# **IGPCS-E131GP**



Industrial 4-port PCIe unmanaged Gigabit PoE Ethernet switch card with 3x10/100/1000Base-T(X) P.S.E. and 1x100/1000Base-X, SFP socket

### **Features**

- Provide 3x10/100/1000Base-T(X) PoE (P.S.E.) ports
- Supports IEEE 802.3at compliant PoE and total power budget is 65Watts with maximum 30Watts per port
- PoE power sourced from 12VDC of ATX power
- Each LAN port supports both PoE and Non-PoE connections (Auto Detect & Classification)
- Supports PCle x1 bus and compatible x4, x8 and x16 PCle slots
- Compliant with PCle Rev.1.1 Interface
- Supports 100Base-FX or 1000Base-X SFP port by DIP-switch
- Supports 10K Bytes Jumbo Frame
- Support auto-negotiation and auto-MDI/MDI-X
- Support store and forward transmission
- Support flow control













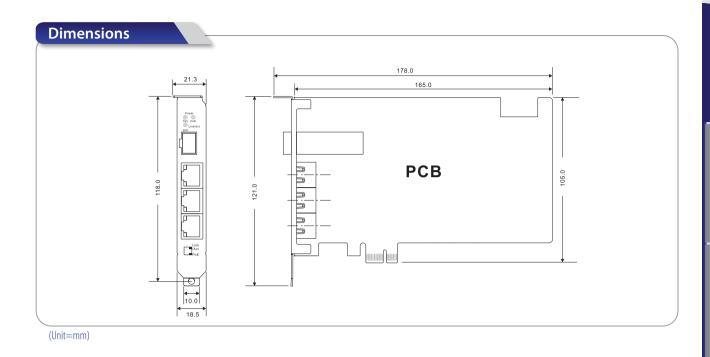
#### Introduction

IGPCS-E131GP is a PCI-Express unmanaged Gigabit PoE Ethernet switch card with P.S.E. function, IGPCS-E131GP supports 3x10/100/1000Base-T(X) IEEE 802.3at P.S.E. (Power Sourcing Equipment) and 1x100/1000Base-X SFP ports. P.S.E. is a device (switch or hub for instance) that will provide power in a PoE port. IGPCS-E131GP could be installed on any IPC motherboard with PCle socket to make the IPC/embedded system able to communication with other Ethernet devices. Therefore, IGPCS-E131GP is the best solution to IPC/embedded system to feature Ethernet network.

### **Practical Operation**

IGPCS-E131GP can be used in connecting several PoE P.D. Ethernet devices like IP-Camera or other Ethernet devices.





### **PoE Pin Definition**

### 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-	

### Specifications

ORing Switch Model	IGPCS-E131GP	
Physical Ports		
10/100/1000Base-T(X) Ports in RJ45 With P.S.E.	3	
100/1000Base-X SFP port	1 S1 DIP-switch for SFP speed setting (ON : 100Base-FX SFP, OFF : 1000Base-X SFP)	
Technology		
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.z for 1000Base-X IEEE 802.3x for Flow control IEEE 802.3at PoE specification (total power budget is 65Watts with maximum 30Watts per port)	
MAC Table	8K MAC addresses	
Processing	Store-and-Forward	

LED Indicators				
Power Indicator	Green: Power LFD x 1			
PoE Power Indicator	Green : PoE power LED x 1			
	Green for port Link/Act.			
100/1000Base-X SFP port indicator 10/100/1000Base-T(X) RJ45 port indicator and PoE	Green for port Link/Act.			
indicator	Green for PoE power injected.			
Power				
Input Power	PCIe bus-powered(for switch card system)			
PoE Input Power	12VDC of ATX power			
Power Consumption (Typ.)	4 Watts (power device not included)			
PoE output power	IEEE802.3at/af compliant, up to 30 Watts per port, totally 65 Watts maximum			
Overload current protection	Present			
Physical Characteristics				
Dimensions (W x D x H)	21.3 (W) x 178 (D) x 121 (H)mm (0.83 x 7 x 4.76 inch)			
Weight (g)	160 g			
Environmental				
Operating Temperature	-40 to 85°C (-40 to 185°F)			
Operating Temperature	-10 to 60°C (14 to 140°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			
Operating System Supports				
Microsoft System	DOS / Win98 / WinMe / WinXP / Win2000 / WinServer2003 / Vista / WinServer 2008 / Win7 / Win8			
Unix (Linux)	Linux for Kernel 3.x / 2.6.x / 2.4.x, FreeBSD for 7.x / 8.0, SCO OpenServer for 6 / UnixWare 7.1.x			
Novell	Novell client for DOS (ODI driver) / Novell server driver (Support OS 5.x and 6.x)			
Others	MacOS 10.4 / 10.5 / 10.6 / 10.7			
Warranty	5 years			

## **Ordering Information**



Code Definition	- 10/100B/1000ase-T(X) Port Number with P.S.E.	Additional Port Number	Additional Port Type
Option	- <b>3:</b> 3 ports	- <b>1:</b> 1 port	- <b>GP:</b> 100/1000Base-X SFP port

Available Model	Model Name	Description
	IGPCS-E131GP	Industrial 4-port PCIe unmanaged Gigabit PoE Ethernet switch card with 3x10/100/1000Base-T(X) P.S.E. and 1x100/1000Base-X, SFP socket
Packing List  • IGPCS-E131GP  • Quick Installation Guide  • ORing Tool CD		