

IES7010 Series

7+3G-port Gigabit WEB Managed Industrial Ethernet Switch

Features

1. 7-port 10/100Base-T(x), 3-port 1000Base-X
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. Store and forward.8k address. Support MAC address filtrate struction
7. Port mirroring for online debugging
8. Bandwidth management prevents unpredictable network status
9. Dual power backup, Relay output warning for power failure and port break alarm
10. Port link, ring fault/abnormity alarm indication
11. IP 30 protection, rugged high-strength metal case
12. Redundant 24VDC power input (12V~36VDC) Operating
13. DIN-Rail or panel mounting ability



Introduction

The IES7010 Gigabit managed redundant industrial Ethernet switch is equipped with up to 3 Gigabit Ethernet ports(7-port FE and 3-port GbE), making it ideal for building a Gigabit SW-Ring(No.8,No.9), but leaving a spare Gigabit port for uplink use. The Ethernet redundant SW-Ring (recovery time < 20 ms) can increase system reliability switches and the availability of your network backbone.

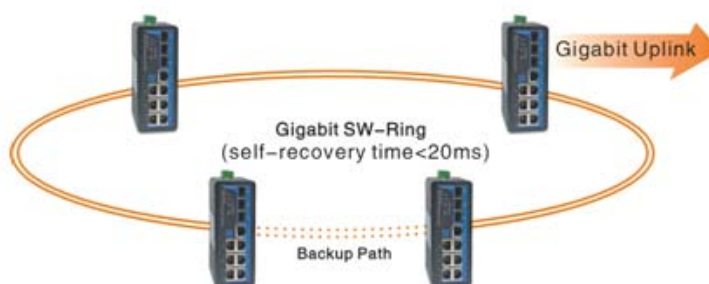
The IES7010 series is designed with industrial standard, can be suited to the applications in different industrial environments.

The IES7010 series supports numerous intelligent network management functions, including such as QoS, VLAN, Port Trunking, velocity configuration and alarm enabling functions.

Gigabit Ethernet redundant ring network, and cascade coupling

IES7010 has 3 Gigabit Ethernet ports of which, 2 ports are used for establishment of Gigabit Ethernet (Gigabit SW-Ring) to enable system administrator to establish a stable Gigabit Ethernet. When Gigabit SW-Ring is used, network will be switched to the backup path automatically if one path is interrupted. Thus, your automatic system can be

recovered within 20ms. The third Gigabit port can be used for cascade coupling, which can establish Gigabit connection in combination with other control centers for data transmission. With the provision of the third Gigabit port, IES7010 can be used to establish an integral Gigabit Ethernet backbone network.



Optimal Bandwidth Management

Aggregation of link port can provide the critical equipment with flexible networking capability and redundant link path. IES7010 permits the synchronous communication by the equipment via 8

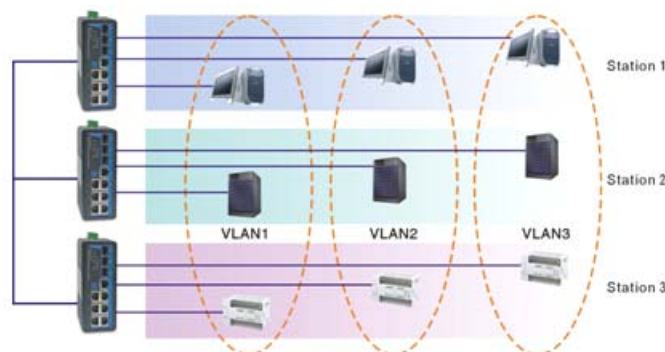
aggregation links (each aggregation link is permitted to have maximum 8 link aggregations).



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. IES7010 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.



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. IES7010 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

IES7010 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 IES7010 series can ensure the system operation as expected by us.



Double power supply input and relay output alarm

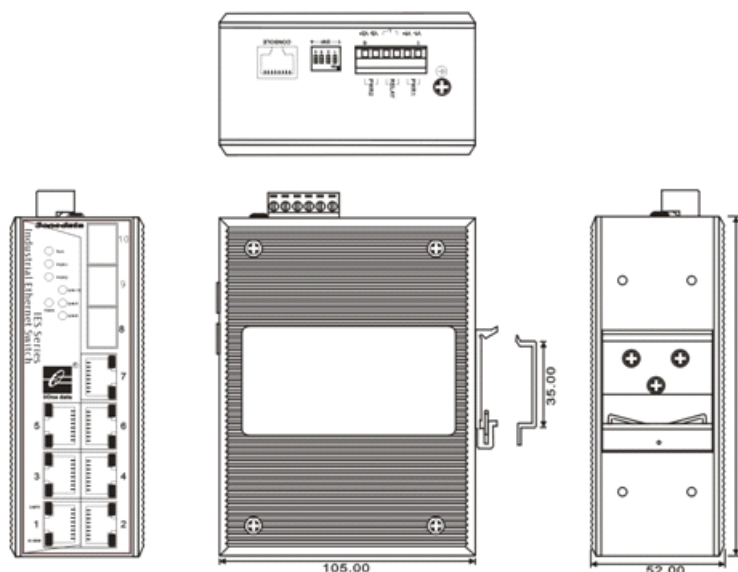
IES7010 series can provide double power supply backup and 1-route relay alarm output. Redundant double DC power supply input (12V~36VDC) can provide your equipment with uninterrupted operation to further provide additional protection for normal operation of automatic system. 1-route equipment alarm output 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

Unit:mm



Specification

Interface

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

Fiber Ports: 1000BaseSX/LX/LHX/ZX (LC connector)

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

Multi-mode:0.5Km

Wavelength: 850 nm(MM), 1310 nm(SM), 1550 nm(SM)

Debugging 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 10/100M Rate, run indication

Technology

Standards: IEEE802.3, IEEE802.3x, IEEE802.3u, IEEE802.1Q, IEEE802.1p

Transmit Rate: 148810pps

Max Rate of Filtrate: 148810pps

Processing type: Store and Forward

System exchange bandwidth: 7.6G

Support 8K MAC address

Port-Based VLAN and 802.1Q 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

Installation: DIN-Rail, Wall Mounting

Weight: 800g

Environmental

Operating Temperature: -40 to 70°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 4

EN61000-4-4(EFT), Level 4

EN61000-4-5 (Surge), Level 4

EN61000-4-6 (CS), Level 4

EN61000-4-8,100A/m

EN61000-4-12

Shock: IEC 60068-2-27

Free Fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Warranty: 5 years

Approvals: FCC,CE, RoHS approvals

Packing List

1. Ethernet switch IES7010 (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)