# IES-3082GP



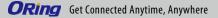
## Industrial 10-port managed Ethernet switch with 8x10/100Base-T(X) and 2x100/1000Base-(F)X, SFP socket



### Introduction

IES-3082GP is managed Redundant Ring Ethernet switch with 8x10/100Base-T(X) ports and 2x100/1000Base-(F)X SFP ports. With completely support of Ethernet Redundancy protocol, O-Ring (recovery time < 30ms over 250 units of connection), O-Chain, MRP and MSTP/RSTP/STP (IEEE 802.1s/w/D) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. O-Chain is the revolutionary network redundancy technology that provides the add-on network redundancy topology for any backbone network, O-Chain allows multiple redundant network rings of different redundancy protocols to join and function together as a larger and more robust compound network topology. O-Chain providing ease-of-use while maximizing fault-recovery swiftness, flexibility, compatibility, and cost-effectiveness in one set of network redundancy topology. All function of IES-3082GP can be managed centralized and convenient by a powerful windows utility — Open-Vision. In addition, the wide operating temperature range from -40 to 75°C can satisfy most of operating environment. Therefore, the switch is one of the most reliable choice for highly-managed and Fiber Ethernet application.

- **O-Ring:** O-Ring is ORing's proprietary redundant ring technology, with recovery time of less 30 milliseconds and up to 250 nodes. The O-Ring redundant ring technology can protect mission-critical application from network interruptions or temporary malfunction with its fast recover technology.
- O-Chain: O-Chain is the revolutionary network redundancy technology that provides the add-on network redundancy topology for any backbone network, O-Chain allows
  multiple redundant network rings of different redundancy protocols to join and function together as a larger and more robust compound network topology.

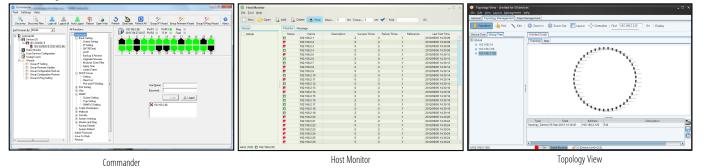


0-Chain providing ease-of-use while maximizing fault-recovery swiftness, flexibility, compatibility, and cost-effectiveness in one set of network redundancy topology.

- MRP: Media Redundancy Protocol (MRP) is a data network protocol standardized by the IEC 62439-2. It allows rings of Ethernet switches to overcome any single failure with recovery time much faster than achievable with Spanning Tree Protocol.
- Modbus TCP: This is a Modbus variant used for communications over TCP/IP networks.

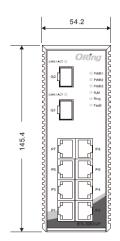
#### **Open-Vision**

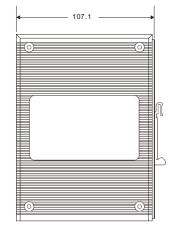
ORing's switches are intelligent switches. Different from other traditional redundant switches, ORing provides a set of Windows Utility (Open-Vision) for user to manage and monitor all of industrial Ethernet switches on the industrial network.

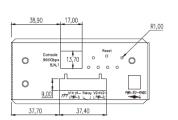


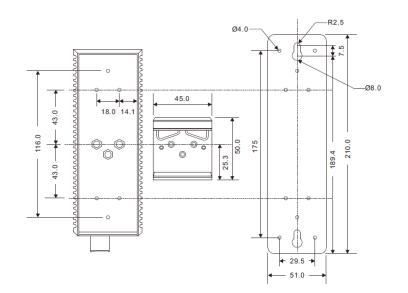
#### Dimensions

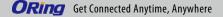
Unit = mm (Tolerance ±0.5mm)











