



## Industrial Ethernet Switches IES1028-4F-4GS

### ◆ 20-port 10/100M Ethernet + 4-port 100Base-FX + 4-port Gigabit (SFP slot) Managed Switch

#### ➤ Features

- Support IEEE802.3, IEEE802.3u, IEEE802.3z, IEEE 802.3x, IEEE802.1Q, IEEE802.1p, IEEE802.1D, IEEE802.1W
- MW-Ring ring network patent technology (Fault recovery time<20ms)
- Support RSTP, way exchange time<50ms
- Support Port based VLAN and IEEE 802.1Q VLAN
- Support absolutely and opposite priority, support IEEE802.1P, DSCP priority
- Support Based Tag port Tag trunking, IEEE802.3ad, 2 group trunking link
- Support MAC address learning, aging automatic
- Support rate control, Broadcast storm control
- Support configuration file up and download
- Support WEB configuration
- Support 8K MAC address
- Support static and dynamic IGMP
- Support bi-directional port mirroring
- Support 1 channel relay alarm output
- Industrial grade 4 design, -40-75°C work temperature
- No fan deign, 19 inch rack mounting
- IP30 protection grade



#### ➤ Introduction

IES1028-4F-4GS is an industrial grade, managed and redundancy Ethernet switch which supports 20 Ethernet Ports, 4 Fiber ports and 4 Gigabit (SFP slot) ports. It provided some kinds of advanced network managed function, like as: MW-Ring redundancy ring network, VLAN, Trunking, Quality of Service, Speed control, port mirroring, fault alarm and firmware upgrade online. MW-Ring can bring your Ethernet to intelligent redundancy. Standard Industry design, can satisfied every requirement of the industry scene. All components used industry grade, it takes products high reliability. It provided wide voltage power supply input.

MW-Ring™ is an arithmetic designed as a rapid redundancy network. It provided recover technology for fault of rapid redundant network, the recovery time<20ms.

Product accorded to CE, FCC standard and Industry grade 4 design requirement, support 1 channel power input and 1 channel relay alarm output, and -40 ~ 75 °C working temperature, can meet all kinds of Industrial environment requirement. It can use in power, water conservancy, transportation area etc.

#### ➤ Application

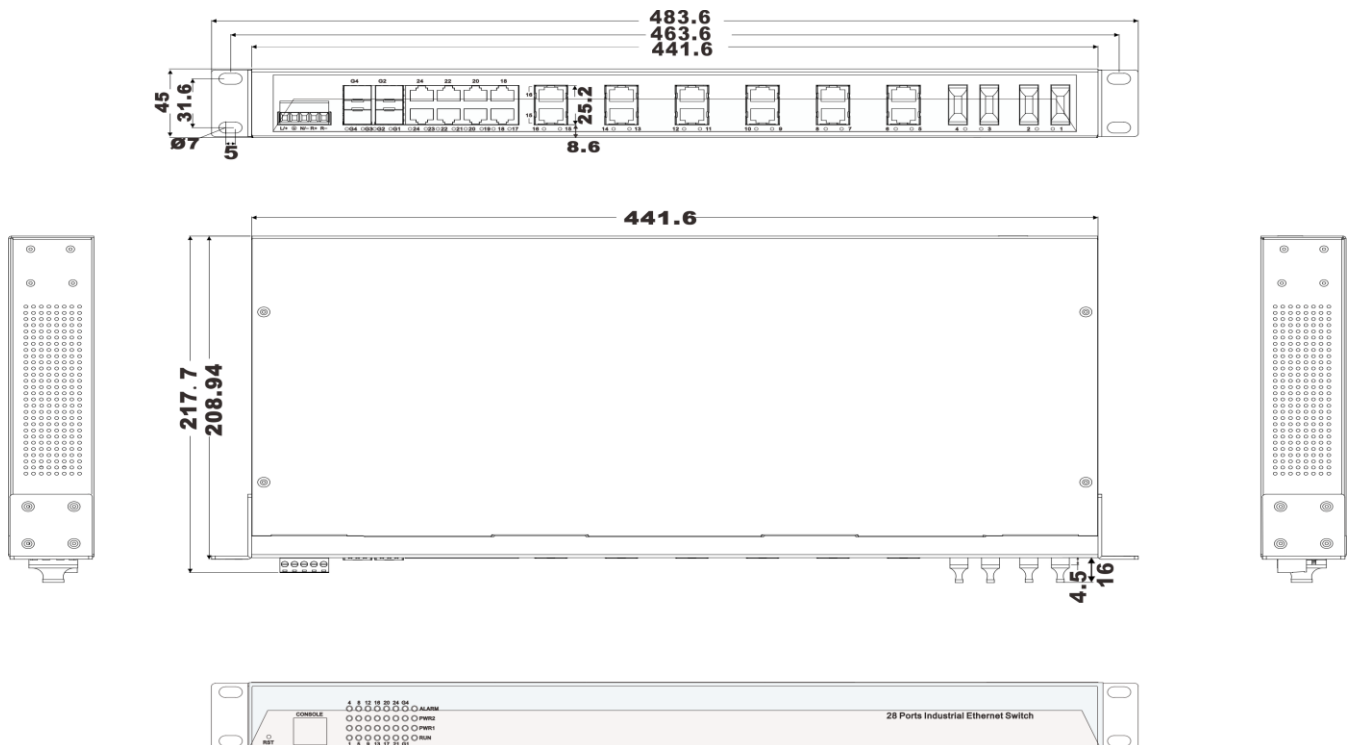
- Intelligent Transportation System
- Connection of Sub-network for Surveillance Center
- Power system applications
- High Way & Toll Station Surveillance
- Transformer Substation Communication System
- Oil of GPRS data acquisition system

