IGPS-1082GP Series

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Industrial 10-port unmanaged Gigabit PoE Ethernet switch with 8x10/100/1000Base-T(X) P.S.E. and 2x100/1000Base-X, SFP socket

Features

- Support 8 ports IEEE 802.3at compliant PoE and total power budget is 120W with maximum 30W per port of 24V model
- Total power budget is 180Watts with maximum 30Watts per port of IGPS-1082GP model
- Support up to **9.6K** Bytes Jumbo Frame
- Support up to **4Mbit** Packet buffer
- Support auto-negotiation and auto-MDI/MDI-X
- Support store and forward transmission
- Support flow control
- Provided relay output for power failed warning system
- Provide DIP-switch to setting SFP speed
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled

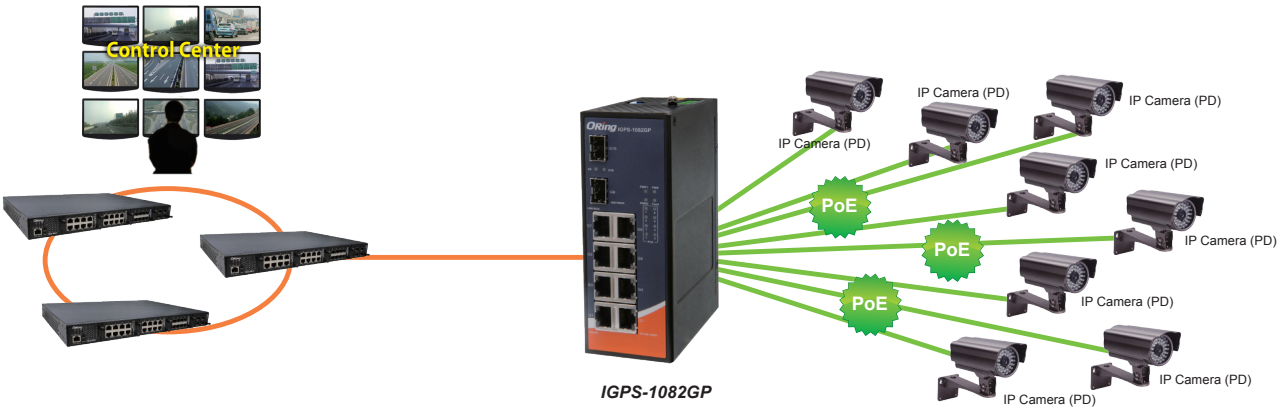
Full Gigabit | P.S.E PoE | Redundant PWR | -40~75°C Temperature | RoHS Lead Free | CE | FC

Introduction

IGPS-1082GP series is full Gigabit unmanaged PoE Ethernet switches with 8x10/100/1000Base-T(X) P.S.E. ports and 2x100/1000Base-X SFP ports. IGPS-1082GP series also support Power over Ethernet, a system to transmit electrical power up to **30 watts**, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. Each IGPS-1082GP series switch has 8x10/100/1000Base-T(X) P.S.E. (Power Sourcing Equipment) ports. P.S.E. is a device (switch or hub for instance) that will provide power in a PoE connection. And support wide operating temperature from -40°C to 75°C. Therefore, the switch is one of the most reliable choices for rolling stock and highly-unmanaged PoE Ethernet application.

Practical Operation

IGPS-1082GP can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches. In addition, there are two different power inputs at terminal block 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.



