

# IES-1082GP

## >> Industrial 10-port Unmanaged Ethernet Switch

- Support 10/100Base-T(X), and 1000Base-X in SFP ports
- Triple Redundant DC power inputs
- Rigid IP-30 housing design



### > Features

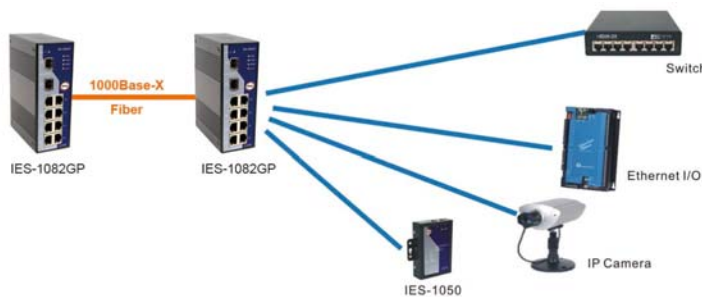
- Triple redundant DC power inputs of terminal block and power jack
- Support 10/100Base-T(X), and 1000Base-X in SFP ports
- Very wide operating temperature range from -40 to 70°C
- Rigid IP-30 housing design
- DIN-Rail and panel mounting enabled

### > Introduction

IES-1082GP is an unmanaged Ethernet switches with 8x10/100Base-T(X) & 2x1000Base-X in SFP ports. IES-1082GP supports redundant power input, relay output alarm, and surge protection. The wide operating temperature range from -40°C to 70°C can satisfy most of operating environments.

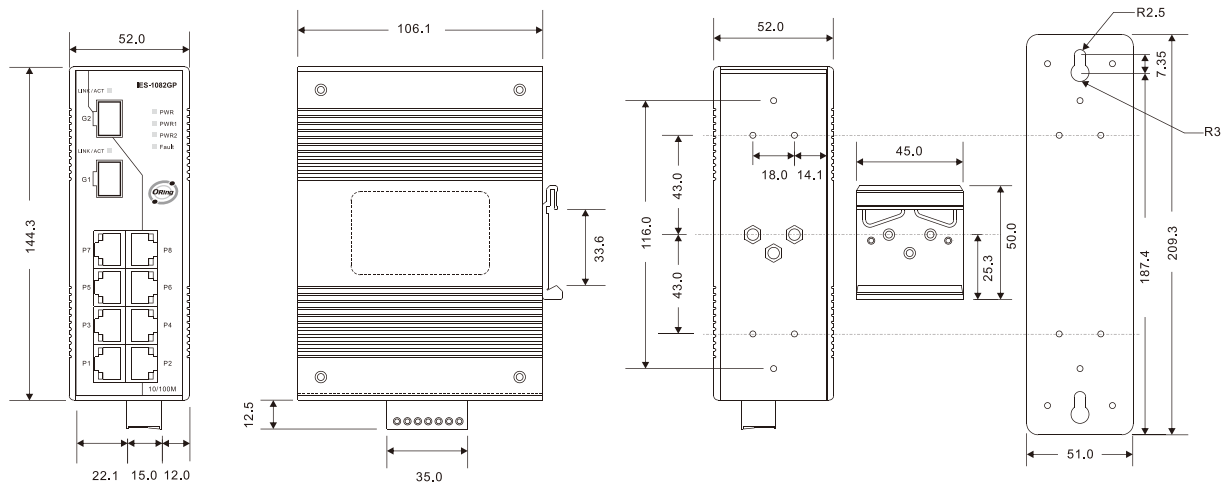
### > Practical Operation

IES-1082GP can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches. In addition, there are three different power inputs to enhance its reliability, two supplied by terminal block, and one by power jack to avoid interruption caused by power down. When the primary DC power input fails, the backup power input will take over immediately to guarantee a non-stop operation.



Connections of Ethernet devices

## > Dimension



(Unit=mm)

## > Specifications

ORing Switch Model	IES-1082GP
<b>Physical Ports</b>	
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	8
1000Base-X SFP ports	2
<b>Technology</b>	
Ethernet Standards	IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-T(X) IEEE 802.3z for 1000Base-X IEEE 802.3x for Flow control
MAC Table	8192 MAC addresses
Processing	Store-and-Forward
<b>LED indicators</b>	
Power indicator	Green : Power LED x 3
Fault indicator	Amber : Indicate PWR1 or PWR2 failure
10/100Base-T(X) RJ45 port indicator	Green for port Link/Act. Amber for Duplex/Collision
Fiber port indicator	Green for port Link/Act.
<b>Fault contact</b>	
Relay	Relay output to carry capacity of 1A at 24VDC
<b>Power</b>	
Redundant Input Power	Triple DC inputs. 12-48VDC on 7-pin terminal block, 12-45VDC on power jack
Power Consumption (Typ.)	6 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)x106.1(D)x144.3(H) mm (2.05x4.18x5.68 inch.)
Weight (g)	678 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

IES-1 **AA** **B** **CC**

Code Definition	10/100Base-T(X) Port Number	Additional Port Number	Additional Port Type
Option	- 08: 8 ports	- 2: 2 ports	- GF: 1000Base-X in SFP

Available Model	Model Name	Description
	IES-1082GP	Industrial 10-port Unmanaged Ethernet Switch with 8x10/100Base-T(X) & 2x1000Base-X in SFP

# SFP1G LC Series

## 1-port Gigabit Ethernet SFP modules

Accessories Web Link ~ [http://www.oring-networking.com/Industrial\\_Accessories.html](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](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℃