



- 8*10/100/1000M + 2*1000M SFP fiber Port Industrial Switch, and 1 console port;
- L2+ features provide better manageability, security, QoS, and performance;
- Support L2+ Switching features including 802.1Q VLAN, Mirroring, Port isolation, IGMP Snooping, DHCP Snooping, LLDP, management, IP Source Guard, ARP inspection, ACLs etc;
- Support spanning tree STP(802.1D) and RSTP(802.1W);
- Switching capacity:192Gbps, MAC table:8K;
- Input voltage: DC12-48V, Redundant dual power 5-bit industrial terminals;
- IP protection level: IP40; Rail-type installation;

RoHS **FC** **CE**

Introduction

The XC-IS3810M is a full Gigabit managed industrial switch. it has 8*10/100/1000M ports and 2*100/1000 SFP fiber slot ports, It is suitable for intelligent transportation, rail transportation, electric power industry, mining, metallurgy and green energy construction and so on. A reliable communication networks.

Managed model supports a variety of network redundancy protocol STP/RSTP/MSTP (<50ms). When one-way network fails, communication can be recovered quickly to ensure uninterrupted communication of important applications. XC-IS3810M industrial series products fully follow industrial product design and material. The shell adopts aluminum alloy to enhance heat dissipation efficiency, IP40 protection grade, and ensures the stable operation of the equipment in bad environment. According to the actual application needs, through Web, CLI, SNMP network management, power supply management, port flow control, VLAN division, STP, RSTP and other functions of the application service configuration.

TECHNICAL SPECIFICATION

Model	XC-IS3810M
Interface	8*10/100/1000Base-TX ports (Data)

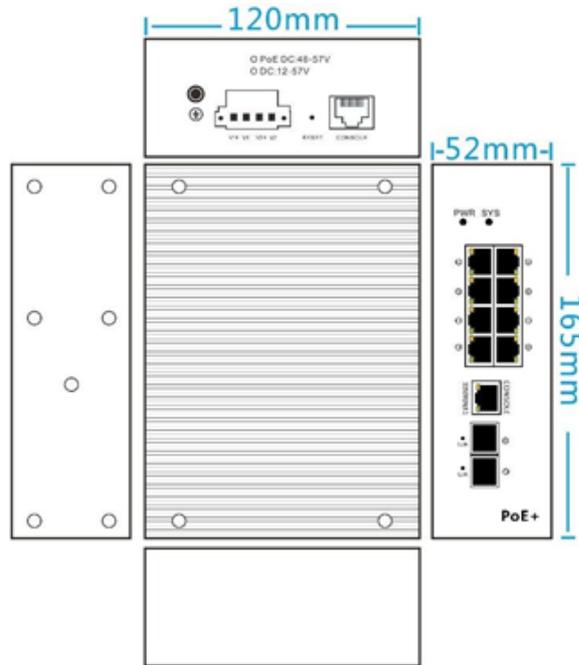
	2*10/100/1000M RJ45 ports (Data) 1 * RS232 console port (115200, N,8,1) 2 set of V+, V- redundant DC power interface (5 Pin Phoenix terminal)
Network Protocol	IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u 100Base-TX; IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X; IEEE802.3x
Ethernet Port Feature	10/100/1000BaseT (X) automatic detection, full / half duplex MDI/MDI-X adaptive
SFP Port Characteristic	Gigabit SFP optical fiber interface, default matching optical modules, need to buy separately, (optional order mode / multi-mode, single fiber / double fiber optical module.
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	192bps (Non-blocking)
Forwarding Rate@ 64byte	14.88Mpps
MAC	8K
Buffer Memory	4M
Jumbo Frame	10K
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP (≤ 100 meter) 100BASE-TX: Cat5 or later UTP (≤ 100 meter) 1000BASE-T: Cat5e or later UTP (≤ 100 meter)
Optical Cable	Multimode: 850nm 0 ~ 500M; Single mode: 1310nm 0 ~ 40KM, 1550nm 0 ~ 120KM.
Working Voltage	24-48VDC; 5 Pin industrial Phoenix terminal, support anti-reverse protection.
Power Consumption	Standby:<10W; Full load:<240W
LED Indicator	System indicator: SYS (green); Network Indicator: Link (yellow); SFP Indicator: L/A (green); PoE Indicator: PoE (green)
Operation TEMP / Humidity	-40~+75°C;5%~90% RH Non condensing
Storage TEMP / Humidity	-40~+85°C;5%~95% RH Non condensing
Dimension	165*120*52mm
Net /Gross Weight	<0.8kg / <1.2kg
Lightning protection / protection level	Lightning protection: 6KV 8/20us; Protection level: IP40 IEC61000-4-2(ESD): ± 8 kV contact discharge, ± 15 kV air discharge IEC61000-4-3(RS):10V/m(80~1000MHz) IEC61000-4-4(EFT): power cable: ± 4 kV; data cable: ± 2 kV IEC61000-4-5(Surge): power cable:CM ± 4 kV/DM ± 2 kV; data cable: ± 4 kV IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz) IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m ,1s to 3s IEC61000-4-9(pulsed magnet field):1000A/m

