

# IES-3110 Managed Industrial Switch



8 x 10/100/1000Mbps RJ-45, plus 2 Combo Uplink Ports (10/100/1000Mbps RJ-45 + 100/1000 SFP Slot)

## Features

- Provide 10 RJ-45 Copper Ports & 2 SFP Ports 100Base-FX or 1000Base-X (SX/LX/LH)
- Support 9K Jumbo Frames
- L2 Wire-Speed Switching Engine
- 16K MAC Forwarding Addresses
- Network Redundant LACP, Spanning Tree STP, RSTP and Fast Ring, Fail-Over Protection (< 50 ms)
- Port-Based /Tag-Based VLAN, IEEE 802.1ad/Q-in-Q VLAN, Add/Remove VLAN Tags
- Multicast/Broadcast/Flooding Storm Control
- Dual Power Input (12~54 VDC) & Reverse Power Protection
- DIN-Rail and Wall Mount (Optional)
- Extended Operation Temperature -40°C ~ 75°C
- All Aluminum Housing for Excellent Heat Dissipation

## Description

Connection Technology Systems (CTS) IES-3110 Industrial Switch are the Fast & Gigabit Ethernet 10/100/1000Base-T to 100/1000Base-X Industrial Switch. It switches the traditionally twisted-pair RJ-45 cable into various fiber optics media. IES-3110 offer easy management of uplink port (10/100/1000Mbps RJ-45 + 100/1000 SFP slot). The fiber optical port of IES-3110 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 IES-3110 Industrial Switch are designed for deployment at industrial sites. With DIN-rail mounting, you can easily mount the Industrial Switch at your sites such as factory or warehouse. The two Terminal Blocks can provide power redundancy to prevent any possible power outage and digital output to serve as an alarm.

The IES-3110 Industrial Switch provide an extended operating temperature (-40°C ~ 75°C) to withstand against harsh environment for better performance. IES-3110 are fully compliant with IEEE standards such as IEEE 802.3/802.3u/802.3ab/802.3az to ensure interoperability between network devices.

The IES-3110 Industrial Switch provide easy management ways via telnet CLI and SNMP. To fulfill the requirement of mass deployment, the device also supports DHCP auto-provision mechanism to allow the network administrator to manage the device configuration automatically and dynamically.

## Target Applications

- Point-to-Point Fiber Connectivity under Harsh Surroundings.
- Long-Distance IP Surveillance Network Deployment.
- Factory, Parking Lot, ITS, Smart City Network Deployment.

## Specification

### ■Interface

- RJ-45:
  - 8 x 10/100/1000Mbps RJ-45
- RJ-45/SFP Combo:
  - 2 x Combo Ports (10/100/1000 RJ-45 + 100/1000 SFP Slot)
- USB: 1 x USB2.0 (Host Type A)
- Console: 1 x RS-232 (RJ-45)

### ■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 Port based Network Access Control

### ■H/W Specification

- MAC Address Table: 16K
- Non-blocking Switching Fabric: 20Gbps
- Jumbo Frame: 9K Bytes
- Store and Forward Switching Mechanism
- Auto Crossover for MDI/MDI-X in TP Port
- Auto-negotiation in TP Port
- Full/Half Duplex Mode Operation
- VLAN ID: 4K
- 1 Digital Output(Alarm Relay)

### ■LED

P1, P2, ALM, RM, R, Status, LAN, F/O

### ■Forward / Filter Rate

10M : 14,880/14,880pps  
 100M : 148,800/148,800pps  
 1000M : 1,488,000/1,488,000pps

### ■Switch Features

IEEE 802.1q Tag Based VLAN  
 QoS Based on P-bit, VLAN  
 Broadcast Storm Control  
 Port Mirroring  
 IGMP v1/v2  
 Port Trunking  
 Loop Detection

### ■Traffic Management

QoS, SPQ, WRR

### ■Network Management

Telnet CLI  
 SNMP v1/v2c/v3  
 DHCP Client  
 FTP/TFTP/HTTP/USB Firmware Upgrade  
 Dual Image  
 Sntp  
 SSHv2  
 Syslog

### ■Network Redundancy

STP/RSTP, CTS Fast Ring

### ■Installation Type

DIN-Rail Mount, Wall Mount (Optional)

### ■Power Requirement

-DC Input:  
 Redundant Input Terminals  
 -Input Voltage:  
 DC: 12 ~ 54VDC  
 -Power Consumption:  
 DC: 15W

### ■Environmental Condition

Operation: -40°C ~ 75°C  
 Storage Temperature: -40°C ~ 85°C  
 Humidity: 5% ~ 90%, non-condensing

### ■Dimension & Weight

Size : 73 x 110 x 135 mm (W x D x H)  
 Weight : 0.92 Kg  
 Housing : Aluminum, IP30

### ■EMC/Safety

FCC Class A, CE  
 Shock: IEC 60068-2-27  
 Freefall: IEC 60068-2-32  
 Vibration: IEC 60068-2-6

## Order Information

### IES-3110

Model	Fiber Ports					TP Ports		Support Power Source
	Speed	Type	Connector	Distance	Ports	Speed	Ports	
IES-3110SFP	100/1000 Mbps	SFP	-	-	2 Combo	10/100/1000 Mbps	10	Terminal Block with 2 Power Input