

## Features

- ▶ 8-Port 10/100/1000T 802.3at PoE + 2-Port 100/1000X SFP
- ▶ **12~48VDC wide range power input with power booster function**
- ▶ Supports IEEE 802.3at PoE+ (Max 30W PoE at one port), **Up to 240W PoE budget (48VDC), 120W PoE budget (24VDC), 60W PoE budget (12VDC)**
- ▶ Support L2+ full network management, PoE network management and configuration
- ▶ Support 9K bytes giant frame, compatible with various extension protocol
- ▶ IEEE 802.3az Energy Efficient Ethernet (EEE)
- ▶ Redundant Power Inputs
- ▶ Supports Wall-mount and DIN-Rail installation
- ▶ -40°C to 80°C (-40°F to 176°F) operating temperature.



## Overview

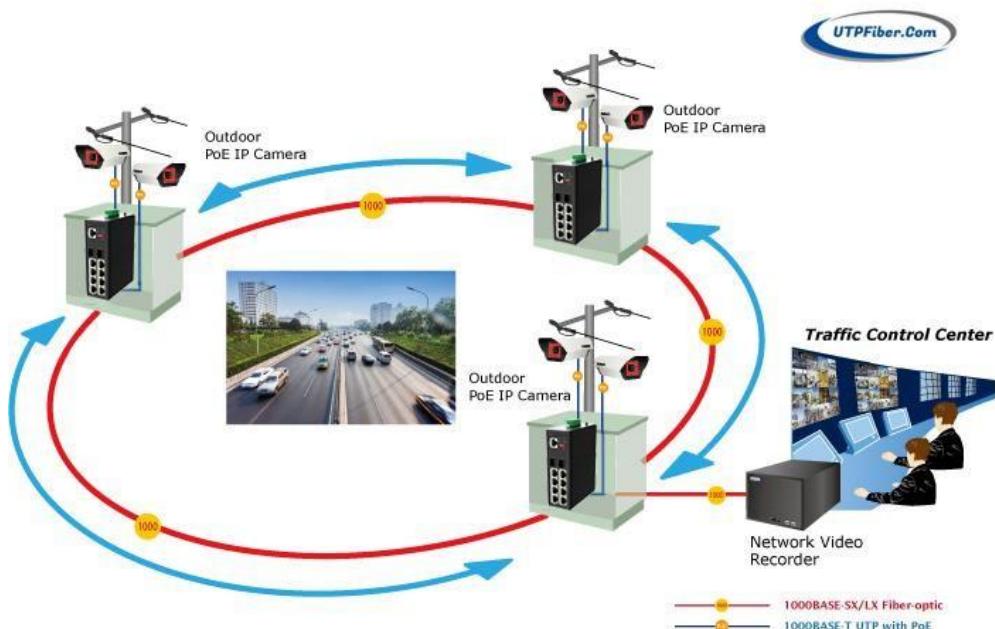
A L2+ Managed Industrial 8-Port 10/100/1000T 802.3at Solar Power PoE Switch w/ 12~48V Booster. The DIN-rail type managed Gigabit Ethernet PoE+ Switch with eight 10/100/1000BASE-T ports featuring IEEE 802.3at PoE+ and two 1000BASE-X fiber optic interfaces for uplink connection. It supports 12VDC or 24VDC power input with power booster function. With its reliable design and ease of use, the product is a great choice for integrating networks consisting of network devices such as IP cameras and wireless access points between remote locations.

To facilitate the 802.3at PoE+ usage with the commonly-used 12~48V DC power input for transportation and industrial-level applications, the switch adopts 12~48V DC to 48V DC power boost technology to solve power source issue but does not require special power supplies. Its wide-ranging voltages design is suitable for worldwide operability with high availability applications requiring dual or backup power inputs. It supports 240W PoE budget (48VDC), 120W PoE budget (24VDC), 60W PoE budget (12VDC).

With dual power input design, the switch can offer redundant mechanisms for critical applications that need always-on connections. It can also operate either at standard operating temperature range -40 to 80°C. Housed in rugged DIN rail or wall mountable IP40 enclosures, these switches are perfect choices for harsh environments, such as industrial networking, intelligent transportation systems (ITS) and are also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications.

## Application

### Industrial 8 Ports POE Switch with DC12V - DC48V Voltage Booster



## Specifications

Physical Port	
RJ45 port and speed	8 x 10/100/1000BASE-T 802.3at PoE
Fiber port and speed	2 x 100/1000BASE-X SFP (Dual Mode, Auto Detection)
Console	1 x RJ45-to-RS232 serial port (115200, 8, N, 1)
Parameters	
Ethernet standards	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/100BASE-FX IEEE 802.3z Gigabit SX/LX IEEE 802.3ab Gigabit 1000T IEEE 802.3x flow control and back pressure IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus

	IEEE 802.3ad port trunk with LACP IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1s Multiple Spanning Tree Protocol IEEE 802.1p Class of Service IEEE 802.1Q VLAN tagging IEEE 802.1ad Q-in-Q VLAN stacking IEEE 802.1x Port Authentication Network Control IEEE 802.1ab LLDP ITU G.8032 ERPS Ring RFC 768 UDP RFC 793 TFTP RFC 791 IP RFC 792 ICMP RFC 2068 HTTP RFC 1112 IGMP v1 RFC 2236 IGMP v2
Packet buffer	4Mbits
Packet length	Up to 10K Bytes
MAC address table	8K
Transmission mode	Store and Forward (full/half duplex mode)
Switch Fabric	24Gbps/non-blocking
Exchange property	Delay time: < 7ps Backplane bandwidth: 20Gbps Packet forwarding rate: 14.88Mpps
<b>PoE</b>	
PoE Standard	8 x IEEE 802.3af /IEEE 802.3at PoE
Power budget	Max. PoE output power budget 30W
Power Pin Assignment	1/2(+), 3/6(-)
PoE Power Output	IEEE 802.3af Standard - Per port 48V~51V DC (depending on the power supply), max. 15.4 watts IEEE 802.3at Standard - Per port 51V~54V DC (depending on the power supply), max. 30 watts
PoE Power Budget	240W maximum @54V DC 120W maximum@24V DC 60W maximum@12V DC
<b>LED Indicator</b>	
Power	Connect-always
RJ45	Link/Act: connect-always; data exchange-twinkle Speed light: 100Mbps-always; 10Mbps-twinkle
Fiber	Link/Act: connect-always; data exchange-twinkle
<b>Power Information</b>	
Input Power:	12~48VDC, Redundant Power (Terminal Block)
Connector:	1 removable 6-contact terminal blocks

# DIREKTRONIK

	Pin 1/2 for Power 1, Pin 3/4 for Power 2, Pin 5/6 for fault alarm
Protection:	Overload Current Protection, Reverse Polarity Protection
Power Consumption:	240W Max. (PoE in use, 48VDC input) 15W Max. (PoE not in use)
<b>Physical Property</b>	
Protection grade	IP40 aluminum case
Cooling mode	Natural cooling, no fan design
Dimensions (L x W x H)	138mm x 108mm x 49mm
Installation mode	DIN-Rail/wall-mountable
Weight	700g
<b>Working Environment</b>	
Operating Temperature	-40°C~80°C
Operating Humidity	5%~90% non-condensing
Storage Temperature	-40°C~80°C
<b>Warranty</b>	
MTBF	500,000 hours
Defects Liability Period	5-year warranty, lifetime technical support
<b>Certification Standard</b>	
EMI	FCC Part15 Subpart B Class A, EN 55022 Class A
EMS	EN61000-4-2(ESD), EN61000-4-3(RS), EN61000-4-4(EFT), EN61000-4-5(Surge), EN61000-4-6(CS), EN61000-4-8, EN61000-4-11
Collision	IEC60068-2-27
Drop	IEC60068-2-32
Vibration	IEC60068-2-6
Safety grade	EN60950-1
<b>Software</b>	
Software Features	Redundant network: STP, RSTP, MSTP, IT-T G.8032 Ethernet Ring Protection Switching (ERPS)for redundant cabling ERPS/ Ring for Redundant Cabling, recovery time<20ms in 250 devices
	Multicast: IGMP Snooping V1/V2/V3
	VLAN: IEEE 802.1Q4K VLAN, GVRP, GMRP, QINQ
	Link Aggregation: Dynamic IEEE 802.3ad LACP Link Aggregation, Static Link Aggregation
	QOS: COS, DSCP, 8 queues, WRR/SP/WFQ scheduling, QOS Policy
	Management Function: CLI, Web based management, SNMP v1/v2c/v3, Telnet/SSH server for management
	Diagnostic Maintenance: Port mirroring, Ping

Alarm management: 1 way relay alarm output, RMON, SNMP Trap
RMON, MIBII, Port mirroring, Event syslog, DNS, SNTP, IEEE 802.1ab LLDP
Security: DHCP Server/Client/Relay option 82/Snooping User hierarchical management
Flexibility security: Port based and MAC based IEEE 802.1X, ACL, HTTP/HTTPS, SSL/SSH v2
Data control Port-based ingress/egress speed limit, Full duplex IEEE 802.3x, half duplex back-pressure flow control.
Broadcast storm suppression, Un known-Multicast suppression and Unknown-Unicast suppression
Software upgrade via HTTP, redundant firmware to avoid upgrade failure

## Order Information

Model	Description
20125379	L2+ Managed Industrial 8-Port 10/100/1000T + 2-Port 100/1000X SFP Solar Power PoE Switch w/ 12~48V Booster
SFP Options	<ul style="list-style-type: none"> <li>▶ SFP option. Please select your SFP on our SFP Options Page (Industrial SFP).</li> <li>▶ SFP module is to be purchased separately.</li> </ul>
Mounting Options	<ul style="list-style-type: none"> <li>▶ Default DIN-Rail Bracket installed; Wall Mount Bracket is included.</li> </ul>
Power Options	<ul style="list-style-type: none"> <li>▶ DIN-Rail Power Supply. Open Wire for Terminal Block.</li> <li>▶ Power Supply is to be purchased separately.</li> </ul>

## Dimension