## Specifications

ORing Switch Model	IES-3082GP
Physical Ports	
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	8
100/1000Basde-(F)X SFP Port	2
Technology	
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3z for 1000Base-X IEEE 802.3a for 1000Base-T IEEE 802.3x for Flow control IEEE 802.3a for LACP (Link Aggregation Control Protocol) IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1p for COS (Class of Service) IEEE 802.1Q for VLAN Tagging IEEE 802.1v for RSTP (Rapid Spanning Tree Protocol) IEEE 802.1s for MSTP (Multiple Spanning Tree Protocol) IEEE 802.1x for Authentication IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)
MAC Table	8K
Packet buffer	1Mbits
Priority Queues	4 Star and Frank
Processing Switch Properties	Store-and-Forward Switching latency: 2.128 µs Switching bandwidth: 5.6Gbps Throughput (packet per second): Fast Ethernet ports: 76.191Mpps@64Bytes packet Gigabit Ethernet ports: 761.91Mpps@64Bytes packet Max. Number of Available VLANs: 4096 VLAN ID Range: VID 1 to 4095 IGMP multicast groups: 1024 Port rate limiting: User Define
Security Features	Enable/disable ports, MAC based port security Port based network access control (802.1x) VLAN (802.1Q) to segregate and secure network traffic Supports Q-in-Q VLAN for performance & security to expand the VLAN space Radius centralized password management SNMP V1/V2c/V3 encrypted authentication and access security
Software Features	STP/RSTP/MSTP (IEEE 802.1D/w/s) Redundant Ring (0-Ring) with recovery time less than 30ms 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 SNTP for synchronizing of clocks over network Support PTP Client (Precision Time Protocol) clock synchronization DHCP Server / Client support Port Trunk support MVR (Multicast VLAN Registration) support Modbus TCP
Network Redundancy	O-Ring O-Chain MRP MSTP/RSTP/STP
RS-232 Serial Console Port	RS-232 in RJ45 connector with console cable. 9600bps, 8, N, 1
LED indicators	
Power Indicator (PWR)	Green: Power LED x 3
Ring Master Indicator (R.M.)	Green: Indicates that the system is operating in O-Ring Master mode
O-Ring Indicator (Ring)	Green: Indicates that the system operating in O-Ring mode Green Blinking: Indicates that the Ring is broken.
Fault Indicator (Fault)	Amber: Indicate unexpected event occurred