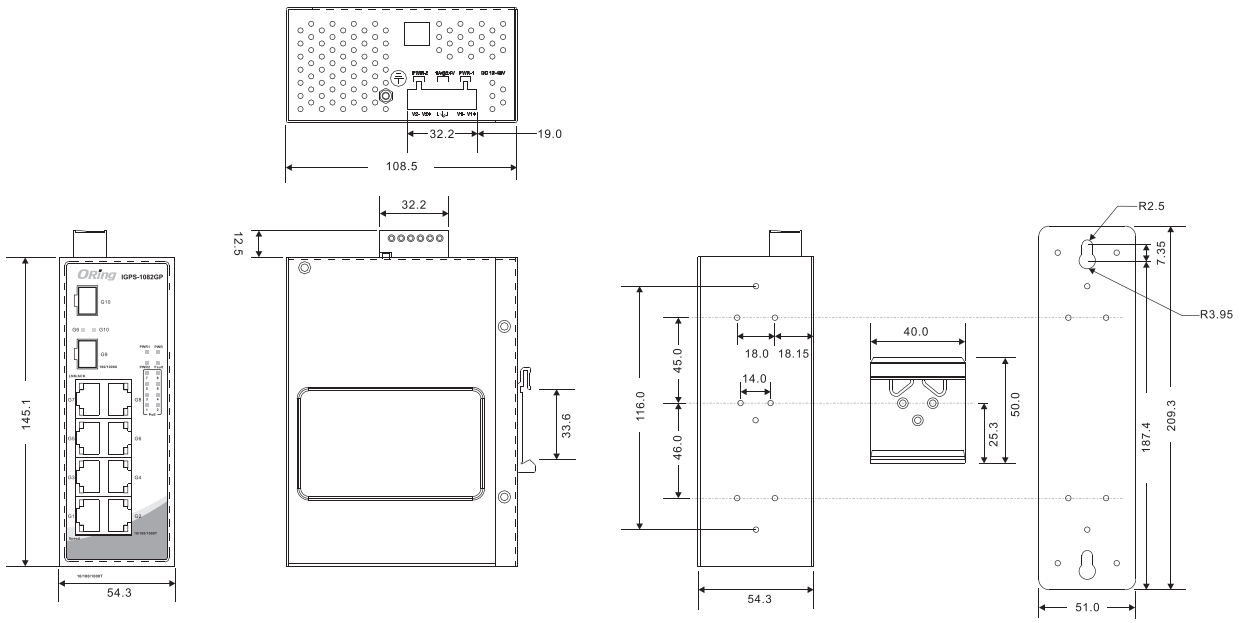
Ethernet Connection

PoE Pin Assignment

10/100Base-T(X) P.S.E. RJ-45 Port	
RJ-45 Pin Definition	
Pin No.	Description
#1	TD+ with PoE Power input +
#2	TD- with PoE Power input +
#3	RD+ with PoE Power input -
#6	RD- with PoE Power input -

1000Base-T P.S.E. RJ-45 Port	
RJ-45 Pin Definition	
Pin No.	Description
#1	BI_DA+ with PoE Power input +
#2	BI_DA- with PoE Power input +
#3	BI_DB+ with PoE Power input -
#4	BI_DC+
#5	BI_DC-
#6	BI_DB- with PoE Power input -
#7	BI_DD+
#8	BI_DD-

Dimension



(Unit=mm)

Specifications

ORing Switch Model	IGPS-1082GP	IGPS-1082GP-24V
Physical Ports		
10/100/1000Base-T(X) with P.S.E. Ports in RJ45 Auto MDI/MDIX	**8 (P.S.E. with IEEE 802.3at)**	
100/1000Base-X with SFP port	**2**	
Physical Ports		
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3ab for 1000Base-T IEEE 802.3z for 1000Base-X IEEE 802.3x for Flow control IEEE 802.3af/at PoE specification	
MAC Table	8k	

Processing	Store-and-Forward	
Switch Properties	Switching latency: less than 7us Switching bandwidth: 20Gbps	
Jumbo frame	Up to 9.6K Bytes	
Packet buffer	4Mbit	
LED indicators		
Power Indicator (PWR)	Green : Power LED x 3	
Fault Indicator (Fault)	Amber : Indicate power failed even warning	
10/100/1000Base-T(X) RJ45 PoE Port Indicator	Green for Port Link/Act indicator Dual color LED for speed indicator: Green for 1000Mbps / Amber for 100Mbps / off-light for 10Mbps	
100/1000Base-X SFP Port Indicator	Green for port Link/Act.	
PoE Indicator	Green for PoE enable indicator.	
DIP Switch		
DIP-Switch 1	Power-2 failed warning : (ON) enable, (OFF) disable	
DIP-Switch 2	Power-1 failed warning : (ON) enable, (OFF) disable	
DIP-Switch 3	DIP switch 3 and 4 (ON) : SFP speed setting to 100Mbps	
DIP-Switch 4	DIP switch 3 and 4 (OFF) : SFP speed setting to 1000Mbps(default)	
Fault contact		
Relay	Relay output to carry capacity of 1A at 24VDC	
Power		
Redundant Input power	Dual DC inputs. 50 ~ 57VDC on 6-pin terminal block	Dual DC inputs. 12 ~ 57VDC on 6-pin terminal block
Power consumption (Typ.)	11W	11W
PoE Power budget	180W	60W at 12~24VDC, 120W at 24~57VDC
Overload current protection	Present	
Reverse Polarity Protection	Present	
Physical Characteristic		
Enclosure	IP-30	
Dimension (W x D x H)	54.3(W) x 108.3(D) x 145.1(H) mm (2.13x4.26x5.71 inches.)	
Weight (g)	889g	916g
Environmental		
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	CE EMC (EN 55024, EN 55032), FCC Part 15 B	
EMI	EN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, FCC Part 15 B class A	
EMS	EN 55024 (IEC/EN 61000-4-2 (ESD), IEC/EN 61000-4-3 (RS),IEC/EN 61000-4-4 (EFT), IEC/EN 61000-4-5 (Surge), IEC/EN 61000-4-6 (CS), 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	
Safety	EN60950-1 compliant	
MTBF	581633hrs	537330hrs
Warranty	5 years	

Ordering Information

IGPS-1 AA B CC - DDD

Code Definition	10/100/1000Base-T(X) P.S.E. Port Number	10/100/1000Base-T(X) P.S.E. Port Number	Additional Port Number	10/100/1000Base-T(X) P.S.E. Port Number
Option	**- 08:** 8 ports	**- 2:** 2 ports	**- GP:** Gigabit SFP ports	**- 24V:** 24VDC power inputs supported

	Model Name	Description
Available Model	IGPS-1082GP	Industrial 10-port unmanaged Gigabit PoE Ethernet switch with 8x10/100/1000Base-T(X) P.S.E. and 2x100/1000Base-X, SFP socket
	IGPS-1082GP-24V	Industrial 10-port unmanaged Gigabit PoE Ethernet switch with 8x10/100/1000Base-T(X) P.S.E. and 2x100/1000Base-X, SFP socket, 24VDC power inputs

Packing List

- IGPS-1082GP / -24V x 1
- Quick Installation Guide x 1
- DIN-Rail Kit x 1
- Wall-mount Kit x 2

Optional Accessories (Can be purchased separately)

- SFP100 series : 100Mbps SFP optical transceiver
- SFP 1G series : 1Gbps SFP optical transceiver
- DR/SDR/DRP 48/24V Series Din rail power supply