

# IES608-2F

## 8-port 10/100M WEB Managed Redundant Industrial Ethernet Switch

### Features

1. Store and forward.8k address. Support MAC address filtrate struction
2. SW-Ring(recovery time < 20 ms at full load)
3. Port-based VLAN, IEEE 802.1Q VLAN to ease network planning
4. Port Trunking for optimum bandwidth utilization
5. Lock port function for blocking unauthorized access based on MAC address
6. Port mirroring for online debugging
7. Bandwidth management prevents unpredictable network status
8. Dual power backup, Relay output warning for power failure and port break alarm
9. Port link, ring fault/abnormity alarm indication
10. IP 30 protection, rugged high-strength metal case
11. Redundant 24VDC power input (12V~36VDC) Operating
12. DIN-Rail or panel mounting ability



### Introduction

IES608-2F series are a type of plug-and-play industrial managed redundant Ethernet switch, which supports 6 10/100Base-T(x) + 2 100Base-FX interfaces. The 7 and 8 ports are used to establish SW-Ring for the purpose of accomplishing redundancy for Ethernet ring network (self-recovery time < 20ms) to enhance the reliability of the network.

Furthermore, IES608-2F series can also support numerous intelligent network management functions, including QoS, VLAN, Port Trunking, velocity configuration and alarm enabling functions. To satisfy applications in different industrial environments, IES608-2F series can also provide wide temperature type in accommodation with limit temperature (-40 ~ 75°C).

### Patented Technology for SW-Ring Network

Self-developed patented technology for SW-Ring network can realize the intelligent redundancy for industrial Ethernet switch, which can make you easily and conveniently establish redundant Ethernet,

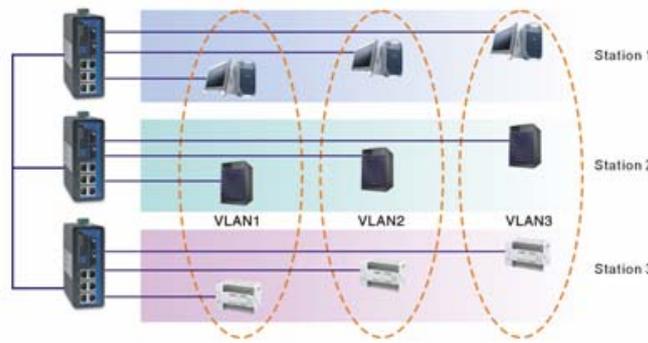
and can facilitate the quick recovery of any network section of automatic system disconnected from the network.



### VLAN Simplified Network Planning

VLANs are composed of a group of equipments, which can be arranged at any position on the network. Owing to its communication mode, it seems that all equipments are positioned at the same physical layer. Therefore, VLANs can be used to divide the network to break away from the limitation on physical connection. When the equipment is located on different VLANS, it will be unavailable for

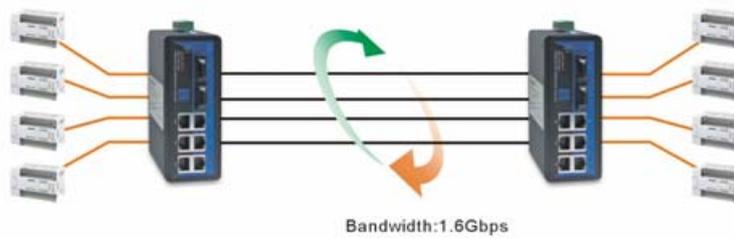
connection due to the prevention of unnecessary invasion and flow. IES608-2 series industrial switch can support IEEE802.1Q Standard and port based VLAN for the purpose of exchanging coherent parameters and maintaining the coherence of set values for VLAN within the whole network.



### Optimal Bandwidth Management

Aggregation of link port can provide the critical equipment with flexible networking capability and redundant link path. IES608-2F permits the synchronous communication by the equipment via 8

aggregation links (each aggregation link is permitted to have maximum 8 link aggregations).



### QoS used for Improvement of Transmission Accuracy

Quality of Service (QoS) can perform the prior process of important flow to ensure the coherence of important information to be transmitted as anticipated. IES608-2F series industrial switches can detect the 2nd layer of IEEE802.1p/1Q, CoS label and even the 3rd

layer TOS information for the purpose of coherent classification of information for the whole network. QoS function has improved the efficiency and certainty of critical tasks within the industrial network for prior process.

### Bandwidth Management can inhibit unexpected network state

IES608-2F series industrial Ethernet switches can also be used for configuration of velocity of in/out single broadcast/multi broadcast/broadcast packet in addition to inhibition of broadcast

storm. This bandwidth management function can fully control the limited bandwidth to guard against unexpected error.



### Port mirroring function for online monitoring

In some cases, network scale is so big, which is unlikely to reach the expected communication level. As compared with file transmission mode used in the office network environment, more directive response modes are used in the industrial communication applications. This means that it is applicable to use the second port for control

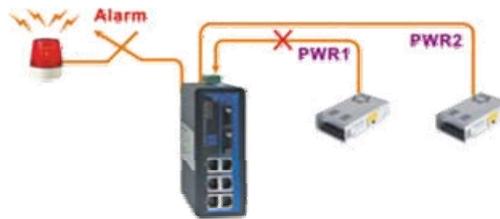
engineering to monitor the actual activities between the equipment and host computer at the preliminary establishment of industrial Ethernet. Mirroring port function of IES608-2F series can ensure the system operation as expected by us.