\*NOTE: This function is available by request only



10/1008ase-F00 R4S Port IndicatorKern for Link/Act Indicator: On for Inik-due, Diff Inika-due, Diff Inik-due, Diff I				
Fault contact         Fault contact           Relay         Relay output to carry capacity of 1A at 2440C           Reset Function         Reset Function           Reset futton         < Ssec System rebot, > S sec factory default           Power         Important input power         Triple DC inputs, 12 – 4840C con 7-pin terminal block, 12 – 4540C con power jack           Power consumption (Typ.)         < Stec System rebot, > S sec factory default         Power consumption (Typ.)           Overload current protection         Present         Pesent           Reverse Polarity Protection         Present         Present on terminal block.           Physical Characteristic         P=30 Aluminum         Pid 21 (W) x 1/0 (X H54 410)mm           Dimension (W x D x H)         S42 (W) x 1/0 (X H54 410)mm         S13 (W) x 42 (U) (X S C) (H) and           Veight (g)         793         Site System recondensing           Environmental         Environmental         Environmental           ENC         CEMC (RM S0835, RM S0832), RC Pan 15 8         Environmental Site System (RV M00-3-2, VCI dias A, CTek dias A, FCC Pan 15 8 dias A           ENK         Dissos (ECM R00-3-2, DN Gais A, MS R), NJ, EC/RI GIOA-4, RF AV), IEC/RI GIOA-4, RF AV), IEC	10/100Base-T(X) RJ45 Port Indicator	Green for Link/Act indicator: On for link-up, Off for link-down, Blinking for act. Amber for Duplex/Collision indicator: On for full-duplex, Off for half-duplex, Blinking for half-duplex and collision occurred.		
Relay         Relay output to carry capacity of 1A at 24/0C           Reset Function            Reset Function            Rever Function            Power            Redundant Input power         Triple DC Inputs, 12–48/0DC on 7-pin terminal block, 12–45/0DC on power jack           Power consumption (Typ.)          Status 2000 0.024 (7W), 24/0DC 0.34 (7W), 45/0DC 0.17A (8W)           Overload current protection         Present         Present           Physical Characteristic         Present on terminal block         Present           Fundosure         P-30 Aurninum         Status (Hjmm         Status (Hjmm           Starge Femperature         -400 to 85% (400 to 185%)         Status (Hjmm         Status (Hjmm <th>100/1000Base-(F)X SFP Port Indicator</th> <th colspan="3">Green for Link/Act indicator: On for link-up, Off for link-down, Blinking for act.</th>	100/1000Base-(F)X SFP Port Indicator	Green for Link/Act indicator: On for link-up, Off for link-down, Blinking for act.		
Reset Function         <5 sec. System rebot, >5 sec. Factory default           Power           Redundant Input power         Triple DC inputs, 12~48VDC on 7-pin terminal block, 12~45VDC on power jack           Power consumption (Typ.) <abnet state="" state<="" th=""><th>Fault contact</th><th></th></abnet>	Fault contact			
Reset Button         < S sec: System reboot, > S sec: Factory default           Power         Tiple DC inputs, 12 – 48VDC on 7-pin terminal block, 12 – 45VDC on power jack           Redundant linput power         Tiple DC inputs, 12 – 48VDC on 7-pin terminal block, 12 – 45VDC on power jack           Power consumption (Typ.)         <8Watts, 12VDC.062A (7W), 24VDC/03A (7W), 48VDC/0.17A (8W)           Overload current protection         Present           Reverse Polarity Protection         Present           Physical Characteristic         Pre-30 Aluminum           Dimension (Wx Dx H)         \$542 (W) × 102 / 10) × 1454 (H)Inm           213 (W) × 424 (D) × 572 (H) Inch         213 (W) × 424 (D) × 572 (H) Inch           Weight (g)         750 g           Environmental         -40 to 85°C (-40 to 185°F)           Operating Temperature         -40 to 85°C (-40 to 185°F)           Operating Temperature         -40 to 55°C (-40 to 185°F)           Operating Temperature         -40 to 55°C (-40 to 185°F)           Operating Temperature         -80 to 85°C (-40 to 185°F)           BM         ENS50032, ECC Part 15 B           EMI         ENS50032, ECC Part 15 B           EMI         ENS50032, ECC Part 15 B           EMI         ENS50032, ECC Part 15 B           EMS         ESS5033 (EECPIN 5000-4-2 (ESC - Contact 4W, Ar RKW), ECPIN 61000-4	Relay	Relay output to carry capacity of 1A at 24VDC		
Power           Redundant liput power         Triple DC inputs, 12~44VDC on 7-pin terminal block, 12~45VDC on power jack           Power consumption (Typ.)         <8Watts, 12VDC/0.62A (7W), 24VDC/0.3A (7W), 48VDC 0n 7-pin terminal block, 12~45VDC on power jack           Power consumption (Typ.)         <8Watts, 12VDC/0.62A (7W), 24VDC/0.3A (7W), 48VDC 0n 7A (8W)           Overload current protection         Present           Reverse Polarity Protection         Present on terminal block           Physical Characteristic         P-30 Aluminum           Dimension (W x D x H)         542 (W) x 107.1 (D) x 145.4 (H)mm 2.13 (W) x 424 (D) x 522 (H) inch           Veright (g)         750 g           Environmental         213 (W) x 424 (D) x 552 (H) inch           Storage Temperature         -40 to 85Y (-40 to 185F)           Operating Temperature         -40 to 85Y (-40 to 185F)           Operating Temperature         -40 to 85Y (-40 to 185F)           Operating Temperature         -40 to 75Y (-40 to 167F)           Operating Temperature         -40 to 75Y (-40 to 167F)           Operating Temperature         -40 to 85Y (-40 to 185F)           EMC         CEMC (EN 55035, EN 55032), EC Pan 15B           EML         B1 55032, ECFN 61000-3-2, RC1 class A, CTRx class A, FC Pan 15B class A           EMS         B1 55035 (EF/R 61000-4-2 (ISD: Contract 4KV, Atr 8KV), EC/RN 61000-4-3 (	Reset Function			
Redundant Input power         Triple DC inputs, 12~48VDC on 7-pin terminal block, 12~45VDC on power jack           Power consumption (Typ.)         <8Watts, 12VDC/0.62A (TW), 24VDC/0.3A (TW), 48VDC/0.17A (8W)	Reset Button	< 5 sec: System reboot, > 5 sec: Factory default		
Power consumption (Typ.)     <8Watts, 12VDC/0.62A (7W), 24VDC/0.3A (7W), 48VDC/0.17A (8W)       Overload current protection     Present       Reverse Polarity Protection     Present on terminal block       Physical Character/stic     Physical Character/stic       Endosure     IP-30 Aluminum       Dimension (W x D x H)     \$42 (W) x 107.1 (D) x 145.4 (P)mm       213 (W) x 4.24 (D) x 5.72 (H) inch     \$42 (W) x 0.72 (H) inch       Weight (g)     700 g       Zorage Temperature     -40 to 85°C (-40 to 185°F)       Operating Temperature     -40 to 75°C (-40 to 185°F)       Operating Temperature     -40 to 75°C (-40 to 167°F)       Operating Humidity     5% to 95% non-condensing       Regulatory approvals     EMC       EMI     EN S5032, (ESPR32, EN 61000-3-2, EN 61000-3-3, VECI dats A, C-Tick dats A, FCC Part 15 B dats A       EMS     ENS 6006-8-2.61       Shock     IE (60068-2-31       Vibration     IE (60068-2-64       Vibration     IE (60068-2-64       Vibration     IE (60068-2-64	Power			
