

IGS-3044GP

>> Industrial 8-port Gigabit Managed Ethernet Switch 4x10/100/1000Base-T(X) and 4x100/1000Base-X SFP Ports

- Supports **O-Ring** (recovery time < 150ms over 250 units of connection), **Open-Ring**, **O-RSTP**, MSTP/RSTP/STP (IEEE 802.1s/w/D) for Ethernet Redundancy
- Supports DDM (Digital Diagnostic Monitoring) function
- Supports SNMP v1/v2c/v3 & 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
- Support eight Gigabit port
- Dual Redundant DC power inputs
- Support LLDP Protocol



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Industrial Ethernet Switch

> Features

- World's fastest Redundant Ethernet Ring: O-Ring (recovery time < 150ms over 250 units of connection)
- **Open-Ring** support the other vendor's ring technology in open architecture
- **O-RSTP** support applications with complex topology
- STP/RSTP/MSTP supported
- 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
- Supports DDM (Digital Diagnostic Monitoring) function
- 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
- Dual redundant DC power inputs of terminal block
- Support eight Gigabit port
- Very wide operating temperature range from -40 to 70°C
- Rigid IP-30 housing design
- DIN-Rail and panel mounting enabled

> Introduction

IGS-3044GP is managed Redundant Ring Ethernet switch with 4x10/100/1000Base-T(X) and 4x100/1000Base-X SFP ports. With completely support of Ethernet Redundancy protocol, O-Ring (recovery time < 150ms over 250 units of connection), Open-Ring, O-RSTP 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. IGS-3044GP can be managed centralized and convenient by a powerful windows utility — Open-Vision. IGS-3044GP support new DDM (Digital Diagnostic Monitoring) function, which can monitor instantly the status of electronic voltage, current and temperature. The redundant DC power inputs guarantee a non-stop operation. The backup power input will take over immediately when the primary DC power input fails. IGS-3044GP provide relay outputs that can be set up to indicate events with urgency to notify or warn the technicians, so they can quickly respond to the message in priority. Therefore, the switch is one of the most reliable choice for highly-managed and Fiber Ethernet application.

> Specifications

| ORing Switch Model | IGS-3044GP |
|--|---|
| Physical Ports | |
| 10/100/1000Base-T(X) Ports in RJ45 Auto MDI/MDIX | 4 |
| 100/1000Base-X SFP ports | 4 |
| Technology | |
| Ethernet Standards | IEEE 802.3 for 10Base-T(X), IEEE 802.3u for 100Base-T(X) and 100BaseFX IEEE 802.3z for 1000Base-X IEEE 802.3ab for 1000Base-T, IEEE 802.3x for Flow control 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 802.1Q for VLAN Tagging IEEE 802.1w 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 | 8192 MAC addresses |
| Priority Queues | 4 |
| Processing | Store-and-Forward |
| Switch Properties | Switching latency : 7 us Switching bandwidth : 10Gbps Max. Number of Available VLANs : 4096 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 Radius centralized password management SNMPv3 encrypted authentication and access security |
| Software Features | STP/RSTP/MSTP (IEEE 802.1D/w/s) Redundant Ring (O-Ring) with recovery time less than 150ms 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 |
| Network Redundancy | O-Ring Open-Ring O-RSTP STP RSTP MSTP |
| DDM Function | Voltage / Current / Temperature |
| RS-232 Serial Console Port | RS-232 in RJ45 connector with console cable. 9600bps, 8, N, 1 |
| LED Indicators | |
| Power Indicator | Green : Power LED x 3 |
| R.M. Indicator | Green : indicate system operated in O-Ring Master mode |
| Ring Indicator | Green : indicate system operated in O-Ring mode |
| Fault Indicator | Amber : Indicate excepted event occurred |
| 10/100/1000Base-T(X) RJ45 port Indicator | Green for port Link/Act. Amber for 100Mbps indicator |
| 1000Base-X / Fiber port Indicator | Green for port Link/Act. |
| Fault contact | |
| Relay | Relay output to carry capacity of 1A at 24VDC |

| Power | |
|-----------------------------|--|
| Redundant Input Power | Dual DC inputs. 12~48 VDC on 6-pin terminal block |
| Power Consumption (Typ.) | 20 Watts |
| Overload Current Protection | Present |
| Reverse Polarity Protection | Present on terminal block |
| Physical Characteristic | |
| Enclosure | IP-30 |
| Dimension (W x D x H) | 74.3(W)x109.2(D)x153.6(H) mm (2.93x4.3x6.05 inch) |
| Weight (g) | 1022g |
| 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

