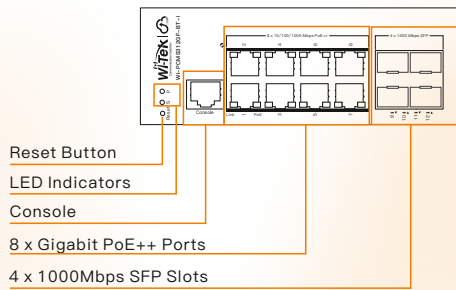


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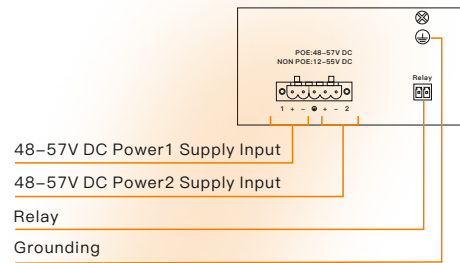
Dimensions (mm)



Front Panel



Side Panel



Package Contents

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

Items	Quantity
Switch	1 pcs
RJ-45 to Serial Port Cable	1 pcs
Phoenix terminal	2 pcs
Wall Mounting Accessory	2 pcs
DIN-Rail Mounting Accessory	1 pcs
Quick Installation Guide	1 pcs



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Technical Support



Cloud Management



Company Website