Overload current protectionPresentReverse Polarity ProtectionPresent on terminal blockPhysical CharacteristicPhysical CharacteristicEnclosureIP-30 AluminumDimension (W x D x H)54.2 (W) x 107.1 (D) x 145.4 (H) mm 2.13 (W) x 4.24 (D) x 5.72 (H) inch21 (W) x 4.24 (D) x 5.72 (H) inchWeight (g)700700700PortionmentalStorage Temperature-40 to 85°C (-40 to 185°F)Operating Temperature-40 to 85°C (-40 to 185°F)Operating Temperature-40 to 75°C (-40 to 185°F)Operating Temperature-40 to 75°C (-40 to 185°F)Operating Humidity5% to 95% non-condensingRegulatory approvalsEMCCEEMC (EN 55035, EN 55032), FCC Part 15 8EMSEMS (1000-4-3 (EST) Contact 4KV, Air 8KV), IEC/EN 61000-4-3 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (RS: 3V), IEC/EN 61000-4-4 (IET Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (RS: 3V), IEC/EN 61000-4-4 (IET Power 0.5KV, Signal 0.5KV), IEC/EN 6	Redundant Input power	Triple DC inputs, 12~48VDC on 7-pin terminal block, 12~45VDC on power jack		
Reverse Polarity Protection         Present on terminal block           Physical Characteristic         Physical Characteristic           Enclosure         IP-30 Aluminum           Dimension (W x D x H)         \$42 (W) x 107.1 (D) x 145.4 (H)mm 213 (W) x 4.24 (D) x 5.72 (H) inch           Weight (g)         750 g           Environmental	Power consumption (Typ.)	≤8Watts, 12VDC/0.62A (7W), 24VDC/0.3A (7W), 48VDC/0.17A (8W)		
Physical Characteristic           Endosure         IP-30 Aluminum           Dimension (W x D x H)         \$4.2 (W) x 107.1 (D) x 145.4 (H)mm 2.13 (W) x4.24 (D) x 572 (H) inch           Weight (g)         750 g           Environmental         750 g           Storage Temperature         -40 to 85°C (-40 to 185°F)           Operating Temperature         -40 to 75°C (-40 to 167°F)           Operating Temperature         -40 to 75°C (-40 to 167°F)           Operating Temperature         -40 to 75°C (-40 to 167°F)           Operating Provals         5% to 95% non-condensing           Regulatory approvals         EMC           EMS         EMS (DS035, EN 55032), FCC Part 15 8           EMS         EMS (DS04-4 (EEF Power 0.5KV), Signal 0.5KV), IEC/EN 61000-4-3 (ICS: 3V), IEC/EN 61000-4-4 (IEF Power 0.5KV), Signal 0.5KV), IEC/EN 61000-4-3 (ICS: 3V), IEC/EN 61000-4-4 (IEF Power 0.5KV), Signal 0.5KV), IEC/EN 61000-4-3 (ICS: 3V), IEC/EN 61000-4-4 (IEF Power 0.5KV), Signal 0.5KV), IEC/EN 61000-4-4 (IEF Power 0.5KV), Signal 0.5KV), IEC/EN 61000-4-3 (ICS: 3V), IEC/EN 61000-4-4 (IEF Power 0.5KV), Signal 0.5KV), IEC/EN 61000-4-3 (ICS: 3V), IEC/EN 61000-4-4 (IEF Power 0.5KV), Signal 0.5KV), IEC/EN 61000-4-3 (ICS: 3V), IEC/EN 61000-4-4 (IEF Power 0.5KV), Signal 0.5KV), IEC/EN 61000-4-4 (IEF Power 0.5KV), Signal 0.5KV), IEC/EN 61000-4-3 (ICS: 3V), IEC/EN 61000-4-4 (IEF Power 0.5KV), Signal 0.5KV), IEC/EN 61000-4-3 (ICS: 3V), IEC/EN 61000-4-4 (IEF Power 0.5KV), Signal 0.5KV), IEC/EN 61000-4-3 (ICS: 3V), IEC/EN 61000-4-4 (IEF Power 0.5KV), Signal 0.5KV), IEC/EN 61000-4-3 (ICS: 3V), IEC/EN 61000-4-4	Overload current protection	Present		
EndosureIP-30 AluminumDimension (W x D x H)\$4.2 (W) x 107.1 (D) x 145.4 (H)mm 2.13 (W) x 4.24 (D) x 5.72 (H) inchWeight (g)750 gEnvironmentalStorage Temperature-40 to 85°C (-40 to 185°F)Operating Temperature-40 to 75°C (-40 to 185°F)Operating Temperature-40 to 75°C (-40 to 167°F)Operating Stronge Temperature-40 to 75°C (-40 to 167°F)Stronge TemperatureStronge TemperatureEMCCE EMC (EN S5035, EN S5032), ECC Part 15 BEMIEN S5035 (IEC/EN 61000-4-2 (ESD: Contact 4KV, Air 8KV), IEC/EN 61000-4-3 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-3 (ISC 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-4 (ISC 3V), IEC/EN 61000-4-4 (ISC 3V), IEC/EN 61000-4-1 (IDP))ShockIEC60068-2-31EVIDationIEC60068-2-6MTBF <th< th=""><th>Reverse Polarity Protection</th><th>Present on terminal block</th></th<>	Reverse Polarity Protection	Present on terminal block		