IGS-3 **AA** **B** **CC**

| Code efnition | 10/100/1000Base-T(X) Port Number | Additional Port Number | Additional Port Type |
|---------------|----------------------------------|------------------------|------------------------------|
| Option | - 04: 4 ports | - 04: 4 ports | -GP: 100/1000Base-X with SFP |

| Available Model | Model Name | Description |
|-----------------|------------|--|
| | IGS-3044GP | Industrial 8-port Gigabit Managed Ethernet Switch with 4x10/100/1000Base-T(X) and 4x100/1000Base-X SFP ports |

SFP100 LC Series

1-port Fast Ethernet SFP modules

Accessories Web Link ~ http://www.oring-networking.com/Industrial_Accessories.html

> Specifications

| Spec | Model Name | | | | |
|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| | SFP100-MM/-I | SFP100-SS30/-I | SFP100-SS60/-I | SFP100-SS100/-I | SFP100-SS120/-I |
| Fiber mode | Multi-mode | Single-mode | Single-mode | Single-mode | Single-mode |
| Typical Distance | 2 km | 30 km | 60 km | 100 km | 120 km |
| Operating Temperature | 0~70℃ -40~85℃ (-I model) | 0~70℃ -40~85℃ (-I model) | 0~70℃ -40~85℃ (-I model) | 0~70℃ -40~85℃ (-I model) | 0~70℃ -40~85℃ (-I model) |
| Output Optical Power 9/125 μm fiber (Max. TX) | - | -8 dBm | 0 dBm | 0 dBm | 5 dBm |
| Output Optical Power 9/125 μm fiber (Min. TX) | - | -15 dBm | -5 dBm | -5 dBm | 0 dBm |
| Output Optical Power 62.5/125 μm fiber (Max. TX) | -14 dBm | - | - | - | - |
| Output Optical Power 62.5/125 μm fiber (Min. TX) | -20 dBm | - | - | - | - |
| Output Optical Power 50/125 μm fiber (Max. TX) | -14 dBm | - | - | - | - |
| Output Optical Power 50/125 μm fiber (Min. TX) | -23.5 dBm | - | - | - | - |
| Wavelength | 1310 nm | 1310 nm | 1310 nm | 1550 nm | 1550 nm |
| Optical Input Power-minimum (Sensitivity) | -31 dBm | -34 dBm | -35 dBm | -35 dBm | -35 dBm |
| Loss of Signal-Asserted | -31 dBm | -34 dBm | -35 dBm | -35 dBm | -35 dBm |
| Loss of Signal-Deasserted | -47 dBm | -45 dBm | -45 dBm | -45 dBm | -45 dBm |
| Loss of Signal-Hysteresis | 1 dB | 1 dB | 1 dB | 1 dB | 1 dB |

> Ordering Information

| Available Model | Model Name | Description | Operating Temperature |
|-----------------|----------------|--|--|
| | | SFP100-MM | 100Mbps SFP optical Transceiver, Multi-mode / 2KM, 1310nm, |
| | SFP100-MM-I | 100Mbps SFP optical Transceiver, Multi-mode / 2KM, 1310nm, Industrial Grade | -40 ~ 85℃ |
| | SFP100-SS30 | 100Mbps SFP optical Transceiver, Single-mode / 30KM, 1310nm, | 0 ~ 70℃ |
| | SFP100-SS30-I | 100Mbps SFP optical Transceiver, Single-mode / 30KM, 1310nm, Industrial Grade | -40 ~ 85℃ |
| | SFP100-SS60 | 100Mbps SFP optical Transceiver, Single-mode / 60KM, 1310nm, | 0 ~ 70℃ |
| | SFP100-SS60-I | 100Mbps SFP optical Transceiver, Single-mode / 60KM, 1310nm, Industrial Grade | -40 ~ 85℃ |
| | SFP100-SS100 | 100Mbps SFP optical Transceiver, Single-mode / 100KM, 1550nm, | 0 ~ 70℃ |
| | SFP100-SS100-I | 100Mbps SFP optical Transceiver, Single-mode / 100KM, 1550nm, Industrial Grade | -40 ~ 85℃ |
| | SFP100-SS120 | 100Mbps SFP optical Transceiver, Single-mode / 120KM, 1550nm, | 0 ~ 70℃ |
| | SFP100-SS120-I | 100Mbps SFP optical Transceiver, Single-mode / 120KM, 1550nm, Industrial Grade | -40 ~ 85℃ |

