IPS-3112-PoE++
Management Industrial PoE Switch

8 ports 10/100/1000Base-T 60W PoE ports

4 Ports 100/1000Base-X SFP ports

Managed Industrial PoE Switch

Features

- Network Redundant LACP, Spanning Tree STP, RSTP and Fast Ring v2, Fail-Over Protection (< 50 ms)
- Port-Based /Tag-Based VLAN, Add/Remove VLAN Tags
- Dual Power Input (48 ~ 54VDC) & Reverse Power Protection
- Support 9K Jumbo Frames
- L2 Wire-Speed Switching Engine
- 8K MAC Forwarding Addresses
- DIN-Rail and Wall Mount (Optional)
- Support IEEE 802.3 af/at PoE+
- Total PoE Budget 480W
- Extended Operation Temperature -40°C ~ 75°C
- All Aluminum Housing for Excellent Heat Dissipation
- +/- 6KV Surge Protection on PoE Ports

Description

Connection Technology Systems (CTS) IPS-3112-PoE++ Industrial PoE Switch is the Fast & Gigabit Ethernet 10/100/1000Base-T to 100/1000Base-X Industrial PoE Switch.

The IPS-3112-PoE++ switches the traditional twist-pair RJ-45 cable into various fiber optics media. It offers easy management of uplink port (4 x port fiber). The fiber optical port of IPS-3112-PoE++ can support various connection distances via multi-mode fiber, single-mode fiber or Bi-directional single-mode fiber for the deployment to the control room, warehouse or factory.

The IPS-3112-PoE++ Industrial PoE Switch is designed for deployment at industrial sites. With DIN-rail mounting, you can easily mount the Industrial PoE Switch at your sites such as factory or warehouse. The terminal blocks provide power redundancy to prevent any possible power outage and digital input/output to serve as an alarm.

The IPS-3112-PoE++ Industrial PoE Switch provides perfect solution for delivering power over Ethernet for IP cameras, Wi-Fi access points or IP phones at an extended operating temperature (-40°C ~ 75°C) to withstand against harsh environment for better performance. The IPS-3112-PoE++ is fully compliant with IEEE standards such as IEEE 802.3/802.3u/802.3ab/802.3z to ensure interoperability between network devices.

The IPS-3112-PoE++ Industrial PoE Switch provides easy management ways via telnet CLI and SNMP. Combined with rich L2+ features and reliable management functions, the IPS-3112-PoE++ will significantly help save OPEX (operational cost) for network administrators.

Target Applications

- Point-to-Point Fiber Connectivity in Harsh Environment
- Long Distance IP Surveillance Network Deployment
- Factory, Parking Lot, ITS, Smart City Network Deployment

Specification

■Interface

Fiber Port
-4 x 100/1000Base-X SFP

RJ-45 Port
-8 x 10/100/1000Base-T RJ-45 with max. 60W PoE injector

Console Port
-1 x RS-232 Port (RJ-45)

■Power over Ethernet
-Total PoE Budget: 480 Watts

■Standards
-IEEE 802.3 10Base-T
-IEEE 802.3u 100Base-TX/FX
-IEEE 802.3ab 1000Base-T
-IEEE 802.3z 1000Base-X
-IEEE 802.3az EEE
-IEEE 802.3x Flow Control
-IEEE 802.3ad Link Aggregation
-IEEE 802.1p Priority
-IEEE 802.1q Tag VLAN
-IEEE 802.1d STP
-IEEE 802.1w RSTP
-IEEE 802.1x Authentication Network Access control
-IEEE 802.3af Power over Ethernet
-IEEE 802.3at Power over Ethernet +

■H/W Specification
-MAC Address table: 8K
-Non-Blocking Switching Fabric: 24Gbps
-Jumbo frame: 9K Bytes
-Store and Forward Switching Mechanism
-Auto-Cross Over for MDI/MDIX in TP Ports
-Auto-Negotiation in TP Ports
-Full/Half Duplex Mode Operation
-1 x Digital Output (Alarm Relay)
-1 x Digital Input

■LED
-P1, P2, STA, ALM, Master, Ring, EXP, Link/ACT, PoE

■Forward / Filter Rate
-10M : 14,880/14,880pps
-100M: 148,800/148,800pps
-1000M: 1,488,000/1,488,000pps

■Layer 2 Switch Features

VLAN
-IEEE 802.1q tag VLAN
-VLAN concurrent groups: 2K VLAN Groups
-Port Based VLAN

