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# **Boost Voltage Industrial PoE Switch**

WI-PS305G-I-DC | WI-PMS310GF-Alien-I

## **Overview**

Wi-Tek's boost voltage industrial PoE switch is designed to provide a network transport solution for CCTV and WISP markets. Products can work with 9~52V DC power, the voltage boost technology makes the low input voltage, such as solar power, can be converted to 48V PoE output voltage, which ensures the PoE powered devices, such as IP cameras, wireless access point, can be powered on stably. And it can also work with a backup battery for emergency power supply. Industrial-grade CPU and redundant power supply design, guarantee its stable and reliable operation even in harsh environments. And the abundant management functions design makes it an ideal choice for complex network projects.

## **Features**

#### **Boost voltage technology**

This series switch can work with 9-52V DC input power supply, such as solar power and emergency backup battery. The voltage boost technology makes the low input voltage can be converted to 48V PoE output voltage, which ensures the PoE powered devices such as IP camera can be powered on stably.

#### -40°C~80°C operating temperature

-40°C~80°C operating temperature design, guarantee its stable and reliable operation even in harsh environment.

#### **DIN-rail mounting design**

DIN-rail mounting design, can perfectly meet the requirements of standard project assembly.

#### Smart PoE watchdog function

Smart PoE watchdog function, can monitor and recover the operation of compliant IP camera persistently and automatically.

#### Robust L2 management functions

Robust L2 management functions meet complex project requirements and can be deployed at one time without additional device investment. (WI-PMS310GF-Alien-I)

#### Fast ring, self-healing in 20ms

Support fast ring, self-healing in 20ms at minimum, improves network security and reliability, and better meets customers' network security requirements. (WI-PMS310GF-Alien-I)

#### **Multiple Smart DIP Mode**

PoE Dog Mode: PoE watchdog, all PoE ports enable PoE watchdog function, which can detect and reboot the offline compliant PoE powered devices.

VLAN Mode: All downlink ports are isolated from each other, but can communicate with uplink ports.

EX\_1-2 Mode: The transmission distance of port 1-2 can be up to 250m, but the rate is limited to 10Mbps.

EX\_1-4 Mode: The transmission distance of port 1-4 can be up to 250m, but the rate is limited to 10Mbps.



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# **Specifications**





Model	WI-PS305G-I-DC	WI-PMS310GF-Alien-I		
Hardware Features				
Ethernet Ports				
Downlink Ports	4*10/100/1000 Base-T PoE RJ-45(Auto-MDI/MDI-X)	8*10/100/1000 Base-T PoE RJ-45(Auto-MDI/MDI-X)		
Uplink Ports	1*10/100/1000 Base-T RJ-45(Auto-MDI/MDI-X)	2*1000 Base-X SFP		
Console Port	N/A	1*RJ-45 to RS-232 console port (115200,8,N,1)		
Alarm In/Out Interface	N/A	Yes		
PoE				
PoE Standard	Ports 1-4: 802.3 af/at PoE	Ports 1-2 : 802.3 af/at/bt 60W Ports 3-8 : 24V Passive/48V 802.3af/at PoE		
PoE Power Supply Type	End-span	Mid-span, End-span		
PoE Budget	120W	360W		
Boost PoE Budget	120W	120W		
Switch Property				
Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.1Q, IEEE 802.1p , IEEE 802.3ad, IEEE 802.1D, IEEE 802.1x		
Forwarding Modes	Store and forward			
Packet Buffer	2.5Mbit	4.1Mbit		
MAC Table	2K	8K		
Switching Capacity	12Gbps / non-blocking	20Gbps / non-blocking		
Packet Forwarding Rate	8.93Mpps	14.88Mpps		
Switch Property				
Input Voltage	Power 1 (Main): 37~57V DC, Power 2,3 (Backup): 37~57V DC Boost Power: 9-52V	Power 1 (Main): 37~57V DC, Power 2 (Backup): 37~57V DC Boost Power 3: 9-52V		
Reliability				
Surge Immunity	6kV, Standard: IEC6000-4-5			
ESD Protection	8kV Contact Discharge, 15kV Air Discharge, Sta	8kV Contact Discharge, 15kV Air Discharge, Standard: IEC61000-4-2		
MTBF	about 30Wh	about 30Wh		
MTBF Standards	Telcordia SR-332, 25℃			
Operating Temperature	-40℃~80℃			
Storage Temperature	-40°C~85°C			
Operating Humidity	5%~95% (Non-condensation)			
Physical Parameter				
Dip Switch	PoE dog/Vlan/Ex_1-2/Ex_1-4	N/A		