SFP100-BIDI LC Series

1-port Fast Ethernet BIDI-SFP modules

Accessories Web Link ~ http://www.oring-networking.com/Industrial_Accessories.html

> Specifications

| Spec | Model Name | | | | | |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| | SFP100B3-SS20/-I | SFP100B5-SS20/-I | SFP100B3-SS40/-I | SFP100B5-SS40/-I | SFP100B3-SS60/-I | SFP100B5-SS60/-I |
| Fiber mode | Single-mode | Single-mode | Single-mode | Single-mode | Single-mode | Single-mode |
| Typical Distance | 20 m | 20 m | 40 km | 40 km | 60 km | 60 km |
| Operating Temperature | 0~70°C -40~85°C (-I model) | 0~70°C -40~85°C (-I model) | 0~70°C -40~85°C (-I model) | 0~70°C -40~85°C (-I model) | 0~70°C -40~85°C (-I model) | 0~70°C -40~85°C (-I model) |
| Output Optical Power 9/125 μm fiber (Max. TX) | -8 dBm | -8 dBm | 0 dBm | 0 dBm | 0 dBm | 0 dBm |
| Output Optical Power 9/125 μm fiber (Min. TX) | -14 dBm | -14 dBm | -8 dBm | -8 dBm | -5 dBm | -5 dBm |
| Wavelength | TX : 1310 nm RX : 1550 nm | TX : 1550 nm RX : 1310 nm | TX : 1310 nm RX : 1550 nm | TX : 1550 nm RX : 1310 nm | TX : 1310 nm RX : 1550 nm | TX : 1550 nm RX : 1310 nm |
| Optical Input Power-minimum (Sensitivity) | -32 dBm | -32 dBm | -34 dBm | -34 dBm | -34 dBm | -34 dBm |
| Loss of Signal-Asserted | -32 dBm | -32 dBm | -34 dBm | -34 dBm | -34 dBm | -34 dBm |
| Loss of Signal-Deasserted | -45 dBm | -45 dBm | -45 dBm | -45 dBm | -45 dBm | -45 dBm |

> Ordering Information

| Available Model | Model Name | Description | Operating Temperature |
|-----------------|-----------------|--|--|
| | | SFP100B3-SS20 | 100Mbps SFP optical Transceiver, Single-mode BIDI / 20KM, TX-1310nm, RX-1550nm |
| | SFP100B3-SS20-I | 100Mbps SFP optical Transceiver, Single-mode BIDI / 20KM, TX-1310nm, RX-1550nm, Industrial Grade | -40 ~ 85°C |
| | SFP100B5-SS20 | 100Mbps SFP optical Transceiver, Single-mode BIDI / 20KM, TX-1550nm, RX-1310nm | 0 ~ 70°C |
| | SFP100B5-SS20-I | 100Mbps SFP optical Transceiver, Single-mode BIDI / 20KM, TX-1550nm, RX-1310nm, Industrial Grade | -40 ~ 85°C |
| | SFP100B3-SS40 | 100Mbps SFP optical Transceiver, Single-mode BIDI / 40KM, TX-1310nm, RX-1550nm | 0 ~ 70°C |
| | SFP100B3-SS40-I | 100Mbps SFP optical Transceiver, Single-mode BIDI / 40KM, TX-1310nm, RX-1550nm, Industrial Grade | -40 ~ 85°C |
| | SFP100B5-SS40 | 100Mbps SFP optical Transceiver, Single-mode BIDI / 40KM, TX-1550nm, RX-1310nm | 0 ~ 70°C |
| | SFP100B5-SS40-I | 100Mbps SFP optical Transceiver, Single-mode BIDI / 40KM, TX-1550nm, RX-1310nm, Industrial Grade | -40 ~ 85°C |
| | SFP100B3-SS60 | 100Mbps SFP optical Transceiver, Single-mode BIDI / 60KM, TX-1310nm, RX-1550nm | 0 ~ 70°C |
| | SFP100B3-SS60-I | 100Mbps SFP optical Transceiver, Single-mode BIDI / 60KM, TX-1310nm, RX-1550nm, Industrial Grade | -40 ~ 85°C |
| | SFP100B5-SS60 | 100Mbps SFP optical Transceiver, Single-mode BIDI / 60KM, TX-1550nm, RX-1310nm | 0 ~ 70°C |
| | SFP100B5-SS60-I | 100Mbps SFP optical Transceiver, Single-mode BIDI / 60KM, TX-1550nm, RX-1310nm, Industrial Grade | -40 ~ 85°C |

