Layer 3, 24* 10/100Base combo port +4-port Gigabit SFP

➢ Features

- Support 24* 10/100Base combo port +4-port Gigabit SFP;
- Comply with IEC61850-3 standard;
- Support RIP, OSPF, PIM Layer 3 Routing protocol;
- Support MW-Ring, MSTP, VRRP, EAPS redundancy network;
- Support multiple management methods and network centralized management；
- Support Front and rear indicator lights design
- Support firmware upgrade online;
- Support relay alarm output;
- Support indicator status display;
- Support Broadcast storm suppression;
- Support dual AC/DC 220V power supply;
- Power supply input support anti-reverse protection and non-polarity;
- Support over Voltage, over current, EMC protection;
- Support wide operating temperature range from -40-85°C;
- 1U, 19-inch Rack-mount Installation;
- Warranty:5years

➢ Introduction

ICS1028-4GS is an industrial grade, Rack-mount, layer3, Managed Ethernet switch which supports 24*10/100M combo port + 4-port Gigabit SFP. providing sufficient data for aggregation and core data exchange of the bandwidth; to provide high-capacity switching capabilities to support based on the three layers of ACL function. Perfect security control strategy and CPU protection policy to improve fault tolerance and ensure stable operation of the network and link load balancing.

UPCOM ICS1028-4GS not only supports rich Layer 2 software features such as ports, VLANs, multicast, QoS, and fast redundant rings, but also supports static and dynamic routing, multicast routing, and supports multiple management methods of Console, Web, and host computer network management software, can satisfied the requirement of various industrial applications such as Intelligent Transportation System, Security Surveillance, Industrial Automation, Smart Grid, Rail Transportation Industry, Safely City, and New Energy, etc.

➢ Application

- Intelligent Transportation System
- Industrial Automation
- Security Surveillance
- New Energy and Utilities
- Data Center Network
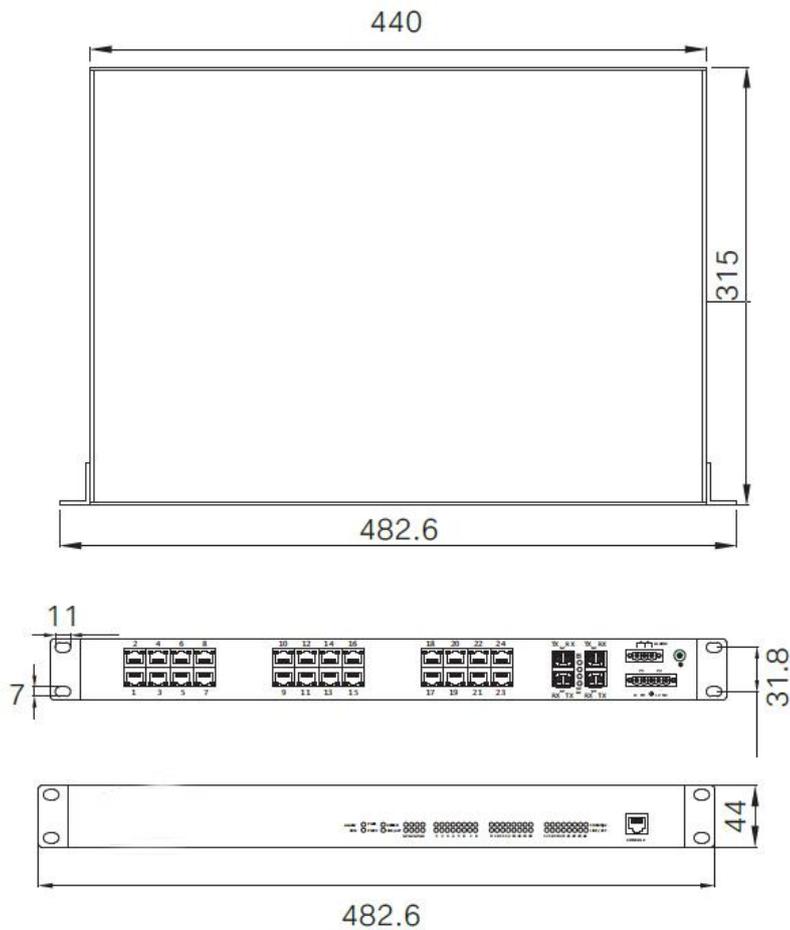- Electric Power Industry
- Smart City

