

### 24\*FE+4\*GE Managed Industrial Ethernet Switch

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- Max to 24\*10/100BASE-T(X) RJ45 ports;
  - Max to 8\*10/100BASE-TX RJ45 or 100BASE-FX ports (SC/ST/FC optional);
- 4\*Gigabits SFP slots, any support 1000M SFP fiber module(support SM/MM) or
- electrical module;

- Support Web, CLI and SNMP;
- Support QoS, IGMP, 802.1Q VLAN;
  Support CK-Ring for Ethernet redundancy;
- Support ck-king for Enternet redundancy,Support relay alarm output, used in power supply, ports, ring network power
- supply for the alarm;
- High strength IP40 shell and industrial-grade EMC design;
- Support redundant dual voltage 110/220VAC power input, or 220VDC or 48VDC power input;
- Support the standard 19" rack-mountable installation, optional wall-mounted installation;
- Operating temperature range: -40~75  $^{\circ}$ C, suitable for industrial environment applications

## **Product Overview**

CRS7100 series are rack-mount switches designed for industrial applications, such as traffic control system, electric power network system, various kinds of wind power photovoltaic system. CRS7100 series support gigabit and fast Ethernet backbone network, double redundant ring-network and the isolation of dual power input (220VDC or 48VDC or 110/220VAC), enhance the communication stability, save the customer network cabling costs. CRS7100 have different ports combination to meet the diverse needs for all kinds of industrial environment.

## Features

### **Basic Switching Features**

- IEEE802.3/802.3u /802.3ab /802.3z protocol, store and forward switching
- Max 24\*10/100BASE-T (X) RJ45 port, or 16\* 10/100BASE-T (X) RJ45 and 8\*100 BASE-FX slots(SC/ST/FC/SFP optional)
- RJ45 ports support Auto-Negotiation speed, and auto-duplex (half duplex/full duplex), MDI/MDI-X mode.
- 4\*1000BASE-X SFP interfaces
- Metal housing with IP40 protection and EMC industrial level 4
- Support redundant dual voltage 100~240VAC power input(220VDC or 48VDC optional)
- Operating temperature range: -40~75°C

Advanced Industrial Ethernet Network Features

- Web, CLI and SNMP management, CLI can login with Telnet and CONSOLE
- Store and forward switching
- Port setting, e.g., Enable/disable the port, speed or mode setting, flow control
- Port Mirroring to debug online or monitor the data status
- Rate-limit to optimize the bandwidth of network

- Port trunking to expand the bandwidth and improve the efficiency of the network
- QoS setting to improve the quality of the service
- Port MAC-address learning and statistics
- 802.1Q VLAN to control multicast domain
- Unicast/multicast MAC-address management
- IGMP multicast filtering, static filters in the multicast flow in the industrial Ethernet protocol.
- Broadcast storm control
- SNMP V1/V2C/V3 make security for different levels of network management.
- RSTP avoid hyperplasia and infinite of message in the loop network.
- CK-Ring provide redundancy self-healing for network, support single ring, tangent and intersection of three ring network model
- Support relay alarm output.
- Rich network system management

# Specification

### Interfaces

- RJ45 port: 10/100BASE-T(X) auto-Negotiation speed, auto duplex mode and MDI/MDI-X connection.
- SFP port: 1000BASE-X SFP optical port, 1000M SFP optical module (single-mode and multimode) and 1000M SFP electrical module
- Fiber port: 1000Base-X full Duplex (default SC port, FC/ST optional), max to 120 km
- Console: RS-232 (RJ45 connector).
- Alarm output: 1 relay output

### **Exchange Property**

- Ten trillion forwarding speed:14881pps
- Fast forwarding speed:148810pps
- Gigabit forwarding speed:1488096pps
- Transmission way:Store-and-forward.
- Switching bandwidth:12.8Gbps
- Buffer memory size:1.5Mbits
- MAC address table:16K

### **Power Supply**

Wide range of redundancy dual 100~240V AC(50~60Hz
 1.2A) voltage power input, Using three-wire single-phase