SFP1G LC Series

1-port Gigabit Ethernet SFP modules

Accessories Web Link ~ http://www.oring-networking.com/Industrial_Accessories.html

> Specifications

| Spec | Model Name | | | | | | | |
|--|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| | SFP1G-SX/-I | SFP1G-MLX/-I | SFP1G-LX10/-I | SFP1G-LX20/-I | SFP1G-LHX30/-I | SFP1G-LHX40/-I | SFP1G-XD50/-I | SFP1G-ZX70/-I |
| Fiber mode | Multi-mode | Multi-mode | Single-mode | Single-mode | Single-mode | Single-mode | Single-mode | Single-mode |
| Typical Distance | 550 m | 62.5/125 : 2km 50/125 : 1km | 10 km | 20 km | 30 km | 40 km | 50 km | 70 km |
| Operating Temperature | 0~70°C -20~85°C (-I model) | 0~70°C -40~85°C (-I model) | 0~70°C -40~85°C (-I model) | 0~70°C -40~85°C (-I model) | 0~70°C -40~85°C (-I model) | 0~70°C -40~85°C (-I model) | 0~70°C -40~85°C (-I model) | 0~70°C -40~85°C (-I model) |
| Output Optical Power 9/125 μm fiber (Max. TX) | - | - | -3 dBm | -2 dBm | 1 dBm | 1 dBm | 1 dBm | 5 dBm |
| Output Optical Power 9/125 μm fiber (Min. TX) | - | - | -9.5 dBm | -8 dBm | -4 dBm | -4 dBm | -4 dBm | 0 dBm |
| Output Optical Power 62.5/125 μm fiber (Max. TX) | -4 dBm | -1 dBm | - | - | - | - | - | - |
| Output Optical Power 62.5/125 μm fiber (Min. TX) | -9.5 dBm | -9 dBm | - | - | - | - | - | - |
| Output Optical Power 50/125 μm fiber (Max. TX) | -4 dBm | -1 dBm | - | - | - | - | - | - |
| Output Optical Power 50/125 μm fiber (Min. TX) | -9.5 dBm | -9 dBm | - | - | - | - | - | - |
| Wavelength | 850 nm | 1310 nm | 1310 nm | 1310 nm | 1310 nm | 1310 nm | 1550 nm | 1550 nm |
| Optical Input Power-minimum (Sensitivity) | -18 dBm | -19 dBm | -20 dBm | -23 dBm | -24 dBm | -24 dBm | -24 dBm | -24 dBm |
| Loss of Signal-Asserted | -18 dBm | -19 dBm | -20 dBm | -23 dBm | -24 dBm | -24 dBm | -24 dBm | -24 dBm |
| Loss of Signal-Deasserted | -35 dBm | -35 dBm | -35 dBm | -35 dBm | -35 dBm | -35 dBm | -35 dBm | -35 dBm |