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Hardware Features				
Physical Parameter				
Led Indicators	3* power supply indicators 1* system working indicator 1* alarm indicator 5*RJ45 PoE indicator 5*RJ45 Link indicator	2* power supply indicators 1* system working indicator 2* SFP indicator 8* RJ45 PoE indicators 8* RJ45 Link indicators		
Dimensions (W*D*H)	106*100*60mm	167*130*73mm		
Net Weight	1.4kg	1.7kg		
Installation	Desktop/DIN-rail/wall mounting			
Certifications				
Certifications	CE, FCC			
Software Features (WI-PI	MS310GF-Alien-I)			
Industrial Switch Monitoring	Temperature sensor, alarm input and output			
	IEEE 802.1D -STP			
Spanning Tree	IEEE 802.1w -RSTP			
	IEEE 802.1s -MSTP			
	Port Loop Detection			
	EAPS			
Reliability	ERPS			
	LLDP/LLDP-MED			
	UDLD			
	Max 4K VLAN Groups			
	802.1q Tagged VLAN			
	MAC-Based VLAN			
VLAN	IP-Based VLAN			
VLAIN	Protocol-Based VLAN			
	QinQ			
	802.1q-Based VLAN			
	Voice VLAN			
	LACP			
	Jumbo Frame			
Port	Port Shutdown			
	Link Aggregation (Up to 8 aggregation groups and up to 8 ports per group)			
	Port Mirroring (One-to-One Many-to-One Tx/Rx/Both)			
	IP-MAC-Port Binding			
	Support Static and Dynamic ARP			
Security	DHCP Snooping			
Occurry	IEEE802.1x AAA			
	RADIUS/TACACS+			
	RADIUS			

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Software Features (WI-	PMS310GF-Alien-I)
	Port Isolation
Security	Port Based Authentication
	Secure Command Line Interface (CLI) Management With SSHv1/SSHv2
	Broadcast/Multicast/Uni-cast Storm Control
	Port MAC Address Filtering
Access Control List	Standard IP-Based ACL
	Extended IP Based ACL
	MAC IP-Based ACL
	MAC ARP-Based ACL
	IPv6-Based ACL
	ACL Port Filtering
	Time-Based ACL
	Port-Based (uplink and downlink traffic of a single port can be restricted)
	802.1p-Based Classification
QOS	Support WRR, SP, WFQ
	DISC-Based Classification
	CAL-Based Classification
	IGMP Snooping V1/V2/V3
L2 Multicast	MLD Snooping
	MVR
	IPv4/IPv6 Dual Protocol Stack
	IPv6 Neighbor Discovery
	Support manual address configuration, stateless address auto-configuration and tasteful address configuration obtained through DHCPv6 client
	IPv6 TFTP
IPv6	IPv6 SNMP
	ICMPv6
	IPv6 Path MTU Discovery
	IPv6 SSH
	Tracert6
	Web-Based GUI
Management	Command Line Interface (CLI) through console port, telnet and SSH
	SNMPv1/v2c/v3 Trap/Inform RMON (1, 2, 3, 9) groups
	Password Recovery
	SNTP
	System Log
	Traceroute
	Ping

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Software Features (WI-PMS310GF-Alien-I)		
Management	CPU Monitoring	
	Firmware Upgrade	
	Configuration Export/Import	
	Support SNTP Based IPv4 and IPv6	
	DHCP/BOOTP Client	

## **Package Content**

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

Items	Quantity
Industrial Switch	1 pcs
Temperature Sensor (Only for WI-PMS310GF-Alien-I)	1 pcs
1* Screw Driver	1 pcs
Quick Installation Guide	1 pcs



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