10-Port Gigabit Managed Industrial Ethernet Switches

■ Optional 2~8*10/100/1000BaseT(X) Ethernet RJ45 ports, rate self-adaptation, full/half duplex mode, MDI/MDI-X self-adaption
■ 0~8*1000M SFP slots, adaptable to 1000M SFP optical module(support SM/MM)or 1000M SFP electric interface module(Support twisted pair transmission)
■ Support Web, CLI and SNMP three management modes, CLI can log in with Telnet and CONSOLE
■ Support QoS, IGMP, GMRP, 802.1Q VLAN function
■ Support RSTP, ERPS and CK-ring, for network redundancy, Self-healing time of ring network < 20ms
■ Support relay alarm output for power supply, port and ring network status alarm
■ Adopt with high strength IP40 housing and industrial EMC design
■ Support redundant wide range voltage (12~48V DC) power input, full-load power consumption < 11W
■ Support DIN-Rail Mounting installation
■ Working temperature : -40~85℃ to meet the application in harsh environment

Product Overview

10-Port Gigabit Managed Ethernet Switches adopt with high strength IP40 protective housing, industrial EMC design, support wide range redundant power input (12~48V DC) to increase the reliability of communication network. Provide powerful management function that can be managed through Web browser, command line (CLI) and SNMP. Support 2~8*10/100/1000BASE-T(X) RJ45 ports and 0~8*1000BASE-X SFP slots, the optical and electrical combination can be flexibly carried out according to the demand of business ports. Base on the industrial installation requirements, DIN35 rail is provided . The products adopt with fan-free, low power consumption, industrial design, - 40 ~ 85℃ working temperature range, which can meet the requirements of various industrial sites and provide a convenient solution for Ethernet communication.

Features

Basic Switching Features

● Support IEEE802.3/802.3u/802.3ab/802.3x, store and forward switching mode

● Support optional 2~8*10/100/1000BaseT(X) RJ45 ports, Auto-Negotiation technology, Automated negotiation rate(10M/100M/1000M), duplex mode(half/full duplex), MDI/MDI-X self-adaption

● Support 0~8 *1000M SFP slots, adaptable to 1000M SFP optical module(support SM/MM)or 1000M SFP electric interface module (Support twisted pair transmission)

● Support broadcast storm suppression function

● Adopt with high strength IP40 housing and industrial EMC design

● Support redundant wide voltage 12~48V DC power input, full load power consumption less than 11W

● -40~85℃ working temperature range

Advanced Industrial Redundant Ethernet Network Features

● Support Web, CLI and SNMP three management modes, CLI can log in with Telnet and CONSOLE

● Support store and Forward Mechanism

● Support port's common feature settings, such as port enabling, adaptive or coercive, flow control, etc.

● Support port mirroring for online debugging and monitoring of network data status

● Support port bandwidth limitation function, optimize bandwidth utilization

● support port aggregation function to expand network bandwidth and improve network transmission efficiency

● Support port priority QoS settings to improve network quality of service

● Support port MAC address learning and data statistics function

● Support 802.1Q VLAN settings to effectively control the broadcast domain

● Support unicast/multicast MAC address management

● Support static IGMP multicast filtering for filtering multicast traffic in industrial Ethernet protocols

● Support GMRP industrial multicast registration protocol for transformer substation application

- Support SNMP V1/V2C/V3 to make network management at different levels secure
- Support RSTP to avoid message multiplication and infinite cycle in loop network
- Support plug and play redundant self-healing ethernet loop network technology (failure recovery time under full Load < 20ms), Support three loop network modes: single loop,

- tangent and intersection
- Support ERPS, industrial Ethernet ring protection technology to meet the application requirements of fast convergence reliability in industry
- Support relay alarm output
- Support whole network system management

Specifications

Interfaces

- RJ45 port: 10/100/1000Base-T(X)rate self-adaptation, Full/Half Duplex mode, MDI/MDI-X self-adaption
- SFP interface: 1000BASE-X SFP optical interface, adaptable to 1000M SFP optical module(support SM/MM)or 1000M SFP electric interface module(Support twisted pair transmission)
- Console: RS-232(RJ45 connector)
- Warning output: 1 relay output, current load capacity DC24V/1A
- Power input: Dual power input, adopt with 4 cores pluggable 7.62mm spacing standard industrial terminal

Exchange Property

- 10M forwarding speed:14881pps
- 100M forwarding speed:148810pps
- 1000M forwarding speed: 1488095pps
- Transmission way: Store and forward.
- System switching bandwidth:20Gbps
- Cache size:2Mbits
- MAC address table:8K

Power Requirements

- Support redundant power input, typical working voltage 12V/24V/48V
- Full load power consumption less than 11W
- Built-in overload-Current protection

Relay

- Relay warning output: for port, power or ring failure
- Contact capability: DC24V/1A, industrial terminal