> Ordering Information

| Available Model | Model Name | Description | Operating Temperature |
|-----------------|---------------|---|---|
| | | SFP1G-SX | 1Gbps SFP optical Transceiver, Multi-mode / 550m, 850nm |
| | SFP1G-SX-I | 1Gbps SFP optical Transceiver, Multi-mode / 550m, 850nm, Industrial Grade | -20 ~ 85°C |
| | SFP1G-MLX | 1Gbps SFP optical Transceiver, Multi-mode / 2km, 1310nm | 0 ~ 70°C |
| | SFP1G-MLX-I | 1Gbps SFP optical Transceiver, Multi-mode / 2km, 1310nm, Industrial Grade | -40 ~ 85°C |
| | SFP1G-LX10 | 1Gbps SFP optical Transceiver, Single-mode / 10km, 1310nm | 0 ~ 70°C |
| | SFP1G-LX10-I | 1Gbps SFP optical Transceiver, Single-mode / 10km, 1310nm, Industrial Grade | -40 ~ 85°C |
| | SFP1G-LX20 | 1Gbps SFP optical Transceiver, Single-mode / 20km, 1310nm | 0 ~ 70°C |
| | SFP1G-LX20-I | 1Gbps SFP optical Transceiver, Single-mode / 20km, 1310nm, Industrial Grade | -40 ~ 85°C |
| | SFP1G-LHX30 | 1Gbps SFP optical Transceiver, Single-mode / 30km, 1310nm | 0 ~ 70°C |
| | SFP1G-LHX30-I | 1Gbps SFP optical Transceiver, Single-mode / 30km, 1310nm, Industrial Grade | -40 ~ 85°C |
| | SFP1G-LHX40 | 1Gbps SFP optical Transceiver, Single-mode / 40km, 1310nm | 0 ~ 70°C |
| | SFP1G-LHX40-I | 1Gbps SFP optical Transceiver, Single-mode / 40km, 1310nm, Industrial Grade | -40 ~ 85°C |
| | SFP1G-XD50 | 1Gbps SFP optical Transceiver, Single-mode / 50km, 1550nm | 0 ~ 70°C |
| | SFP1G-XD50-I | 1Gbps SFP optical Transceiver, Single-mode / 50km, 1550nm, Industrial Grade | -40 ~ 85°C |
| | SFP1G-ZX70 | 1Gbps SFP optical Transceiver, Single-mode / 70km, 1550nm | 0 ~ 70°C |
| | SFP1G-ZX70-I | 1Gbps SFP optical Transceiver, Single-mode / 70km, 1550nm, Industrial Grade | -40 ~ 85°C |

SFP1G-BIDI LC Series

1-port Gigabit Ethernet BIDI-SFP modules

Accessories Web Link ~ http://www.oring-networking.com/Industrial_Accessories.html

> Specifications

| Spec | Model Name | | | | | | | |
|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| | SFP1GB3 -LX10/-I | SFP1GB5 -LX10/-I | SFP1GB3 -LX20/-I | SFP1GB5 -LX20/-I | SFP1GB3 -LX40/-I | SFP1GB5 -LX40/-I | SFP1GB3 -LX60/-I | SFP1GB5 -LX60/-I |
| Fiber mode | Single-mode | Single-mode | Single-mode | Single-mode | Single-mode | Single-mode | Single-mode | Single-mode |
| Typical Distance | 10 m | 10 m | 20 km | 20 km | 40 km | 40 km | 60 km | 60 km |
| Operating Temperature | 0~70℃ -40~85℃ (-I model) | 0~70℃ -40~85℃ (-I model) | 0~70℃ -40~85℃ (-I model) | 0~70℃ -40~85℃ (-I model) | 0~70℃ -40~85℃ (-I model) | 0~70℃ -40~85℃ (-I model) | 0~70℃ -40~85℃ (-I model) | 0~70℃ -40~85℃ (-I model) |
| Output Optical Power 9/125 µm fiber (Max. TX) | -3 dBm | -3 dBm | -2 dBm | -2 dBm | 2 dBm | 2 dBm | 5 dBm | 4 dBm |
| Output Optical Power 9/125 µm fiber (Min. TX) | -9 dBm | -9 dBm | -8 dBm | -8 dBm | -3 dBm | -3 dBm | 0 dBm | -2 dBm |
| Wavelength | TX : 1310 nm RX : 1550 nm | TX : 1550 nm RX : 1310 nm | TX : 1310 nm RX : 1550 nm | TX : 1550 nm RX : 1310 nm | TX : 1310 nm RX : 1550 nm | TX : 1550 nm RX : 1310 nm | TX : 1310 nm RX : 1550 nm | TX : 1550 nm RX : 1310 nm |
| Optical Input Power-minimum (Sensitivity) | -21 dBm | -21 dBm | -23 dBm | -23 dBm | -23 dBm | -23 dBm | -24 dBm | -25 dBm |
| Loss of Signal-Asserted | -21 dBm | -21 dBm | -23 dBm | -23 dBm | -23 dBm | -23 dBm | -24 dBm | -25 dBm |
| Loss of Signal-Deasserted | -35 dBm | -35 dBm | -35 dBm | -35 dBm | -35 dBm | -35 dBm | -35 dBm | -35 dBm |

