

20-Port Full-gigabit Managed Industrial Ethernet Switches



- 8-16 fixed 10/100/1000M Ethernet ports; rate self-adaption, full/half duplex mode, MDI/ MDI-X self-adaption; (The number of electrical ports can be selected from 8/12/16)
- 0-4 fixed 1000M SFP interfaces, adaptable to 1000M SFP optical module(support SM/MM)and 1000M SFP electrical interface module(Support twisted pair transmission, the number of SFP interfaces can be 0/4);
- Support Web, CLI and SNMP three management modes, and CLI supports Telnet and console log in;
- Support QoS, IGMP, 802.1Q VLAN function ;
- Support RSTP and CK-Ring for Ethernet redundancy;
- Support relay alarm output for power supply, port and ring network status alarm;
- Support redundant wide range voltage 12~48V DC power input;
- Adopt with high strength IP40 housing and industrial EMC design;
- Working temperature range: -40~85℃, meet various industrial site requirements

Product Overview

20-Port Full-gigabit Managed Industrial Ethernet switches adopt with high strength IP40 protective housing, industrial EMC design, including CK7220M-16GTX、CK7220M-8GTX4SFP、CK7220M-12GTX4SFP and CK7220M-16GTX4SFP four models. They are layer2 Ethernet switches independently developed by Shenzhen Comark Technology Co., Ltd., provide powerful management functions, which can be managed through Web browser, command line (CLI) and SNMP. The products provide 8-16 fixed 10/100/1000M self-adaptive Ethernet ports, 0-4 fixed 1000M SFP interfaces (Optical and electrical ports can be freely combined) .Base on industrial installation requirements, provides standard DIN-rail installation. At the same time, the products adopt with fan-free, low power consumption, industrial design, working temperature range of - 40 ~ 85℃, which can meet the requirements of various industrial sites, and provide convenient Ethernet communication solutions.

Features

Basic Switching Features

- Conform to IEEE802.3/802.3u /802.3ab/802.3z standard, store and forward switching
- Provide 8-16 fixed 10/100/1000M self-adaptive Ethernet ports, Auto MDI/MDIX
- Provide0- 4 fixed 1000M SFP interfaces(optional 1000base-X or 1000base-T module)
- Adopt with high strength IP40 housing and industrial EMC design
- Support redundant wide range voltage 12~48V DC power input. (Standard voltage 24V DC)
- -40~85℃ working temperature range

- CLI supports Telnet and Console log in
- Support store and forward mechanism
- Support common port feature settings, such as port enabling, adaptive or forced, flow control, etc
- Support port mirroring for online debugging and monitoring of network data status
- Support the function of port bandwidth limitation and optimize bandwidth utilization
- support port aggregation function to expand network bandwidth and improve network transmission efficiency.
- Support port priority QoS settings to improve network service quality
- Support port MAC address learning and data statistics functions
- Support 802.1Q VLAN setting and effectively control broadcast domain

Advanced Industrial Redundant Ethernet Network

Features

- Support Web, CLI and SNMP three management modes,

- Support unicast / multicast MAC address management
- Support static IGMP multicast filtering, which is used to filter the multicast traffic in the industrial Ethernet protocol.
- Support multicast, GMRP protocol
- Support broadcast storm suppression function
- Support SNMP V1 / V2C / V3 to make different levels of network management secure
- Support RSTP to avoid message proliferation and infinite loop in the loop network
- supports plug and play redundant self-healing Ethernet ring network technology, and supports three ring network modes: single ring, tangent and intersection.
- Support relay alarm output
- Support the whole network system management

Specification

Technology

- Standard: IEEE802.3、IEEE802.3u、IEEE 802.3ab、IEEE 802.3z、IEEE802.3x、IEEE802.1Q、IEEE802.1p、IEEE802.1d、IEEE802.1w

Interfaces

- RJ45 port:10/100/1000BASE-T rate self-adaption, Full/half duplex mode, MDI/MDI-X self-adaption.
- SFP interfaces:1000BASE-X or SFP Copper 1000Base-T (Support twisted pair transmission)
- Console: RS-232 (RJ45 connector) debugging serial ports

Exchange Property

- 10M forwarding speed:14881pps
- 100M forwarding speed:148810pps
- 1000M forwarding speed:1488096pps
- Transmission way:Store and forward.
- System switching bandwidth:40Gbps
- Cache size:1.5Mbits
- MAC address table:16K

Power Supply

- Direct-current power supply: redundant wide range voltage

12V-48V DC power input, with 2 cores 7.62mm spacing industrial terminal, power supply supports reverse connection protection and non polarity function

- Power consumption: no-load 4 optical ports 16 electrical ports 9.12W/24V; fully loaded 4 optical ports 16 electrical ports 13.44W/24V.