## ➤ Specification

<b>Technology</b>	
Standard	Support IEEE802.3, IEEE802.3u, IEEE802.3z, IEEE802.3x, IEEE802.1Q, IEEE802.1p, IEEE802.1D, IEEE802.1W, IEEE802.3ad
Protocol	ARP, ICMP, TCP, DHCP, DNS, HTTP, Telnet, MW-Ring, RSTP, SNMP
Flow control	IEEE802.3x flow control, back press flow control
<b>Function</b>	
Switch function	MW-Ring, QOS, 802.1QVLAN, RSTP, SNMP, Port trunking, static multicast filter, port mirroring, bandwidth management, broadcast storm control, port flow statistics, upgrade online, up and download configuration file, user name access system
MW-Ring	Support Single, Couple, Chain, Dual homing
<b>Exchange attribute</b>	
100M forward speed	148810pps
1000M forward filter speed	1488100pps
Transmit mode	store and forward
System exchange bandwidth	12.8G
MAC address table	8K
Memory	4M
<b>Interface</b>	
Electric port	10Base-T/100Base-TX auto speed control, Half/full duplex and MDI/MDI-X auto detect
100M optic fiber port	100Base-FX, SC/ST/FC connector, support single mode (20/40/60/80Km optional), multi mode (2Km), wavelength :1310nm, 1550nm
1000M fiber port	1000Base-FX (SFP port)
Console port	debug serial port carry out CLI command
Alarm port	2 bit terminal block, 1 channel relay alarm output
<b>Transfer distance</b>	
Twisted cable	100M (standard CAT5/CAT5e cable)
Multi-mode	1310nm, 2/5Km
Single-mode	1310nm, 20/40/60Km, 1550nm, 80/100/120Km
<b>LED indicator</b>	
Run indicator	Run
Interface indicator	Link (1~24/G1~G4)
Power supply indicator	PWR
Alarm indicator	Alarm
<b>Power supply</b>	
Input Voltage	100~240VAC
Type of input	3 bits terminal block
Overload current protect	1.2A
<b>Consumption</b>	
No-load consumption	10.0W
Full-load consumption	15.7W
<b>Working environment</b>	

Working temperature	-40~75℃
Storage temperature	-40~85℃
Relative Humidity	5%~95 % (no condensation)
<b>Mechanical Structure</b>	
Shell	IP30 protect grade, metal shell
Installation	19" 1U rack
Size (W×H×D)	441.6mm×45mm×208.9mm
<b>Industry Standard</b>	
EMI	FCC Part 15, CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD), Level 4
	EN61000-4-3 (RS), Level 3
	EN61000-4-4 (EFT), Level 4
	EN61000-4-5 (Surge), Level 4
	EN61000-4-6 (CS), Level 3
EN61000-4-8, Level 5	
Shock	IEC 60068-2-27
Free fall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Certification	CE, FCC, RoHS, UL508 (Pending)
Warranty	5 years

## ➤ Dimension



## ➤ Ordering Information

Model NO.	Description
IES1028-4F-4GS (M)	20 port 10/100Base-T(X) + 4 port 100Base-FX Multi-mode SC/ST/FC+ 4 port gigabit (SFP slot), 100-240VAC
IES1028-4F-4GS (S)	20 port 10/100Base-T(X) + 4 port 100Base-FX Single-mode SC/ST/FC+4 port gigabit (SFP slot), 100-240VAC
IES1028-4F-4GS (SS)	20 port 10/100Base-T(X) + 4 port 100Base-FX single-mode, single fiber SC/ST/FC+ 4 port gigabit (SFP slot), 100-240VAC

## ➤ Packing List

- Ethernet switch IES1028-4F-4GS (plus terminal block)×1
- User manual × 1
- CD × 1
- Certificate of quality × 1
- Warranty card × 1
- Power cable × 1