Dimension (W x D x H)\$42 (W) x 107.1 (D) x 145.4 (H)mm 2.13 (W) x 4.24 (D) x 5.72 (H) inchWeight (g)750 gEnvironmental40 to 85°C (-40 to 185°F)Operating Temperature-40 to 85°C (-40 to 167°F)Operating Temperature-40 to 95% to 95% non-condensingOperating Temperature5% to 95% non-condensingEMCCEEMC (EN 55035, EN 55032), FCC Part 15 BEMIDis 5032, CSPR32, EN 61000-3-2, EN 61000-3-3, VCCI dass A, C-Tick dass A, FCC Part 15 B class AEMSEN 55035, (EC/EN 61000-4-2 (ESD: Contact 4KY, Air 8KY), IEC/EN 61000-4-3 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KY, Signal 0.5KY), IEC/ENShockIE 60068-2-37Free FallIE 60068-2-45VibrationIE 60068-2-45MTBF70345.9824 hrs.	Physical Characteristic			
Differision (W x 0 x H)         2.13 (W) x 4.24 (D) x 5.72 (H) inch           Weight (g)         750 g           Environmental         -40 to 85°C (-40 to 185°F)           Operating Temperature         -40 to 75°C (-40 to 165°F)           Operating Temperature         -40 to 75°C (-40 to 165°F)           Operating Temperature         5% to 95% non-condensing           Regulatory approvals         EMC         CE EMC (EN 55035, EN 55032), FCC Part 15 B           EMI         9N 55032 (SPR32, EN 61000-3-2, EN 61000-3-3, VCCI dass A, C-Tick dass A, FCC Part 15 B class A           EMS         Shock         EIC6008-2-27           Free Fall         IEC6008-2-31         IEC6008-2-6           Vibration         IEC6008-2-6         T70345,8824 hrs.	Enclosure	IP-30 Aluminum		
Environmental         -40 to 85°C (-40 to 185°F)           Operating Temperature         -40 to 75°C (-40 to 185°F)           Operating Temperature         -40 to 75°C (-40 to 167°F)           Operating Humidity         5% to 95% non-condensing           Regulatory approvals         -           EMC         CE EMC (EN 55035, EN 55032), FCC Part 15 B           EMI         EN 55035, (ISPR32, EN 61000-3-2, EN 61000-3-3, VCCI class A, C-Tick class A, FCC Part 15 B class A           EMS         EN 55035, (ISCPR32, EN 61000-3-2, EN 61000-4-3, (KC, Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Si 3V), IEC/EN 61000-4-11 (DIP))           Shock         IEC60068-2-27           Free Fall         IEC60068-2-6           Vibration	Dimension (W x D x H)			
Storage Temperature       -40 to 85°C (-40 to 185°F)         Operating Temperature       -40 to 75°C (-40 to 167°F)         Operating Humidity       5% to 95% non-condensing         Regulatory approvals       EMC         EMI       EN 55032, EN 55032), FCC Part 15 B         EMS       EN 55032 (SPR32, EN 61000-3-2, EN 61000-3-3, VCCI class A, C-Tick class A, FCC Part 15 B class A         EMS       EN 55035 (EE/EN 61000-4-2 (ESD: contact 4KV, Air 8KV), IEC/EN 61000-4-3 (RS: 3V), IEC/EN 61000-4-11 (DIP))         Shock       IEC60068-2-27         Free Fall       IEC60068-2-31         Vibration       IEC60068-2-6         MTBF       770345,9824 hrs.	Weight (g)	750 g		
Operating Temperature-40 to 75°C (-40 to 167°F)Operating Humidity5% to 95% non-condensingRegulatory approvalsEMCCE EMC (EN 55035, EN 55032), FCC Part 15 BEMIEN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, VCCI dass A, C-Tick dass A, FCC Part 15 B class AEMSEN 55035 (IEC/EN 61000-4-2 (ESD: Contact 4KV, Air 8KV), IEC/EN 61000-4-3 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/ENShockIEC60068-2-27Free FallIEC60068-2-31VibrationIEC60068-2-31MTBF70345.9824 hrs.	Environmental			
Operating Humidity       5% to 95% non-condensing         Regulatory approvals         EMC       CE EMC (EN 55035, EN 55032), FCC Part 15 B         EMI       EN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, VCCI class A, C-Tick class A, FCC Part 15 B class A         EMS       EN 55035 (IEC/EN 61000-4-2 (ESD: Contact 4KV, Air 8KV), IEC/EN 61000-4-3 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Surge: Power 0.5KV, RI45 1KV), IEC/EN 61000-4-6 (CS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-6 (CS: 3V), IEC/EN 61000-4-8 (PFMF), IEC/EN 61000-4-11 (DIP))         Shock       IEC60068-2-27         Free Fall       IEC60068-2-31         Vibration       IEC60068-2-6         MTBF       70345.9824 hrs.	Storage Temperature	-40 to 85°C (-40 to 185°F)		