Relay

- Relay alarm output: alarm output of port failure, power failure and ring network failure
- Max. contact capacity:1A@24VDC

Mechanical Properties

- Dimension(W×H×D): 168.4mm×75.0mm×126.8mm
- Net weight: 1.2kg
- Housing: IP40 protection, metal housing
- Installation: DIN-rail installation

Operating Environment

- Working temperature:-40℃~85℃
- Storage temperature: -40℃~ 85℃
- Relative humidity: 5% ~ 95% (no condensation)

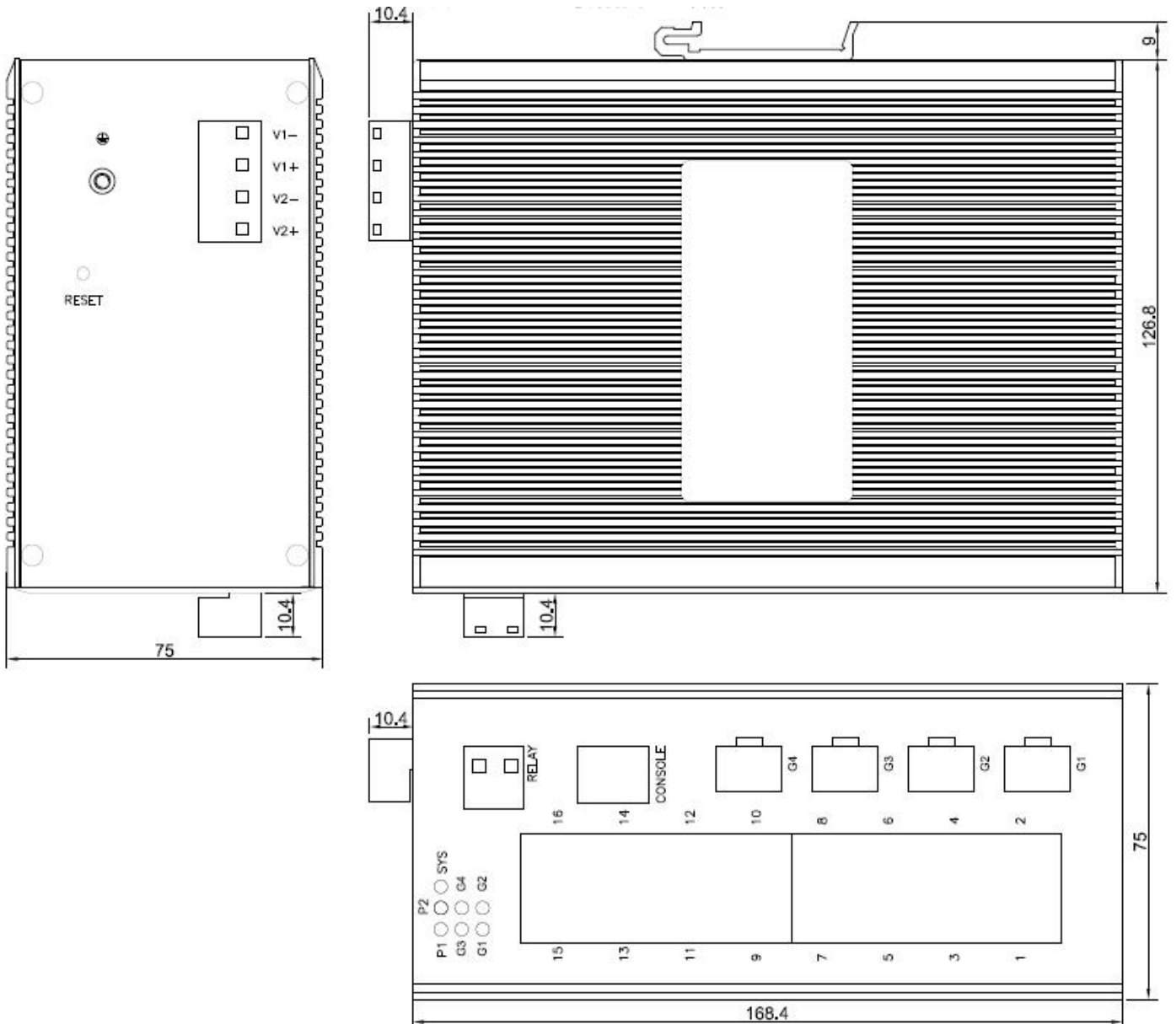
Warranty

- Warranty: 5 years

Standard

- IEC61000-4-2(ESD): ±6KV Contact Discharge, ±8KV Air Discharge
- IEC61000-4-3(RS): 10V/M (80-1000MHZ)
- IEC61000-4-4(EFT): Power Cable ±1KV, Data Cable ±4KV
- IEC61000-4-5(Surge): Power Cable ±2KV CM/±1KV DM, Data Cable: ±2KV
- IEC61000-4-6(Radio Frequency Conduction): 3V (10KHZ-150KHZ), 10V (150KHZ-80MHZ)
- IEC61000-4-16(Common Mode Conduction) :
- 30V(cont.),300V(1s)
- IEC60068-2-6 (Vibration)
- IEC60068-2-27 (Shock)
- IEC60068-2-32 (Free fall)
- IEC61000-6-2(General Industrial Standards), IEC61850-3(Transformer Substation), IEEE1613(Power Substation)
- EN50121-4(Rail Transit)

Dimension(mm)



Product Models

Product Models	Specification & Descriptions
CK7220M-16GTX	Industrial Managed Switch,16*10/100/1000M self-adaptive Ethernet ports.
CK7220M-8GTX4SFP	Industrial Managed Switch,8*10/100/1000M self-adaptive Ethernet ports, 4*1000M SFP interfaces.
CK7220M-12GTX4SFP	Industrial Managed Switch,12*10/100/1000M self-adaptive Ethernet ports,4*1000M SFP interfaces.
CK7220M-16GTX4SFP	Industrial Managed Switch,16*10/100/1000M self-adaptive Ethernet ports,4*1000M SFP interfaces.

Package List

- 20-Port Full-Gigabit Managed Industrial Ethernet Switch 1pcs (with industrial power terminal and debugging serial port wire)
- Product Manual 1pcs