> Ordering Information

| Available Model | Model Name | Description | Operating Temperature |
|-----------------|----------------|--|--|
| | | SFP1GB3-LX10-I | 1Gbps SFP optical Transceiver, Single-mode BIDI / 10KM, TX-1310nm, RX-1550nm |
| | SFP1GB5-LX10 | 1Gbps SFP optical Transceiver, Single-mode BIDI / 10KM, TX-1310nm, RX-1550nm, Industrial Grade | -40 ~ 85℃ |
| | SFP1GB5-LX10-I | 1Gbps SFP optical Transceiver, Single-mode BIDI / 10KM, TX-1550nm, RX-1310nm | 0 ~ 70℃ |
| | SFP1GB3-LX20 | 1Gbps SFP optical Transceiver, Single-mode BIDI / 10KM, TX-1550nm, RX-1310nm, Industrial Grade | -40 ~ 85℃ |
| | SFP1GB3-LX20-I | 1Gbps SFP optical Transceiver, Single-mode BIDI / 20KM, TX-1310nm, RX-1550nm | 0 ~ 70℃ |
| | SFP1GB5-LX20 | 1Gbps SFP optical Transceiver, Single-mode BIDI / 20KM, TX-1310nm, RX-1550nm, Industrial Grade | -40 ~ 85℃ |
| | SFP1GB5-LX20-I | 1Gbps SFP optical Transceiver, Single-mode BIDI / 20KM, TX-1550nm, RX-1310nm | 0 ~ 70℃ |
| | SFP1GB3-LX40 | 1Gbps SFP optical Transceiver, Single-mode BIDI / 20KM, TX-1550nm, RX-1310nm, Industrial Grade | -40 ~ 85℃ |
| | SFP1GB3-LX40-I | 1Gbps SFP optical Transceiver, Single-mode BIDI / 40KM, TX-1310nm, RX-1550nm | 0 ~ 70℃ |
| | SFP1GB5-LX40 | 1Gbps SFP optical Transceiver, Single-mode BIDI / 40KM, TX-1310nm, RX-1550nm, Industrial Grade | -40 ~ 85℃ |
| | SFP1GB5-LX40-I | 1Gbps SFP optical Transceiver, Single-mode BIDI / 40KM, TX-1550nm, RX-1310nm | 0 ~ 70℃ |
| | SFP1GB3-LX60 | 1Gbps SFP optical Transceiver, Single-mode BIDI / 40KM, TX-1550nm, RX-1310nm, Industrial Grade | -40 ~ 85℃ |
| | SFP1GB3-LX60-I | 1Gbps SFP optical Transceiver, Single-mode BIDI / 60KM, TX-1310nm, RX-1550nm | 0 ~ 70℃ |
| | SFP1GB5-LX60 | 1Gbps SFP optical Transceiver, Single-mode BIDI / 60KM, TX-1310nm, RX-1550nm, Industrial Grade | -40 ~ 85℃ |
| | SFP1GB5-LX60-I | 1Gbps SFP optical Transceiver, Single-mode BIDI / 60KM, TX-1550nm, RX-1310nm | 0 ~ 70℃ |
| | SFP1G-ZX70-I | 1Gbps SFP optical Transceiver, Single-mode BIDI / 60KM, TX-1550nm, RX-1310nm, Industrial Grade | -40 ~ 85℃ |