# **IES-2050A**

▶ Industrial 5-port slim type lite-managed Ethernet switch with 5x10/100Base-T(X)

#### **Features**

- Fastest Redundant Ethernet Ring : **O-Ring** (recovery time < 10ms over 250 units
- **Open-Ring** supports the other vendor's ring technology in open architecture
- Supports 5 ports 10/100Base-T(X)
- SNMP v1/v2c/v3 support for secured network management
- Web-based interface, telnet server, and Windows utility (Open-Vision) configuration
- Event notification through Syslog, Email, SNMP trap and relay.
- Provides Web / Windows Utility / DIP-Switch function to set Ring
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled
- Supports LLDP Protocol















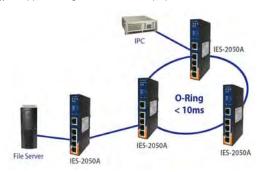


### Introduction

IES-2050A is a lite-managed Ethernet switch. With very compact size of housing, you can install IES-2050A easily. In addition, it also supports of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection) and Open-Ring can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. IES-2050A provide the setting ability of Web-GUI and Windows Utility, also support the simple DIP-Switch setting function which offer great flexibility to set up the Ring. IES-2050A is with rigid IP-30 housing design and can operate under harsh environment. The feature of wide operating temperature range from -40 to 70°C can satisfy most requirement of operation.

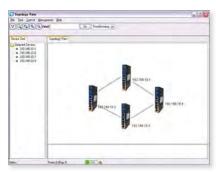
#### **Open-Vision**

IES-2050A can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches. In addition, O-Ring redundant technology is supported to guarantee a non-stop operation.



Connections of redundancy

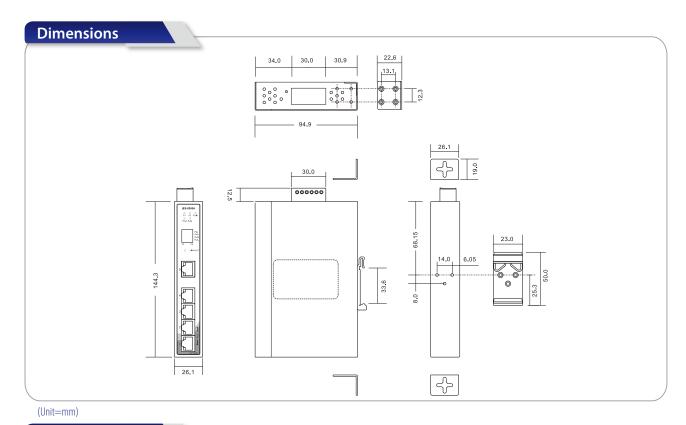




Topology View



Monitoring and Configuration interface



## Specifications

ORing Switch Model	IES-2050A	
Physical Ports		
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	5	
Technology		
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3x for Flow control IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol) IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)	
MAC Table	2048 MAC addresses	
Priority Queues	4	
Processing	Store-and-Forward	
Switch Properties	Switching bandwidth : 1.0Gbps VLAN : Port Based	
Security Features	Enable/disable ports VLAN to segregate and secure network traffic	
Software Features	STP/RSTP (IEEE 802.1D/w) Redundant Ring (0-Ring) with recovery time less than 10ms over 250 units DHCP Client Port base VLAN LLDP (Link Layer Discovery Protocol) Port configuration, status, statistics, monitoring, security SNMP v1/v2c/v3 and private MIB support	
Network Redundancy	O-Ring Open-Ring Fast recovery STP RSTP	
DIP Switch Settings		
P.F.	When power fault enable relay warning system (On: Enable, Off: Disable function)	
R.E.	Enable/Disable O-Ring function (On : Enable, Off : Disable)	
R.M.	Enable/Disable Ring Master Mode (On : Enable, Off : Disable)	
R.S.	O-Ring redundant port select (On: ring port set to port-1 and port-5, Off: ring port set to port-1 and port-2)	