QoS
-QoS based on 802.1p CoS, VLAN and DSCP
-QoS Priority Queues : 8 Queues
-SPQ and WRR
-Port based rate limit

Network Redundancy
-STP IEEE 802.1d
-RSTP IEEE 802.1w
-CTS Fast Ring v2
-LACP algorithm of source / destination IP, MAC , L4 Port
-Static Port Trunking
-Up to 5 Aggregation Groups, 6 ports per Group

Multicast
-IGMP Snooping v1/v2
-IGMP Fast Leave
-Static Multicast Configuration

■Security
-802.1x Port Base Access Control
-802.1x RADIUS Authentication
-802.1x MAC Authentication Bypass

■Management
-SNMP v1/v2c/v3
-WEB/Telnet/SSH/CLI Interface
-Text Base CLI Configure file
-Port Configuration Speed/Duplex/Flow Control/ Description
-SNTP
-Static MAC address Table

■Maintenance

Diagnostic
-Event log
-Syslog
-SFP SFF-8472 DDMI monitor

Upgrade/Restore
-HTTP/FTP/TFTP Firmware & configuration update
-DHCP Auto-provision

Monitoring
-Switch Port Status, Traffic, Packet Error, Packet Analysis Statics

■ Power Requirement
Input DC: 48 ~ 54VDC
Redundant Input Terminals
Caution: Use 14AWG or better powering wire
Power Consumption: 495W
Total PoE Budget: 480W

■ Environmental Condition
Operation : -40˚C ~ 75˚C
Storage Temperature : -40˚C ~ 85˚C
Humidity: 5% ~ 90%, Non-condensing

■ Dimension & Weight
Size: 80 x 135 x 200 mm (W x D x H)
Weight: 1.84 Kg
Housing: Aluminum, IP30

■ EMC/Safety
FCC Class A, CE
ITU-T K.21
Shock: IEC 60068-2-27
Freefall: IEC 60068-2-32
Vibration: IEC 60068-2-6

Order Information

IPS-3112-PoE++

Model	Fiber Ports			TP Ports		Support Power Source
	Speed	Type	Ports	Speed	Ports	
IPS-3112-PoE++	100/1000Mbps	SFP	4	10/100/1000Mbps	8 with Max. 60W PoE injector	Terminal Block with 2 Power Input

Accessory

Power Supply

Model	Description	Remarks
SDR-480-48	48V/480W Din-Rail Power Supply	Working Temperature: -25˚C ~ 70˚C
SDR-240-48	48V/240W Din-Rail Power Supply	Working Temperature: -25˚C ~ 70˚C
SDR-120-48	48V/120W Din-Rail Power Supply	Working Temperature: -25˚C ~ 70˚C
SDR-75-48	48V/75W Din-Rail Power Supply	Working Temperature: -25˚C ~ 70˚C
NDR-480-48	48V/480W Din-Rail Power Supply	Working Temperature: -20˚C ~ 70˚C
NDR-240-48	48V/240W Din-Rail Power Supply	Working Temperature: -20˚C ~ 70˚C
NDR-120-48	48V/120W Din-Rail Power Supply	Working Temperature: -20˚C ~ 70˚C
NDR-75-48	48V/75W Din-Rail Power Supply	Working Temperature: -20˚C ~ 70˚C
MDR-60-48	48V/60W Din-Rail Power Supply	Working Temperature: -20˚C ~ 70˚C

SFP-31-D

Model	Fiber Port					Operating Temperature
	Speed	Type	Connector	Distance	Wavelength	
SFP-31FC-D	1000Mbps	MM	LC	550M	850nm	-40˚C ~ 85˚C
SFP-31FC-(MM-02)-D	1000Mbps	MM	LC	2KM	1310nm	-40˚C ~ 85˚C
SFP-31FC(SM-10/20)-D	1000Mbps	SM	LC	10/20KM	1310/1310nm	-40˚C ~ 85˚C
SFP-31W2A(SM-10/20)-D	1000Mbps	WDM	LC	10/20KM	TX: 1310/1310nm	-40˚C ~ 85˚C
					RX: 1550/1550nm	
SFP-31W2B(SM-10/20)-D	1000Mbps	WDM	LC	10/20KM	TX: 1550/1550nm	-40˚C ~ 85˚C
					RX: 1310/1310nm	

Connection Technology Systems (CTS) reserves the right to change specification without prior notice.