# **IES-3080/3062 Series**

Industrial 8-port Managed Ethernet Switch

#### **Highlights**

- · Supports O-Ring (recovery time < 10ms over 250 units of connection), Open-Ring, O-RSTP, RSTP/ STP (IEEE 802.1w/D) for Ethernet Redundancy
- Supports SNMP v1/v2c/v3, QoS, IGMP, RMON & Port based/ 802.1Q VLAN Network Management
- · Multiple notification for warning of excepted event
- · Web-based, Telnet, Console, CLI, and Windows utility (Open-Vision) configuration
- · Complete selection to Support 100TX, 1000Base-T, 100FX, 1000SX, 1000LX ports
- · Triple Redundant DC power inputs











#### **Features**

- · World's fastest Redundant Ethernet Ring: O-Ring (recovery time < 10ms over 250 units of connection)
- · Open-Ring support in open architecture (recovery time is depended on the other vendor's ring technology)
- O-RSTP support applications of complex topology with optimized RSTP technology
- RSTP/STP(IEEE 802.1w/D)
- · IGMP snooping for filtering multicast traffic
- · Port Trunking for easy of bandwidth management
- SNMP v1/v2c/v3 support for secured network management
- · RMON for traffic monitoring
- · Event notification through Syslog, Email, SNMP trap, and Relay Output

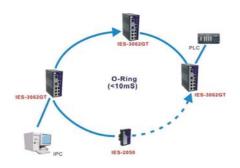
- · Port lock to prevent access from unauthorized MAC address
- Windows utility (Open-Vision) support centralized management and configurable by Web-based Telnet, Console, CLI
- Triple redundant DC power inputs of terminal block and power jack
- Complete combination of 10/100Base-T(X), 100Base-FX, 1000Base-T, 1000Base-SX, and 1000Base-LX ports
- · Very wide operating temperature range from -40°C
- · Rigid IP-30 housing design
- · DIN-Rail and panel mounting enabled

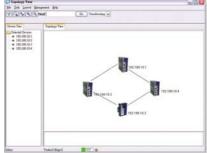
#### Introduction

IES-3080/3062 series are managed Redundant Ring Ethernet switches with 6x10/100Base-T(X) & 2x100Base-FX, 1000Base-T, 1000Base-SX or 1000Base-LX ports. With completely support of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection), Open-Ring, O-RSTP and RSTP/STP (IEEE 802.1w/D) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. Another Open-Ring technology is also supported which can be applied for other vendor's proprietary ring. IES-3080/3062 series can be managed centralized and convenient by a powerful windows utility — Open-Vision. In addition, the wide operating temperature range from -40°C to 70°C can satisfy most of operating environment. 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. Different form other traditional redundant switches, ORing provide a set of Windows utility (**Open-Vision**) for user to manage and monitor all of industrial Ethernet switches on the industrial network.