Physical Characteristics

- Dimensions (W x H x D): 150.5mm×51.5mm×125.5mm
- Weight: 900 g
- Housing: IP40 protection, metal housing
- Installation: DIN rail mounting

Environment Limits

- Work Temp.: -40℃~85℃
- Storage Temp.: -40℃~85℃
- Relative Humidity: 5%~95% (no condensation)
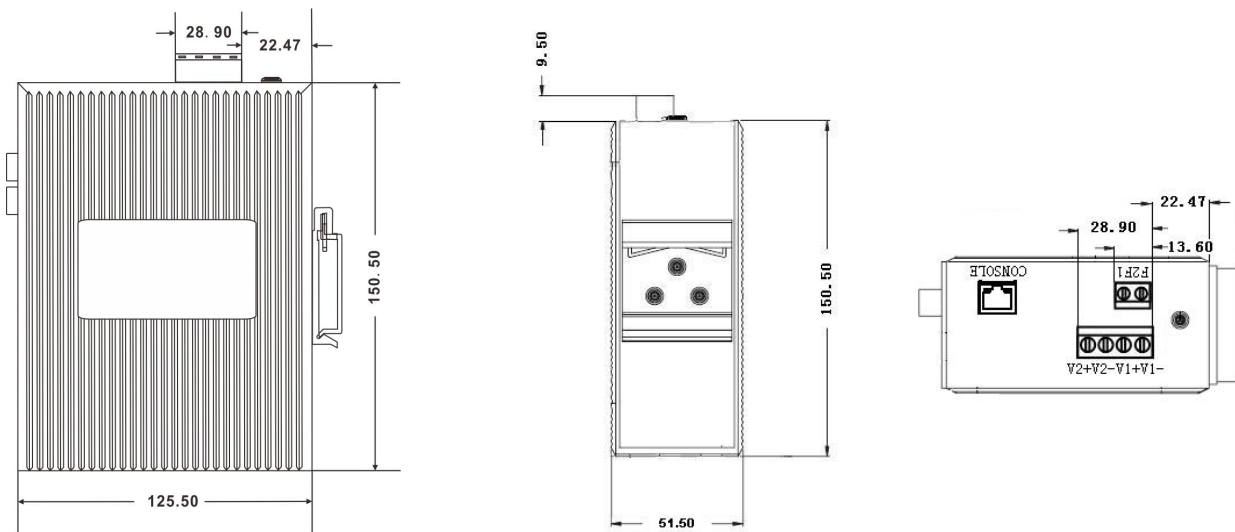
Warranty

- Warranty Period: 5 years

Standard and Certifications

- IEC61000-4-2(ESD): ±6KV Contact Discharge, ±15KV Air Discharge
- IEC61000-4-3(RS): 10V/m (80-1000MHZ)
- IEC61000-4-4(EFT): Power Cable ±2KV, Data Cable ±2KV
- IEC61000-4-5(Surge): Power Cable ±2KV CM/±1KV DM, Data Cable: ±4KV
- IEC61000-4-6(Radio Frequency Conduction): 3V (10KHZ-150KHZ), 10V(150KHZ-80MHZ)

- IEC61000-4-8(Power Frequency Magnetic Field): 100A/M COUNT 1000A/M, 1S TO 3S
- IEC61000-4-12/18(Oscillating Wave): 2.5KV CM, 1KV DM
- IEC61000-4-10(Damped Oscillation): 30A/M
- IEC61000-4-16(Common Mode Conduction): 30V COUNT 300V, 1S
- IEC61000-6-2(General Industrial Standards), IEC61850-3(Transformer Substation), IEEE1613(Power Substation)
- EN50121-4 (Rail Transit)

Dimensions(mm)

Models

Model	Specs
CK7110M-8GTX	Industrial managed switch, 8*10/100/1000BaseT(X) RJ45 ports, DIN35 rail mounting
CK7110M-8GTX2SFP	Industrial managed switch, 8*10/100/1000BaseT(X) RJ45 ports, 2*1000M SFP slots (optical or electrical interface optional, transceiver module not included), DIN35 rail mounting
CK7110M-6GTX4SFP	Industrial managed switch, 6*10/100/1000BaseT(X) RJ45 ports, 4*1000M SFP slots (optical or electrical interface optional, transceiver module not included), DIN35 rail mounting
CK7110M-4GTX6SFP	Industrial managed switch, 4*10/100/1000BaseT(X) RJ45 ports, 6*1000M SFP slots (optical or electrical interface optional, transceiver module not included), DIN35 rail mounting
CK7110M-2GTX8SFP	Industrial managed switch, 2*10/100/1000BaseT(X) RJ45 ports, 8*1000M SFP slots (optical or electrical interface optional, transceiver module not included), DIN35 rail mounting

Package List

- 10-Port Gigabit Managed Industrial Ethernet Switch 1pcs (with 2-core and 4-core 7.62mm industrial terminal)
- Choose the corresponding number of SFP optical modules according to the product model
- Product Manual 1pcs