Datasheet

Industrial L2 Managed PoE Switch

SP3018FM-L2

Overview

Wi-Tek Superic industrial L2 managed PoE switch provide 16 Gigabit Ethernet RJ-45 ports and 2 2.5 Gigabit SFP uplink ports. All RJ-45 ports comply with 802.3af/at PoE (PoE+) standard and output up to 30W PoE power per port.

This series switch support Layer 2 management functions, such as VLAN, VLAN classification, QinQ, port mirroring, STP, RSTP, MSTP, IGMP, QoS, DHCP, multicast, ACL, dying gasp, LLDP, 802.1X, fiber transceiver DDM, PoE management, G.8032 ERPS protocol, IPV6 management, Web, SNMP, Telnet, TFTP, 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 and high-level EMI/EMC capability design, ensure its stale and reliable operation even in harsh environment. It is the best choice for outdoor CCTV project, wireless coverage project and the project of industrial application scenarios such as factory and transportation.

Key Features

Full Gigabit Interfaces Design

SP3018FM-L2:

16×10/100/1000 Base-T PoE+ ports and 2×1000/ 2500 Base-X SFP ports

-40~75°C Operating Temperature

-40~75°C working temperature design, makes it meet the requirement of harsh application environment.

High Level Protection Design

6kV surge immunity for Ethernet ports, 15kV air discharge and 8kV contact discharge ESD protection, makes it an ideal choice for outdoor application scenario.

Robust L2 Managed Functions

Support robust Layer 2 management functions, such as VLAN, VLAN classification, QinQ, port mirroring, STP, RSTP, MSTP, IGMP, QoS, DHCP, multicast, ACL, dying gasp, LLDP, 802.1X, fiber transceiver DDM, PoE management, G.8032 ERPS protocol, IPV6 management can meet the requirement of simple industrial project.

Redundant DC Power Input Design

Support redundant 44-57V DC power input, provide reliable alternative power access solutions.

Hardware Specification	
Model	SP3018FM-L2
Interfaces	
Downlink Ports	16*10/100/1000 Base-T PoE+ RJ-45 (Auto-MDI/MDI-X)
Uplink Ports	2* 1000/ 2500 Base-X SFP
Management port	1* RJ45 Console
PoE	
PoE Standard	IEEE 802 .3af/at (PSE)
PoE Power Supply Type	End-span
PoE Pin Assignment	1/2 (+) , 3/6 (-)
PoE Power	30W max for each port, 240W Max
Switch Property	
Standards	IEEE 802.3 10Base-T Ethernet

IEEE 802.3u 100Base-TX Ethernet

IEEE 802.3ab 1000Base-T Ethernet

IEEE 802.3z 1000Base-X Ethernet

IEEE802.3x Flow Control and Back Pressure

IEEE 802.1D Spanning Tree Protocol

IEEE 802.1w Rapid Spanning Tree Protocol

IEEE 802.1Q VLAN

ITU-T G.8032 ERPS

IEEE 802.1X Port Authentication Network Control |

	IEEE 802.1ab LLDP
	IEEE 802.3ad LACP
	IEEE802.3af PoE
	IEEE802.3at PoE plus
Forwarding Modes	Store and Forward
Packet Buffer	12Mbit
MAC Table	16k
Switching Capacity	42Gbps
Packet Forwarding Rate	31.2Mpps
Jumbo Frame	10kB

Power Supply	
Input Voltage	Power 1 (Main) : 44–57V DC , Power 2 (Backup) : 44–57V DC
Power Consumption	Full loading without PoE ≤ 15W
	PoE power budget ≤ 240W
Connector	Removable 4–pin terminal block
Reverse polarity protection	Support
Over–voltage protection	Support
Over–current protection	Support

Environmental Reliability	
	Surge protection of power: IEC 61000–4–5 6KV/4KV (8/20us)

Industrial Standard	Surge protection of Ethernet ports: IEC 61000-4-5 6KV/2KV 10/700us
	RS: IEC 61000-4-3 80 MHz- 1 Ghz: 10 V/ m
	EFT: IEC 61000-4-4 4K/2K
	CS: IEC 61000-4-6 10V
	ESD: IEC 61000-4-2 Contact: 8K; Air: 15K
	EMI: FCC Part 15B Class A
	Shock: IEC 60068-2-27
	Free Fall: IEC 60068-2-32
	Vibration: IEC 60068-2-6
Operating Temperature	-40℃ ~75℃
Storage Temperature	-40℃ ~85℃
Operating Humidity	5 %~95% (Non-condensation)
LED Indicators	
P (Power indicator)	Off: the device is power off or failed Green On: the device power on is normal
S (System status indicator)	Blinking: device initialization On: device on and normal operation
Copper ports	1-16 Green indicators Off: ports link down On: ports link up Blinking: data on TX/ RX 1-16 Yellow indicators

	Off: PoE is not working On: PoE is working
Fiber ports	17–18 Fiber ports indicators Off: ports link down Green On: ports link up Green Blinking: data on TX/ RX
Dimensions (W* D* H)	54* 115* 158mm
Net Weight	1.43kg
Installation	Desktop/ DIN–rail
Certifications	
Certifications	CE, FCC, RoHS

Software Specification	
Port aggregation	Support 1GE port aggregation Support 2 .5GE aggregation Support static aggregation Support dynamic aggregation
Port features	Support IEEE802 .3x flow control Support port traffic statistics Support port isolation

	Support network storm suppression based on port bandwidth percentage
VLAN	Support access mode
	Support trunk mode
	Support hybrid mode
VLAN Classification	Mac Based VLAN
	IP Based VLAN
	Protocol Based VLAN
QinQ	Port-based QinQ
	VLAN-based QinQ
	Flow-based QinQ
Port mirroring	Many to one port mirroring
Ring network protocol	Support STP, RSTP, MSTP
	Support G.8032 ERPS protocol, single ring, sub Ring and associated sub ring
	Recovery time ≤20ms
DHCP	Support DHCP Client
	Support DHCP Snooping
Multicast	IGMP V1, V2, V3
	IGMP snooping
ACL	IP Standard ACL
	MAC extend ACL
	IP extend ACL
QoS	Support QoS Class, Remarking
	Support SP, WRR queue scheduling

	Ingress Port-based Rate-limit
	Egress Port-based Rate-limit
	Support Policy-based QoS
Security	Support Dot1x, port authentication, MAC authentication, RADIUS service
	Support port-security
	Support IP Source Guard, IP/ Port/ MAC binding
	Support ARP-check and ARP packet filtering for illegal users
	Support port isolation
Management and maintenance	Support LLDP
	Support user management and login authentication
	Support SNMPV1/V2C/V3
	Support web management , HTTP1 . 1 , HTTPS
	Support Syslog and alarm grading
	Support RMON(Remote Monitoring) alarm
	Support NTP
	Support temperature monitoring
	Support Ping , TRACERT
	Support optical transceiver DDM function
	Support TFTP Client
	Support Telnet Server
	Support SSH Server
	Support IPv6 Management
	Support PoE management
	Support TFTP, web upgrading

Package Contents

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

Items	Quantity
Industrial Switch	1 pcs
Quick Installation Guide	1 pcs

CE FC RoHS ☒ UK CA ✓

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