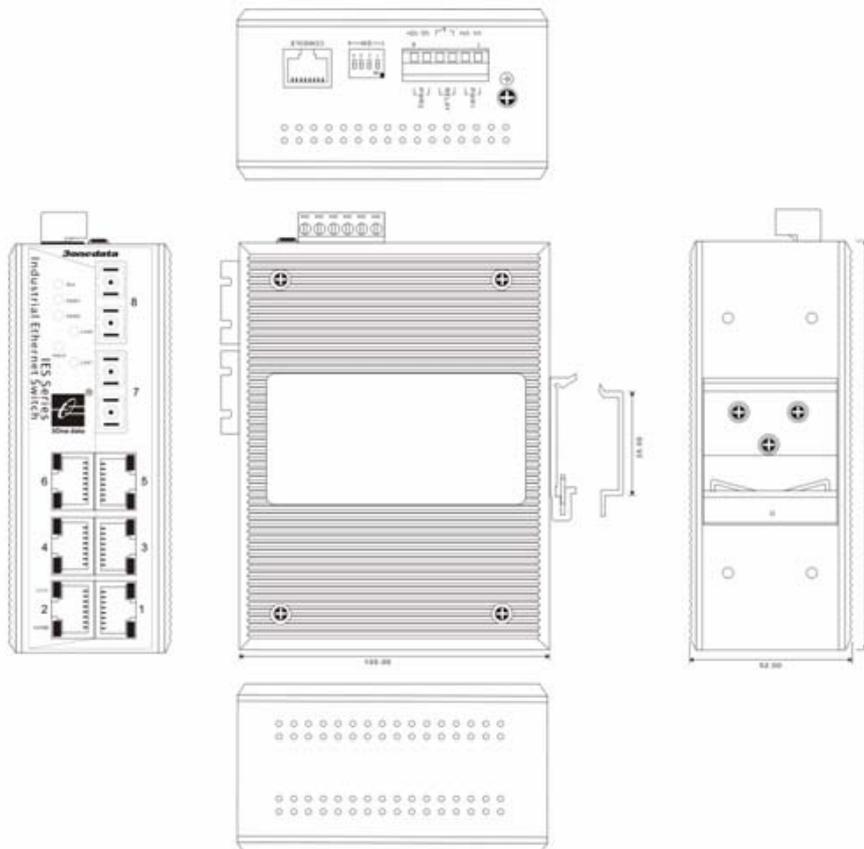
### Double power supply input and relay output alarm

IES608-2F series can provide double power supply backup and 1-route relay alarm output. Redundant double DC power supply input (12V~36VDC) can provide your equipment with uninterrupted operation to further provide additional protection for normal operation of automatic system. 1-route equipment alarm output signal

can support power supply and port link alarm. Relay can give out output alarm in case of power supply failure or interruption of port link to notice or remind site engineers to make quick response for appropriate emergency maintenance



### Dimension



## Specification

### Interface

RJ45 Ports: 10/100BaseT(X) auto connection, Full /Half duplex or force work mode, and support MDI/MDI-X connection

Fiber Ports: 100BaseFX ports (SC/ST, optional)

Single-mode:20, 40,60, 80, 120Km,optional

Multi-mode: 2,5Km,optional

Wavelength: 850nm, 1310 nm, 1550nm

DOWNLOAD PROGRAM Port: Based serial network management (RS-232), RJ45

Alarm output interface: One relay alarm output. Support power, port link and ring network alarm .

Indicator: Port link, ring fault/abnormity alarm indication 10M/100M Rate, run indication

### Technology

Standards: IEEE802.3 for 10BaseT, IEEE802.3x for Flow Control, IEEE802.3u for 100BaseTX and 100BaseFX, IEEE802.1Q for VLAN

Tagging, IEEE802.1p for Class of Service

Transmit Rate: 148810pps

Max Rate of Filtrate: 148810pps

Processing Type: Store and Forward

System exchange bandwidth: 4.8G

Support 8K MAC address

Port-Based VLAN

### Relay

Max voltage: DC30V

Max current input: 1A

### Power

Input Voltage: 24VDC (12VDC~36DC)

Overload Current Protection

Support dual power backup

Support dual power alarm input

### Mechanical

Dimensions: 136mm×52mm×105mm (H×W×D)

Casing: IP30 protection, metal case

Weight: 800g

### Environmental

Operating Temperature: -40 to 75°C

Storage Temperature: -45°C to 85°C

Ambient Relative Humidity: 10 to 95% (non-condensing)

### Approvals

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

**Warranty: 5 years**

**Approvals: FCC, CE, RoHS approvals**

## Ordering Information

**IES608-2F** 10/100M WEB Managed Redundant Industrial Ethernet Switch, 6-port 10/100Base-T(x) + 2-port 100Base-FX (multi-mode), SC, ST, optional

**IES608-2E** 10/100M WEB Managed Redundant Industrial Ethernet Switch, 6-port 10/100Base-T(x) + 2-port 100Base-FX (single-mode), SC, ST, optional

## Packing List

1. Ethernet switch IES608-2F series (plus terminal block)×1
2. Hardware Installation Guide ×1
3. CD-ROM with Windows Utility ×1
4. Product Warranty Statement ×1
5. RJ45 to DB9 Console port cable ×1
6. DIN-Rail setting fittings(wall mounting for optional)