

# IES-3242GC-E

## >> Industrial 26-port Managed Ethernet Switch (Enhanced)

- Supports **O-Ring** (recovery time < 10ms over 250 units of connection), MSTP/RSTP/ STP (IEEE 802.1w/D/s) for Ethernet Redundancy
- Support ACLs, 802.1x User Authentication for security
- Supports SNMP v1/v2c/v3, QoS, IGMP, RMON & Port based/ 802.1Q VLAN Network Management
- Web-based ,Telnet, Console, CLI, and Windows utility (Open-Vision) configuration
- Completely selection to support 10/100Base-T(X), 1000Base-T and 1000 Base-X port in SFP connector
- 19 inches rack mountable
- Support AC and Dual DC power inputs
- Provide Extend operating temperature from -40 to 70 °C



### > Features

- World's fastest Redundant Ethernet Ring: O-Ring (recovery time < 10ms over 250 units of connection)
- Secured ACL supported
- **MSTP/RSTP/STP**(IEEE 802.1w/D/s)
- IGMP snooping for filtering multicast traffic
- Port Trunking for easy of bandwidth management
- Event notification through Syslog, Email, SNMP trap, and Relay Output
- Include 100~240 VAC and Dual +12~+48 VDC or -12~-48 VDC power inputs
- Extend operating temperature from -40 to 70 °C
- Port lock to prevent access from unauthorized MAC address
- Bundled Windows utility (Open-Vision) support centralization management and configurable by Web-based ,Telnet, Console, CLI
- Completely selection to support 100Base-T(X), 1000Base-T and 1000 Base-X port in SFP connector
- 19 inches rack mountable

### > Introduction

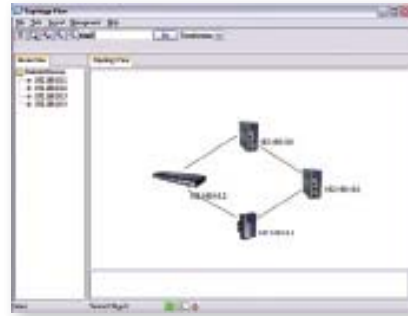
IES-3242GC-E is managed Redundant Ring Ethernet switch with 24x10/100TX & 2x1000 SFP COMBO ports (Enhanced). With completely support of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection), and MSTP/RSTP/STP (IEEE 802.1w/D/s) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. IES-3242GC-E can be managed centralized and convenient by a powerful windows utility — Open-Vision. IES-3242GC-E also supports functions of network management, such as SNMP, RMON, Port Trunking, and Port/Tag-based VLAN security. IES-3242GC-E support one full-range AC and dual DC power inputs from +12~48 VDC or -12~-48 VDC, and support extend operating temperature from -40 °C to 70 °C. One additional relay output is provided for system alarm warning, Therefore, the switch is one of the most reliable choice for highly-managed and Fiber Ethernet application.

> Open-Vision

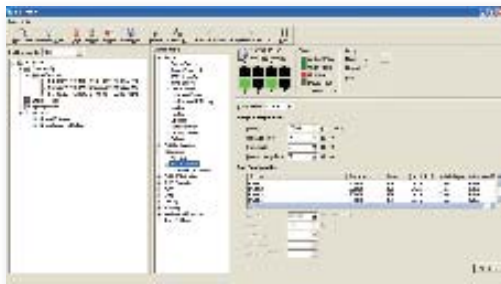
ORing's switches are intelligent switches. Being different from other traditional redundant switches, ORing provides a set of Windows utility (**Open-Vision**) for users to manage and monitor all of industrial Ethernet switches on the industrial network.



Network connection

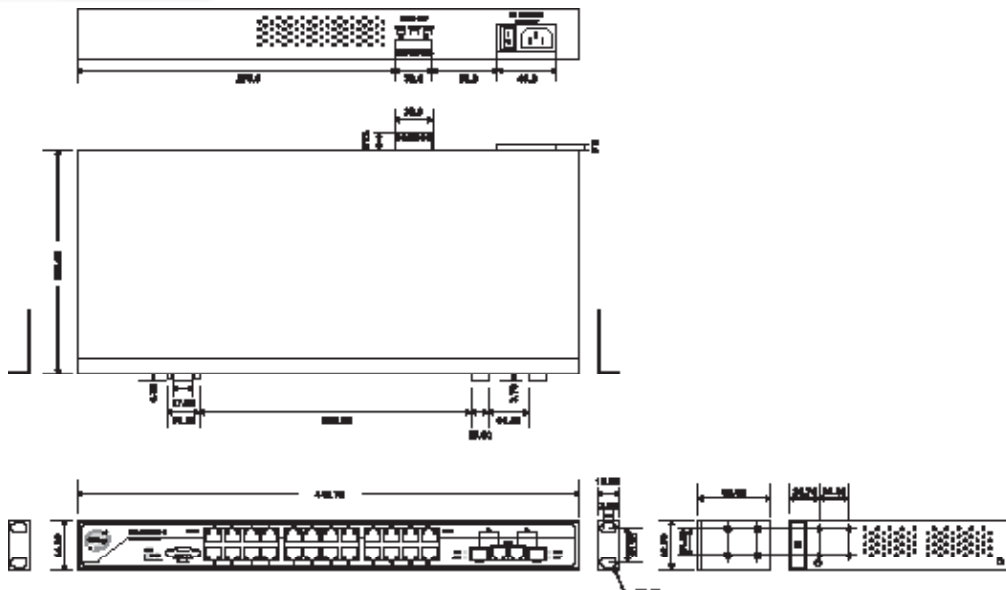


Topology View



Monitoring and Configuration interface

> Dimension



(Unit=mm)