LED Indicators         Green LED x 2           RM. Indicator         Green I. Indicates that the system is operating in 0-Ring Master mode           O-Ring Indicator         Amber : Indicates unexpected event occurred           10/1008ase-T(X) RJ45 Port Indicator         Green for port Link/Act. Amber for Link           Fault Contact           Relay         Relay output to carry capacity of 1A at 24VDC           Power           Power           Input Power         Dual 12 – 48 VDC power input on 6-pin terminal block           Power Consumption (Typ.)         4 Watts           Querioad Current Protection         Present           Reverse Polarity Protection         Present on terminal block           Physical Characteristics           Endosure         IP-30           Dilmensions (W x D x H)         26.1 mm (W) x 95 mm(D) x 144.3 mm(H)           Weight (g)         39 5g           Environmental           Storage Temperature         -40 to 85°C (-40 to 185°F)           Operating Temperature         -40 to 85°C (-40 to 185°F)           Operating Temperature         -40 to 50°C (-40 to 185°F)           Operating Temperature         -40 to 50°C (-40 to 185°F)           Operating Temperature         -60 to 55°C (-40 to 185°F)		
R.M. Indicator Green: Indicates that the system is operating in O-Ring Master mode  O-Ring Indicator Green: Indicates port operated in O-Ring mode  Fault Indicator Amber: Indicates unexpected event occurred  10/100Base-T(X) RJ45 Port Indicator Green for port Link/Act. Amber for Link  Fault Contact  Relay Relay output to carry capacity of 1A at 24VDC  Power  Input Power Dual 12—48 VDC power input on 6-pin terminal block  Power Consumption (Typ.) 4 Watts  Overload Current Protection Present  Reverse Polarity Protection Present on terminal block  Physical Characteristics  Endosure IP-30  Dimensions (W x D x H) 25.1 mm (W) x 95 mm (D) x 144.3 mm (H)  Weight (g) 395 g  Environmental  Storage Temperature 40 to 85°C (-40 to 185°F)  Operating Jemperature 40 to 70°C (-40 to 158°F)  Operating Jemperature 40 to 70°C (-40 to 158°F)  Operating Jemperature 50 to 95 to 95% Non-condensing  Regulatory Approvals  EMI FC CPART 15, CISPR (ENS5022) class A  EMS BNGO00-4-2 (ESD), ENG1000-4-3 (RS), ENG1000-4-4 (EFT), ENG1000-4-5 (Surge), ENG1000-4-6 (CS), ENG1000-4-8, ENG1000-4-1 (EG0068-2-7)  Free Fall IEC00068-2-82  Vibration IEC00068-2-82  Vibration ENG005-1		
O-Ring Indicator         Green: Indicates port operated in O-Ring mode           Fault Indicator         Amber: Indicates unexpected event occurred           10/1008ase-T(X) RJ45 Port Indicator         Green for port Link/Act. Amber for Link           Fault Contact         Relay         Relay output to carry capacity of 1A at 24VDC           Power         Power           Input Power         Dual 12~ 48 VDC power input on 6-pin terminal block           Power Consumption (Typ.)         4 Watts           Reverse Polarity Protection         Present           Reverse Polarity Protection         Present on terminal block           Physical Characteristics         Endosure           Dimensions (Wx Dx H)         26.1 mm (W) x 95 mm(D) x 144.3 mm(H)           Weight (g)         395 g           Environmental           Storage Temperature         40 to 85°C (~40 to 185°F)           Operating Temperature         40 to 70°C (~40 to 158°F)           Operating Humidity         9% 59% Non-condensing           Regulatory Approvals         EMI           EMS         ENG 1000-4-2 (ESD), ENG 1000-4-3 (RS), ENG 1000-4-4 (EFT), ENG 1000-4-5 (Surge), ENG 1000-4-6 (CS), ENG 1000-4-8, ENG 1000-4-4 (ESD), ENG 1000-4-3 (RS), ENG 1000-4-4 (ESD), EN	Power Indicator	Green LED x 2
Fabil Indicator         Amber : Indicates unexpected event occurred           10/100Base-T(X) RJ45 Port Indicator         Geren for port Link/Act. Amber for Link           Fault Contact         Relay         Relay output to carry capacity of 1A at 24VDC           Power         Description (Typ.)         Upual 12~ 48 VDC power input on 6-pin terminal block           Power Consumption (Typ.)         4 Watts           Overload Current Protection         Present           Reverse Polarity Protection         Present on terminal block           Physical Characteristics         Page on the minal block           Endosure         IP-30           Dimensions (W x D x H)         26.1 mm (W) x 95 mm (D) x 144.3 mm (H)           Weight (g)         395 g           Environmental         Secretain of temperature           Operating Temperature         -40 to 85°C (-40 to 185°F)           Operating Imperature         -40 to 70°C (-40 to 158°F)           Operating Humidity         5to 95% Non-condensing           Resultory Approvals         EMS           EMS         ECC Part 15, CISPR (EMS5022) class A           EMS         ECC Part 2, CISPD, ENG10000-4-2 (ESD), ENG10000-4-3 (ESD), ENG10000-4-4 (EFT), ENG1000-4-5 (Surge), ENG1000-4-6 (CS), ENG1000-4-8 (ESD), ENG1000-4-3 (ESD), ENG1000-	R.M. Indicator	Green: Indicates that the system is operating in O-Ring Master mode