Regulatory approvals         EMC       CE EMC (EN 55035, EN 55032), FCC Part 15 B         EMI       EN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, VCCI class A, C-Tick class A, FCC Part 15 B class A         EMS       EN 55035 (IEC/EN 61000-4-2 (ESD: Contact 4KV, Air 8KV), IEC/EN 61000-4-3 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Surge: Power 0.5KV, RJ45 1KV), IEC/EN 61000-4-6 (CS: 3V), IEC/EN 61000-4-8 (PFMF), IEC/EN 61000-4-11 (DIP))         Shock       IEC60068-2-27         Free Fall       IEC60068-2-31         Vibration       IEC60068-2-6         MTBF       770345.9824 hrs.	Operating Temperature	-40 to 75°C (-40 to 167°F)		
EMC         CE EMC (EN 55035, EN 55032), FCC Part 15 B           EMI         EN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, VCCI class A, C-Tick class A, FCC Part 15 B class A           EMS         EN 55035 (IEC/EN 61000-4-2 (ESD: Contact 4KV, Air 8KV), IEC/EN 61000-4-3 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (CS: 3V), IEC/EN 61000-4-8 (PFMF), IEC/EN 61000-4-11 (DIP))           Shock         IEC60068-2-27           Free Fall         IEC60068-2-31           Vibration         IEC60068-2-6           MTBF         770345.9824 hrs.	Operating Humidity	5% to 95% non-condensing		
EMIEN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, VCCI class A, FCC Part 15 B class AEMSEN 55035 (IEC/EN 61000-4-2 (ESD: Contact 4KV, Air 8KV), IEC/EN 61000-4-3 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Surge: Power 0.5KV, RJ45 1KV), IEC/EN 61000-4-6 (CS: 3V), IEC/EN 61000-4-8 (PFMF), IEC/EN 61000-4-11 (DIP))ShockIEC60068-2-27Free FallIEC60068-2-31VibrationIEC60068-2-6MTBF770345.9824 hrs.	Regulatory approvals			
EMS         EN 55035 (IEC/EN 61000-4-2 (ESD: Contact 4KV, Air 8KV), IEC/EN 61000-4-3 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN           Shock         IEC60068-2-27           Free Fall         IEC60068-2-31           Vibration         IEC60068-2-6           MTBF         770345.9824 hrs.	EMC	CE EMC (EN 55035, EN 55032), FCC Part 15 B		
Erros         61000-4-5 (Surge: Power 0.5KV, RJ45 1KV), IEC/EN 61000-4-6 (CS: 3V), IEC/EN 61000-4-8(PFMF), IEC/EN 61000-4-11 (DIP))           Shock         IEC60068-2-27           Free Fall         IEC60068-2-31           Vibration         IEC60068-2-6           MTBF         770345.9824 hrs.	EMI	EN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, VCCI class A, C-Tick class A, FCC Part 15 B class A		
Free Fall         IEC60068-2-31           Vibration         IEC60068-2-6           MTBF         770345.9824 hrs.	EMS	EN 55035 (IEC/EN 61000-4-2 (ESD: Contact 4KV, Air 8KV), IEC/EN 61000-4-3 (RS: 3V), IEC/EN 61000-4-4 (EFT Power 0.5KV, Signal 0.5KV), IEC/EN 61000-4-5 (Surge: Power 0.5KV, RJ45 1KV), IEC/EN 61000-4-6 (CS: 3V), IEC/EN 61000-4-8 (PFMF), IEC/EN 61000-4-11 (DIP))		
Vibration         IEC60068-2-6           MTBF         770345.9824 hrs.	Shock	IEC60068-2-27		
MTBF         770345.9824 hrs.	Free Fall	IEC60068-2-31		
	Vibration	IEC60068-2-6		
Warranty 5 years	MTBF	770345.9824 hrs.		
	Warranty	5 years		

Ordering Inf	ormation	
Available	Model Name	Description
Model	IES-3082GP	Industrial 10-port managed Ethernet switch with 8x10/100Base-T(X) and 2x100/1000Base-(F)X, SFP socket
Packing List • IES-3082G • Wall-moun • ORing Tool • Quick Insta	nt Kit x 2 I CD Card x 1 Illation Guide x 1	<ul> <li>Optional Accessories</li> <li>Open-Vision M500: Powerful Network Management Windows Utility Suit, 500 IP devices</li> <li>SFP100 series: 100Mbps SFP optical transceiver</li> <li>SFP 1G series: 1Gbps SFP optical transceiver</li> <li>SDR/NDR Series DIN-Rail power supply</li> </ul>

Console Cable x 1