	IEC61000-4-10(damped oscillation):30A/m 1MHz IEC61000-4-12/18(shockwave):CM 2.5kV, DM 1kV IEC61000-4-16(common-mode transmission):30V; 300V,1s FCC Part 15/CISPR22(EN55022): Class B IEC61000-6-2(Common Industrial Standard)
Mechanical Properties	IEC60068-2-6 (anti vibration) IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)
Certification	CCC; CE mark, commercial; CE/LVD EN60950; FCC Part 15 Class B; RoHS;
Business features (only restricted management function models)	
Port	Support IEEE802.3x flow control (full duplex) Support for broadcast storm suppression based on port rate support speed limit for incoming and offline message traffic, with a minimum particle size of 64Kbps. Support port temperature protection settings Support port EEE green Ethernet energy saving configuration
Layer 3 Function	L2+ network management function Support IPV4/IPV6 management Support layer3 soft routing (weak three tier) forwarding, Support different network segments, communication between different VLAN Support static routing / default routing 128, 1024 ARP software forwarding
VLAN	Support port based VLAN (4K), IEEE802.1q Support protocol based VLAN Support Voice VLAN Support for MAC address-based VLANs Support Access, Trunk, Hybrid three types of port configuration Support QinQ configuration
Port Aggregation	Support LACP Support static polymerization Support the largest 8 aggregation groups, each aggregation group supports 8 ports.
Spanning Tree	Support STP (IEEE802.1d) Support STPRSTP (IEEE802.1w) Support STP MSTP (IEEE802.1s)
Industrial Ring Network Protocol	Support G.8032 (ERPS), support 255 loops at most, and supports 1024 devices per ring. The self-healing time of the ring network is less than 20ms
Multicast	Support IGMP Snooping V1/V2 and support 1024 multicast groups at most. Support the user's quick departure mechanism Support MLD Snooping V1/V2 Support multicast VLAN
Mirror	Bi-directional traffic mirroring supporting the basic port
QoS	Support Diff-Serv QoS Each port supports 8 output queues