## > Specifications

| ORing Switch Model                          | IES-3242GC-E   |
|---|--|
| <b>Physical Ports</b>                       |  |
| 10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX | 24   |
| 1000 COMBO with SFP                         | 2  |
| RS-232 Serial Console Port                  | RS-232 console cable. 9600bps, 8, N, 1   |
| <b>Technology</b>                           |  |
| Ethernet Standards                          | IEEE 802.3 for 10Base-T,<br>IEEE 802.3u for 100Base-T(X),<br>IEEE 802.3ab for 1000Base-T<br>IEEE 802.3x for Flow control<br>IEEE 802.3ad for LACP (Link Aggregation Control Protocol )<br>IEEE 802.1D for STP (Spanning Tree Protocol)<br>IEEE 802.1p for COS (Class of Service)<br>IEEE 802.1Q for VLAN Tagging<br>IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol)<br>IEEE 802.1s for MSTP (Multiple Spanning Tree Protocol)<br>IEEE 802.1X for Authentication<br>IEEE 802.1AB for LLDP (Link Layer Discovery Protocol) |
| MAC Table                                   | 8192 MAC addresses   |
| Priority Queues                             | 4  |
| Processing                                  | Store-and-Forward  |
| Switch Properties                           | Max. Number of Available VLANs:256<br>IGMP multicast groups: 256<br>Port rate limiting: User Define  |
| Security Features                           | Enable/disable ports, MAC based port security<br>ACL supported<br>Port based network access control (802.1x)<br>VLAN (802.1q ) to segregate and secure network traffic<br>Radius centralized password management<br>SNMPv3 encrypted authentication and access security  |
| Software Features                           | STP/RSTP/MSTP (IEEE 802.1D/w/s)<br>Redundant Ring (O-Ring) with recovery time less than 10ms over 250 units<br>TOS/Diffserv supported<br>Quality of Service (802.1p) for real-time traffic<br>VLAN (802.1Q) with VLAN tagging and GVRP supported<br>IGMP Snooping for multicast filtering<br>Port configuration, status, statistics, monitoring, security  |
| Network Redundancy                          | O-Ring<br>STP<br>RSTP<br>MSTP  |
| <b>LED indicators</b>                       |  |
| Power indicator                             | Green : Power LED x 4  |
| Status indicator                            | Green on for system ready  |
| R.M. indicator                              | Green : Flashing to indicate system operated in O-Ring Master mode   |
| O-Ring indicator                            | Green : Indicate system operated in O-Ring mode  |
| Fault indocator                             | Yellow : indicate excepted event occurred  |
| 10/100TX RJ45 port indicator                | Green at left for port Link/Act. Green at right for 100Mbps link   |
| 1000 Base-T / Fiber port indicator          | Green for port Link/Act.   |

| Power                       |  |
|-----------------------------|--|
| Redundant Input power       | 100~240VAC with power cord and dual +12~+48 VDC or -12~-48 VDC inputs in 6-pin terminal block                            |
| Power consumption (Typ.)    | 18 Watts   |
| Overload current protection | Present  |
| Physical Characteristic     |  |
| Dimension (W x D x H)       | 440mm(W)x200mm(D)x44mm(H)  |
| Weight (g)                  | 2480 g   |
| Environmental               |  |
| Operating Temperature       | -40 to 70°C (-40 to 158°F )  |
| Operating Humidity          | 5% to 95% Non-condensing   |
| Regulatory approvals        |  |
| EMI                         | FCC Part 15, CISPR (EN55022) class A   |
| EMS                         | EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11 |
| Warranty                    | 2 years  |

> Ordering Information

IES-3 AA B CC - D

| Code efnition | 10/100TX Port Number | Additional Port Number | Additional Port Type     | Model Type  |
|---------------|----------------------|------------------------|--------------------------|---|
| <b>Option</b> | - 24: 24 ports       | - 2: 2 port            | -GC: 1000 COMBO with SFP | -E: enhanced model with dual DC inputs and -40 to 70 °C operating temperature |

| Available Model | Model Name   | Description  |
|-----------------|--------------|--|
|                 | IES-3242GC-E | Industrial 26-port Ethernet Switch with 24x10/100TX & 2x1000 COMBO port (Enhanced) |