10/100Base-T(X) RJ45 Port Indicator     Green for port Link/Act. Amber for Link       Fault Contact       Relay     Relay output to carry capacity of 1A at 24VDC       Power       Input Power     Dual 12~48 VDC power input on 6-pin terminal block       Power Consumption (Typ.)     4 Watts       Overload Current Protection     Present       Reverse Polarity Protection     Present on terminal block       Physical Characteristics       Enclosure     IP-30       Dimensions (W x D x H)     26.1 mm (W) x 95 mm (D) x 144.3 mm (H)       Weight (g)     395 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       EMS     FCC Part 15, CISPR (EMS5022) class A       EMS     FCC Part 15, CISPR (EMS5022) class A       EMS     EM 50000-4-2 (ES), IN 610000-4-3 (RS), EN 61000-4-4 (EFT), EN 61000-4-5 (Surge), EN 61000-4-6 (CS), EN 61000-4-8 (ES), EN 61000-4-3 (RS), EN 61000-4-3 (RS), EN 61000-4-4 (EFT), EN 61000-4-5 (Surge), EN 61000-4-6 (CS), EN 61000-4-8 (ES)       Shock     EL 60068-2-27       Free Fall     EL 60068-2-3       Vibration     IEC 60068-2-3       Short     EN 61000-4-2 (ES), EN 61000-4-3 (ES), EN 61000-4-3 (ES)	O-Ring Indicator	Green: Indicates port operated in O-Ring mode
Fault Contact         Relay       Relay output to carry capacity of 1A at 24VDC         Power         Input Power       Dual 12~ 48 VDC power input on 6-pin terminal block         Power Consumption (Typ.)       4 Watts         Overload Current Protection       Present         Reverse Polarity Protection       Present on terminal block         Physical Characteristics       Present         Enclosure       IP-30         Dimensions (W x D x H)       26.1 mm (W) x 95 mm (D) x 144.3 mm (H)         Weight (g)       395 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         EMS       FCC Part 15, CISPR (EN55022) class A         EMS       EN61000-4-21 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8 (RS), EN61000-4-1 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8 (RS), EN61000-4-1 (EFT), ENGINDER (ERSECTION CONTROLL)         Even Fall       IEC60068-2-32         Vibration       IEC60068-2-6         Safety       EN60950-1	Fault Indicator	Amber : Indicates unexpected event occurred
RelayRelay output to carry capacity of 1A at 24VDCPowerPower Onsumption (Typ.)Jual 12~ 48 YDC power input on 6-pin terminal blockPower Consumption (Typ.)4 WattsOverload Current ProtectionPresentReverse Polarity ProtectionPresent on terminal blockPhysical CharacteristicsP30Dimensions (W x D x H)26.1 mm (W) x 95 mm (D) x 144.3 mm (H)Weight (g)395 gEnvironmentalStorage Temperature-40 to 85°C (-40 to 185°F)Operating Temperature-40 to 70°C (-40 to 158°F)Operating Humidity96 to 95% Non-condensingRegulatory ApprovalsFCC Part 15, CISPR (EN55022) dass AEMIFCC Part 15, CISPR (EN55022) dass AEMSECOMO00-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8ShockIEC60068-2-27Free FallIEC60068-2-32VibrationIEC60068-2-6SafetyEN60050-1	10/100Base-T(X) RJ45 Port Indicator	Green for port Link/Act. Amber for Link
Power         Input Power         Dual 12− 48 VDC power input on 6-pin terminal block           Power Consumption (Typ.)         4 Watts           Overload Current Protection         Present           Reverse Polarity Protection         Present on terminal block           Physical Characteristics         P30           Dimensions (W x D x H)         26.1 mm (W) x 95 mm(D) x 144.3 mm(H)           Weight (g)         395 g           Environmental         5torage 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           EMS         ENG 1000-4-2 (ESD), ENG 1000-4-3 (RS), ENG 1000-4-4 (EFT), ENG 1000-4-5 (Surge), ENG 1000-4-6 (CS), ENG 1000-4-8, ENG 1000-4-11           Shock         IECG0068-2-27           Free Fall         IECG0068-2-32           Vibration         IECG0068-2-6           Safety         N60950-1	Fault Contact	
Input Power     Dual 12~ 48 VDC power input on 6-pin terminal block       Power Consumption (Typ.)     4 Watts       Overload Current Protection     Present       Reverse Polarity Protection     Present on terminal block       Physical Characteristics     Finchosure       Dimensions (W x D x H)     26.1 mm (W) x 95 mm (D) x 144.3 mm (H)       Weight (g)     395 g       Environmental       Storage Temperature     -40 to 85° (-40 to 185°F)       Operating Temperature     -40 to 70° (-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, EN61000-4-1 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (ESD), EN61000-4-8, EN61000-4-1 (ESD), EN61000-4-1 (ESD), EN61000-4-5 (ESD), ENG1000-4-5	Relay	Relay output to carry capacity of 1A at 24VDC