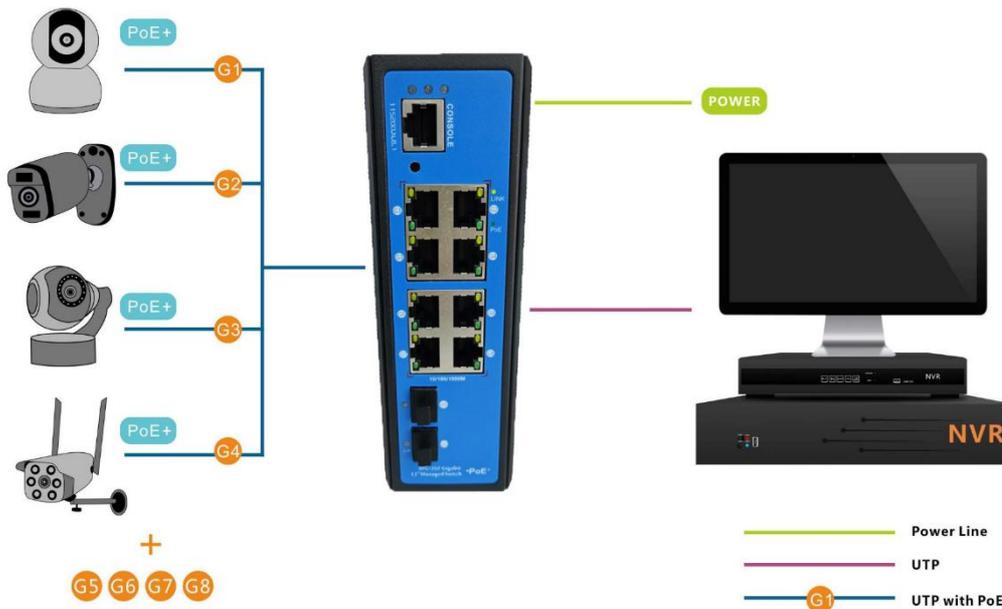
	<p>Support 802.1p/DSCP priority mapping</p> <p>Support queue scheduling mechanism (SP, WRR, SP+WRR)</p> <p>Support priority tag Mark/Remark</p> <p>Support stream-based packet filtering</p> <p>Support for stream-based redirection</p> <p>Support flow-based speed limit</p>
ACL	<p>Support L2 to L4 packet filtering function, can match the first 80 bytes of the message, provide based on the source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN and other definition ACL.</p> <p>Support ACL based on port and VLAN</p>
Safety Characteristics	<p>Support user grading management and password protection</p> <p>Support IEEE802.1X authentication / centralized MAC address authentication</p> <p>Support AAA&RADIUS authentication</p> <p>Support the number of MAC address learning restrictions</p> <p>Support MAC address black hole</p> <p>Support SSH 2.0 to provide secure passwords for user login.</p> <p>Support SSL to ensure data transmission security</p> <p>Support port isolation</p> <p>Support the speed limit function of ARP message</p> <p>Support IP source address protection</p> <p>Support ARP intrusion detection function</p> <p>Support against DoS attacks</p> <p>Support port broadcast message suppression</p> <p>Support host data backup mechanism</p> <p>Binding capabilities of IP+MAC+VLAN+ ports</p>
DHCP	<p>Support DHCP Client</p> <p>Support DHCP Snooping</p> <p>Support DHCP Serve</p> <p>Support DHCP Relay</p>
Management and Maintenance	<p>Support Console/AUX Modem/Telnet/SSH2.0 CLI command line configuration</p> <p>Support WEB network management (HTTPS)</p> <p>Support FTP, TFTP, Xmodem, SFTP file download management</p> <p>Support SNMP V1/V2C/V3</p> <p>Support one bond reduction</p> <p>Support NTP clock</p> <p>Support system work log</p> <p>Support Ping detection</p> <p>Support cable state detection</p> <p>Support CPU instant utilization status view</p> <p>Support link layer discovery protocol LLDP</p> <p>Support NMS intelligent management center</p>
System Requirements	<p>Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later;</p>

Cat5e or later Ethernet cable;
TCP/ IP, network adapter and network operating system (Microsoft Windows, Linux or Mac OS X) installed on every computer in the network.

DIMENSION



APPLICATION





PACKING LIST

CONTENT	QTY	UNIT
10 Ports Full Gigabit Managed Industrial Switch (XC-IS3810M)	1	SET
User Guide	1	PC
Warranty Card	1	PC