

### 20-Port 100M Unmanaged Switches



- 16\*100M Ethernet RJ45 ports, Rate Self-Detection, Full/Half Duplex Mode, MDI/MDI-X self-adaption
- $\blacksquare$  0~4\*100M optical interfaces, default SC interface, FC/ST optional, max transmission up to 120 km
- Support redundant wide voltage 12~48V DC power input
- Adopt with high strength IP40 housing and industrial EMC design
- Support DIN-Rail mounting installation
- Working temperature range: -40~85°C, to meet the requirements of various industrial sites

# **Product Overview**

20-Port 100M Unmanaged Switches adopt with high strength IP40 protective housing, industrial EMC design, including Ck4016  $\$  Ck4016-2FX Ck4016-4FX three models, two-layer Ethernet switches are independently developed by Shenzhen Comark Technology Co.,Ltd. Support auto negotiation adaptive technology, provide comprehensive LED status indication, support 12 ~ 48V DC power input to increase the reliability of communication network. Provide 16\*10/100 Base-T (X) RJ45 ports and 0-4\*100 Base-FX optical ports (optional FC, ST). Base on industrial installation requirements, DIN35 rail installation mode is provided. The products adopt excellent network scheme in the industry, working temperature range of - 40 ~ 85°C, can meet the requirements of various industrial sites, and provide convenient Ethernet communication solutions.

### Features

- Conform to IEEE802.3/802.3u, store and forward switching
  Provide 16\*10/100BaseT(X) RJ45 ports, Auto-Negotiation
  - technology, Automated negotiation rate(10M/100M),Duplex mode(half/full duplex) and MDI/MDI-X self-adaption
- Provie 0~4\*100BaseFX optical interfaces ,default SC interface,

## **Specifications**

#### **Technical Standard**

Protocol: IEEE802.3, IEEE802.3u

#### Interfaces

- RJ45 port: 10/100BaseT(X) Rate Self-Detection, Full/Half Duplex, MDI/MDI-X self-adaption
- Fiber interface: 100BaseFX full Duplex, default SC interface, FC/ST optional, max transmission up to 120 km

#### **Exchange Property**

- 10M forwarding speed:14881pps
- 100M forwarding speed:148810pps
- Transmission way: Store and forward.
- System switching bandwidth:4Gbps
- Cache size:4Mbits
- MAC address table:16K

FC/ST optional, transmission up to 120 km

- Adopt with high strength IP40 housing and industrial EMC design
- Provide wide range power voltage with 12~48V DC inputs
- -40~85°C working temperature range

#### **Power Requirements**

- Redundant wide range voltage 12~48V DC input, typical working voltage 12V/24V/48V,with 4 cores 7.62mm industrial terminal.
- Idle running power: 4 optical 16 electric 5.28W/16 electric 2.16W (@24VDC)
- Full load power: 4 optical 16 electric 7.2/16 electric 3.84W (@24VDC)

#### **Physical Characteristics**

- Dimensions (W×H×D): 75.4mm×168.4mm×125.5mm
- Weight: 1050 g
- Housing: Metal, IP40 protection
- Installation: DIN rail mounting

#### **Environment Limits**

- Work Temp.: -40°C~85°C
- Storage Temp.: -40°C~85°C
- Relative Humidity: 5%~95% (non-condensation)

# **Standards and Certifications**

- IEC61000-4-2(ESD): Power Cable:±8KV Contact Discharge,
  - $\pm 15 KV$  Air Discharge ;Data Cable:  $\pm 6 KV$  Contact Discharge,
  - $\pm 15 KV$  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

## **Dimensions(mm)**

(10KHZ-150KHZ), 10V (150KHZ-80MHZ)

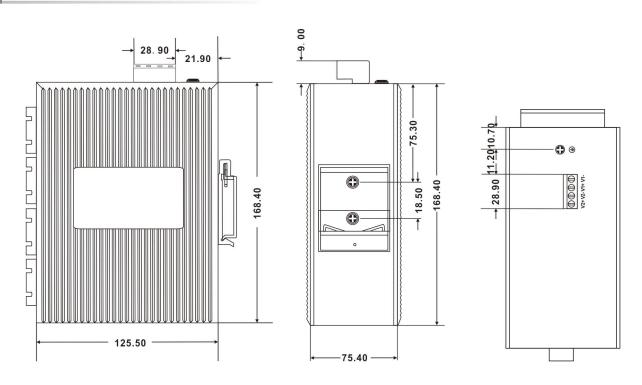
- IEC61000-4-16(Common Mode Conduction): 30V COUNT 300V, 1S
- IEC60068-2-6 (Vibration)

Warranty Period: 5 years

IEC60068-2-27(Shock)

Warranty

- IEC60068-2-32(Free Fall)
- IEC61000-6-2(General Industrial Standards)



# Models

Model	Specs
Ck4016	100M Unmanaged switch,16*10/100BaseT(X) RJ45 ports, DIN35 rail mounting, -40°C~85°C .
Ck4016-2FX	100M Unmanaged switch,16*10/100BaseT(X) RJ45 ports, 2*100BaseFX fiber interfaces (single-mode/multi-mode), DIN35 rail mounting, -40°C~85°C .
Ck4016-4FX	100M Unmanaged switch,16*10/100BaseT(X) RJ45 ports, 4*100BaseFX fiber interfaces (single-mode/multi-mode), DIN35 rail mounting, -40°C~85°C .

### **Package List**

- 20-Port Unmanaged Industrial Ethernet Switch 1pcs (with industrial terminal for power supply)
- Product Manual 1pcs