➤ Specification

Specification	
Product Name	28-Port layer 3 Gigabit Industrial Ethernet Switch
Product Model	ICS1028-4GS
Port Definition	24*10/100M combo port + 4-port Gigabit SFP.
Software performance	
Switch Function	Support VLAN, GVRP
	Support port speed limit
	Support storm suppression
	Support port aggregation
	Support port flow control
Redundancy protocol	Support VRRP/EAPS
	Support MW-Ring and the recovery time<20ms
	Support RSTP/MSTP and compatible with STP
Multicast Routing	Support IGMP snooping/ IGMP v1/v2/v3
	Support GMRP
	Support static multicast
Routing technology	Support RIPv1 / v2, RIPng, OSPFv1/v2
	Support static routing protocol
	Support PIM-SM, PIM-DM
Service quality management	Support ACL and L2-L7 data Filter
	Support SP/ WRR queuing
Management and maintenance	Support Console, Telnet, WEB management mode, RMON
	Support SNMPv1 / v2c
	Support FTP, TFTP file transfer and software upgrade
	Support power failure alarm, power alarm, port alarm, ring alarm
	Support port mirroring, Syslog, LLDP, RTC, SNTPv4
	IP supports DHCP server/relay /client
Technical specifications	
Ethernet Standard	IEEE802.3-10BaseT
	IEEE802.3u-100BaseTX/100Base-FX
	IEEE802.3x-Flow Control
	IEEE802.3z-1000BaseLX
	IEEE802.3ab-1000BaseTX
	IEEE802.1ab

Ethernet Standard	IEEE802.1D-Spanning Tree Protocol
	IEEE802.1w-Rapid Spanning Tree Protocol
	IEEE802.1Q -VLAN Tagging
	IEEE802.1s Multiple Spanning Tree Protocol
	IEEE802.1p -Class of Service
	IEEE802.1X-Port Based Network Access Control
	GVRP/RIPv1/v2&OSPFv1/v2/v3/VRRP/DHCP/CLI/EAPS/Qos/LACP/LLDP/IGMP/PIM/SNMP/SNTP/SSH

Switch properties	
Priority queue	8
VLAN ID	4096
IGMP Groups	512
MAC table	32k
Switch Bandwidth	12.8Gbps
Route Table	8k
Switch Delay	<5μs

Interface	
Gigabit ports	Port numbers: 4
	Connector: SFP for fiber port(LC, single or multi-mode), RJ45 for copper port
	Baud rate: 1000Base-LX(fiber port)
100M ports	Port numbers:24
	Connector: 9 fixed 100BaseF(x) ports(single or multi-mode, SC/FC/ST available)or RJ45
	Baud rate:100Base-FX/adaptive 10/100M-T(x)
Console port	RS232/RJ45
Terminal block for power input	5.08mm terminal block
Terminal block for relay alarm	5.08mm terminal block,1A@24VDC

Communication distance	
Twisted-pair	100m(CAT5/CAT5e cable)
Multimode fiber	Gigabit multi-mode: 850nm, 550m
Single mode fiber	Gigabit single mode: 1310nm, 20km

LED indicator lights	
Front panel LED	Port light: LINK/ACT; SPEED
	Running light: RUN
	Power LED: PWR1, PWR2
	Alarm LED: Alarm
Rear panel LED	RJ45 LED: LINK/ACT; SPEED

	Fiber LED: LINK/ACT
Power Requirements	
Power input	AC/DC220V(85-264VAC/110-370VDC)
Full-load consumption	<35W @ full load
Overload protection	Support
Reverse protection	Support
Redundancy protection	Support
Working Environment	
Operating Temperature	-40°C~85°C
Storage temperature	-40°C~85°C
Ambient Humidity	5%~95%(non-condensing)
Physical Characteristics	
Shell	IP40 protection, aluminum alloy shell
Installation	19" 1U rack mounted for front and rear outlet installation
Dimension	482.6 mm*44mm*315mm
Industry standard	
EMC	EN61000-4-2(ESD), Level 4 EN61000-4-3(RS), Level 4 EN61000-4-4(EFT), Level 4 EN61000-4-5(Surge), Level 4 EN61000-4-6(CS), Level 4 EN61000-4-8, Level 5
Impact	IEC60068–2-27
Falling	IEC60068-2-32
Shock	IEC60068-2-6
Warranty	
Warranty	5 Years
Certification	CE, FCC, RoHS

➢ Dimension

➢ Order Information

Model NO.	Description
ICS1028-4GS	24-port 10/100M Base-T (x) +4-port Gigabit SFP, Layer 3, AC/DC220V
ICS1028-4F-4GS	20-port 10/100M Base-T (x) +4- port 100M Fx +4-port Gigabit SFP, AC/DC220V
ICS1028-8F-4GS	16-port 10/100M Base-T (x) +8- port 100M Fx +4-port Gigabit SFP, AC/DC220V
ICS1028-12F-4GS	12-port 10/100M Base-T (x) +12- port 100M Fx +4-port Gigabit SFP, AC/DC220V
ICS1028-16F-4GS	8-port 10/100M Base-T (x) +16- port 100M Fx +4-port Gigabit SFP, AC/DC220V
ICS1028-24F-4GS	24- port 100M Fx +4-port Gigabit SFP, AC/DC220V

➢ Packing List

- Layer 3 Industrial Ethernet Switch *1
- User manual * 1
- Certificate of quality * 1
- Warranty card * 1