Power Consumption (Typ.)4 WattsOverload Current ProtectionPresentReverse Polarity ProtectionPresent on terminal blockPhysical CharacteristicsEnclosureIP-30Dimensions (W x D x H)26.1 mm (W) x 95 mm(D) x 144.3 mm(H)Weight (g)395 gEnvironmentalStorage Temperature-40 to 85°C (-40 to 185°F)Operating Temperature-40 to 70°C (-40 to 158°F)Operating Humidity5% to 95% Non-condensingRegulatory ApprovalsFCC Part 15, CISPR (EN55022) class AEMSEN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11ShockIEC60068-2-27Free FallIEC60068-2-32VibrationIEC60068-2-6SafetyEN60950-1	Power	
Overload Current Protection         Present           Reverse Polarity Protection         Present on terminal block           Physical Characteristics           Enclosure         IP-30           Dimensions (W x D x H)         26.1 mm (W) x 95 mm(D) x 144.3 mm(H)           Weight (g)         395 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           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         BN60950-1	Input Power	Dual 12~ 48 VDC power input on 6-pin terminal block
Reverse Polarity Protection Present on terminal block  Physical Characteristics  Enclosure IP-30  Dimensions (W x D x H) 26.1 mm (W) x 95 mm(D) x 144.3 mm(H)  Weight (g) 395 g  Environmental  Storage Temperature -40 to 85°C (-40 to 185°F)  Operating Temperature -40 to 70°C (-40 to 185°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, EN61000-4-1 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-1 (EFT), ENG1000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-1 (EFT), ENG1000-4-5 (Surge), ENG1000-4-6 (CS), ENG1000-4-1 (EFT), ENG1000-4-5 (Surge), ENG1000-4-6 (CS), ENG1000-4-1 (EFT), ENG1000-4-5 (Surge), ENG1000-4-6 (CS), ENG1000-4-1 (EFT), ENG1000-4-5 (SURGE), EN	Power Consumption (Typ.)	4 Watts
Physical Characteristics           Enclosure         IP-30           Dimensions (W x D x H)         26.1 mm (W) x 95 mm(D) x 144.3 mm(H)           Weight (g)         395 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           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         EN60950-1	Overload Current Protection	Present
Enclosure         IP-30           Dimensions (W x D x H)         26.1 mm (W) x 95 mm(D) x 144.3 mm(H)           Weight (g)         395 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           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         EN60950-1	Reverse Polarity Protection	Present on terminal block
Dimensions (W x D x H)         26.1 mm (W) x 95 mm(D) x 144.3 mm(H)           Weight (g)         395 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           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         EN60950-1	Physical Characteristics	
Weight (g)         395 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           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         EN60950-1	Enclosure	IP-30
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           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         EN60950-1	Dimensions (W x D x H)	26.1 mm (W) x 95 mm(D) x 144.3 mm(H)
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           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         EN60950-1	Weight (g)	395 g
Operating Temperature         -40 to 70°C (-40 to 158°F)           Operating Humidity         5% to 95% Non-condensing           Regulatory Approvals         EMI           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         EN60950-1	Environmental	
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         EN60950-1	Storage Temperature	-40 to 85°C (-40 to 185°F)
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         EN60950-1	Operating Temperature	-40 to 70°C (-40 to 158°F)
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         EN60950-1	Operating Humidity	5% to 95% Non-condensing
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 EN60950-1	Regulatory Approvals	
ENS       EN61000-4-11         Shock       IEC60068-2-27         Free Fall       IEC60068-2-32         Vibration       IEC60068-2-6         Safety       EN60950-1	EMI	FCC Part 15, CISPR (EN55022) class A
Free Fall         IEC60068-2-32           Vibration         IEC60068-2-6           Safety         EN60950-1	EMS	
Vibration         IEC60068-2-6           Safety         EN60950-1	Shock	IEC60068-2-27
Safety EN60950-1	Free Fall	IEC60068-2-32
	Vibration	IEC60068-2-6
<b>Warranty</b> 5 years	Safety	EN60950-1
	Warranty	5 years

## **Ordering Information**

IES-2 AABA

	<u> </u>	
Code efinition	10/100Base-T(X) Port Number	Additional Port Number
Option	- <b>5:</b> 5 ports	- <b>0:</b> 0 port

Available Model	Model Name	Description
	IES-2050A	Industrial 5-port slim type lite-managed Ethernet switch with 5x10/100Base-T(X)
Packing List  • IES-2050A  • DIN-Rail Kit  • Wall-mount Kit  • ORing Tool CD  • Quick Installation	Guide	Optional Accessories (Can be purchased separately)  Open-Vision M500, Powerful Network Management Windows Utility Suite, 500 IP devices  DR-45 series, 45W DIN-Rail power supply  DR-75 series, 75W DIN-Rail power supply  DR-120 series, 120W DIN-Rail power supply