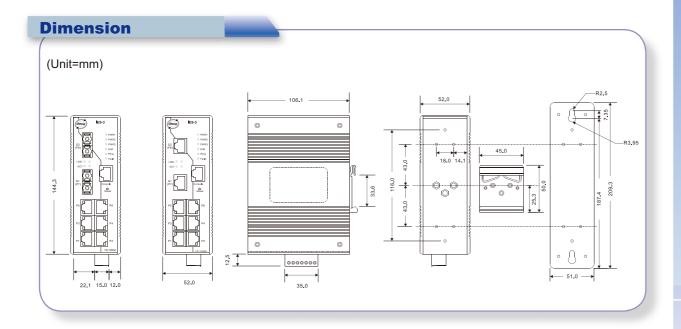
Network connection

Topology View





Monitoring and Configuration interface

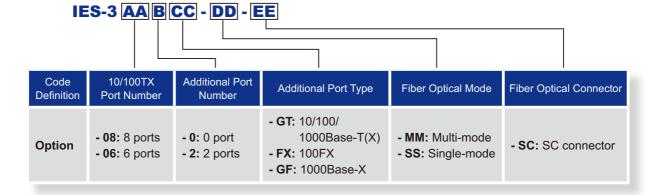


## **Specifications**

ORing Switch Model	IES-3080	IES-3062GT	IES-3062FX-MM	IES-3062FX-SS	IES-3062GF-MM	IES-3062GF-SS
Physical Ports						
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	8	6	6	6	6	6
1000Base-T Ports in RJ45 Auto MDI/MDIX		2				
100Base-FX Multimode ports (2KM, 1310nm, SC connector)			2			
100Base-FX Singlemode ports (30KM, 1550nm, SC connector)				2		
1000Base-SX Multimode ports (550M, 850nm, SC connector)					2	
1000Base-LX Singlemode ports (10KM, 1310nm, SC connector)						2
Technology						
Ethernet Standards	IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-T(X) and 100Base-FX, IEEE 802.3z for 1000Base-X IEEE 802.3ab for 1000Base-T IEEE 802.3ab for 1000Base-T IEEE 802.3ad for LACP (Link Aggregation Control Protocol) IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1p for COS (Class of Service) IEEE 802.1p for VLAN Tagging IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol) IEEE 802.1X for Authentication IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)					
MAC Table	8192 MAC addresses					
Priority Queues	4					
Processing	Store-and-Forward					
Switch Properties	Switching latency: 7 us Switching bandwidth: 5.6Gbps Max. Number of Available VLANs:4096 IGMP multicast groups: 1024 Port rate limiting: User Define					
Security Feature	Enable/disable ports, MAC based port security Port based network access control (802.1x) VLAN (802.1q) to segregate and secure network traffic Radius centralized password management SNMPv3 encrypted authentication and access security					
	STP/RSTP (IEEE 802.1D/w) Redundant Ring (O-Ring) with recovery time less than 10ms over 250 units TOS/Diffserv supported Quality of Service (802.1p) for real-time traffic VLAN (802.1Q) with VLAN tagging and GVRP supported IGMP Snooping for multicast filtering Port configuration, status, statistics, monitoring, security					
Software Features	Redundant R TOS/Diffserv Quality of Serv VLAN (802.10 IGMP Snoop	ing (O-Ring) was supported rvice (802.1p) Q) with VLAN rung for multicas	ith recovery time for real-time traft tagging and GVI st filtering	fic RP supported	ns over 250 units	S
Software Features  Network Redundancy	Redundant R TOS/Diffserv Quality of Serv VLAN (802.10 IGMP Snoop	ing (O-Ring) was supported rvice (802.1p) Q) with VLAN rung for multicas	ith recovery time for real-time traft tagging and GVI st filtering	fic RP supported	ns over 250 units	5

LED indicators						
Power indicator	Green: Powe	er LED x 3				
R.M. indicator	Green: Flashing to indicate system operated in O-Ring Master mode					
O-Ring indicator	Green : Indic	Green : Indicate system operated in O-Ring mode				
Fault indicator	Yellow : Indic	Yellow : Indicate excepted event occurred				
10/100TX RJ45 port indicator	Green for por	Green for port Link/Act. Yellow for Duplex/Collision				
1000 Base-T / Fiber port indicator	Green for port Link/Act. Yellow for Link					
Fault contact						
Relay	Relay output	to carry capac	city of 1A at 24VI	OC .		
Power						
Redundant Input power	Triple DC inp	uts. 12-48VD0	C on 7-pin termin	al block, 12-45	VDC on power ja	ack
Power consumption (Typ.)	5 Watts	8 Watts	9 Watts	9 Watts	7 Watts	7 Watts
Overload current protection	Present					
Reverse polarity protection	Present on terminal block					
Physical Characteristic						
Enclosure	IP-30					
Dimension (W x D x H)	52(W)x106(D)x144(H) mm (2.05x4.17x5.67 inch.)					
Weight (g)	710 g	722 g	735 g	735 g	740 g	740 g
Environmental						
Storage Temperature	-40 to 85°C (-40 to 185°F)					
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					
Shock	IEC60068-2-27					
Free Fall	IEC60068-2-32					
Vibration	IEC60068-2-6					
Safety	EN60950					
Warranty	5 years					

### **Ordering Information**



	Model Name	Description
	IES-3080	Industrial 8-port Managed Ethernet Switch with 8x10/100TX
	IES-3062GT	Industrial 8-port Managed Ethernet Switch with 6x10/100TX & 2x1000Base-T
Available Model	IES-3062FX-MM-SC	Industrial 8-port Managed Ethernet Switch with 6x10/100TX & 2x100FX (Multi-mode)
	IES-3062FX-SS-SC	Industrial 8-port Managed Ethernet Switch with 6x10/100TX & 2x100FX (Single-mode)
	IES-3062GF-MM-SC	Industrial 8-port Managed Ethernet Switch with 6x10/100TX & 2x1000SX (Multi-mode)
	IES-3062GF-SS-SC	Industrial 8-port Managed Ethernet Switch with 6x10/100TX & 2x1000LX (Single-mode)