### Standard

- IEC61000-4-2(ESD): ±6KV touch, ±15KV air
- IEC61000-4-3(RS): 10V/M (80-1000MHZ)
- IEC61000-4-4(EFT): Power cable ±4KV, data cable ±2KV
- IEC61000-4-5(Surge): Power cable ±4KV CM/±2KV DM, data cable ±4KV
- IEC61000-4-6(CS):
  - 3V(10KHZ-150KHZ),10V(150KHZ-80MHZ)
- IEC61000-4-16: 30V(cont.),300V(1s)
- IEC60068-2-6
- IEC60068-2-27
- IEC60068-2-32
- IEC61000-6-2, IEC61750-3, IEEE1613
- EN50121-4

power cord

 Wide range of redundancy dual 220V DC(48V DC optional) voltage power input, adopt 2 cores 7.62mm industrial terminal port,Built-in over-current protection

### Relay

- Relay: Port failure, power failure, and ring failure error alarm output
- Contact rating: 1A@24VDC

#### **Mechanical Properties**

- Dimension(W×H×D): 482.6mm×44mm×275mm
- Net weight: 3.15 Kg
- Shell: IP40 protection grade, metal casing
- Installation: racks installed (optional wall-mounted)

### **Operating Environment**

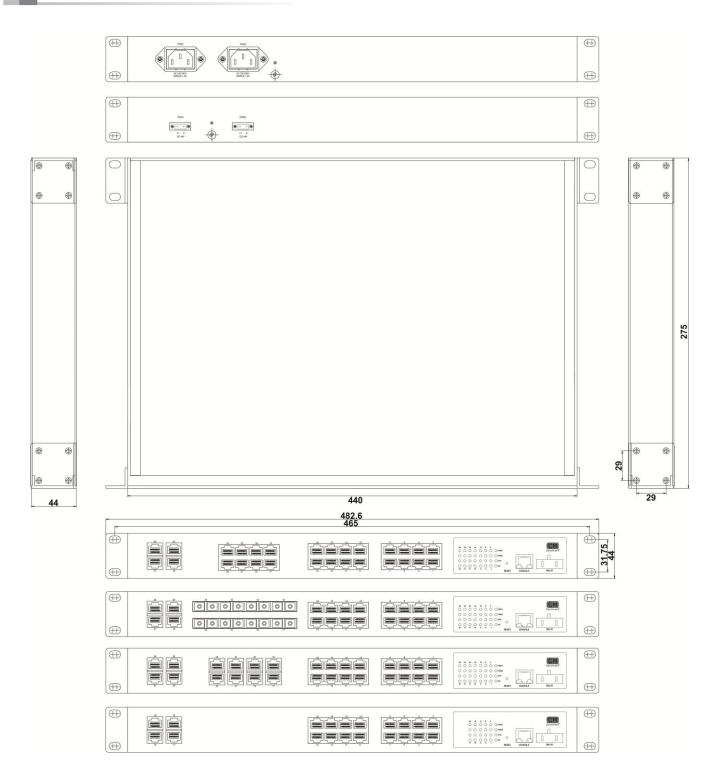
- Working temperature:-40°C~75°C
- Storage temperature: -40°C~ 85°C
- Relative humidity: 5% ~ 95% (no condensing)

#### Warranty

Warranty: 5 years



# **Dimension**(**mm**)





# **Product Models**

Product Models	Specification & Descriptions	
CRS7128-8TX	24*FE+4*GE Managed Industrial Ethernet, 24*10/100BASE-T(X) RJ45 ports, 4*1000M SFP ports (Optional fiber or electrical module), rack installation	
CRS7128-8FX	24*FE+4*GE Managed Industrial Ethernet, 16*10/100BASE-T(X) RJ45, 8*100BASE-FX optical ports (SC/ST/FC optional), 4*1000M SFP ports (Optional fiber or electrical module), rack installation	
CRS7128-8SFP	24*FE+4*GE Managed Industrial Ethernet, 16*10/100BASE-T(X) RJ45, 8*100BASE-FX SFP ports (Fiber or electrical module), 4*1000M SFP ports(Optional fiber or electrical module), rack installation	
CRS7120	16*FE+4*GE Managed Industrial Ethernet, 16*10/100BASE-T(X) RJ45 ports, 4*1000M SFP ports (Optional fiber or electrical module), rack installation	

# Package List

- 24\*FE+4GE Industrial Ethernet Switch 1 pcs
- Product Manual 1pcs
- Product Warranty 1pcs