# **IGPCS-E140**

## > Industrial 4-port PCIe unmanaged Gigabit PoE Ethernet switch card with 4x10/100/1000Base-T(X) P.S.E.

#### **Features**

- Provide 4x10/100/1000Base-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 10K Bytes Jumbo Frame
- Support auto-negotiation and auto-MDI/MDI-X
- Support store and forward transmission
- Support flow control











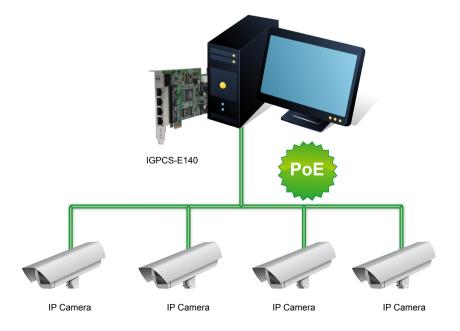


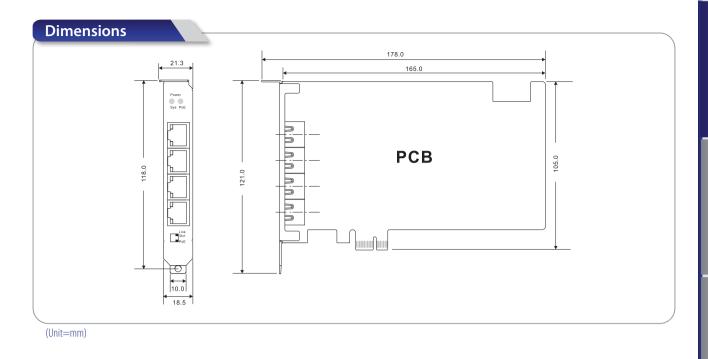
## Introduction

IGPCS-E140 is a PCI-Express unmanaged Gigabit PoE Ethernet switch card with P.S.E. function, IGPCS-E140 supports 4x10/100/1000Base-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 port. IGPCS-E140 could be installed on any IPC motherboard with PCI-E socket to make the IPC/embedded system able to communication with other Ethernet devices. Therefore, IGPCS-E140 is the best solution to IPC/embedded system to feature Ethernet network.

#### **Practical Operation**

IGPCS-E140 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-E140
Physical Ports	
10/100/1000Base-T(X) Ports in RJ45 With P.S.E.	4
Technology	
Ethernet Standards	IEEE 802.3 for 10Base–T IEEE 802.3u for 100Base–TX IEEE 802.3ab for 1000Base–T 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
Priority Queues	4
Processing	Store-and-Forward

LED Indicators			
Power Indicator	Green: Power LED x 1		
PoE Power Indicator	Green : PoE power LED x 1		
10/100/1000Base-T(X) RJ45 port indicator and PoE	Green for port Link/Act.		
indicator	Green for PoE power injected.		
Power			
Input Power	PCle bus-powered(for switch card system) / 12VDC of ATX power(for PoE)		
Power Consumption (Typ.)	4.2 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		
Weight (g)	150 g		
Environmental			
Operating Temperature	-40 to 85°C (-14 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
Option	- <b>4:</b> 4 ports	- <b>0:</b> 0 port

Available Model	Model Name	Description
	IGPCS-E140	Industrial 4-port PCIe unmanaged Gigabit PoE Ethernet switch card with 4x10/100/1000Base-T(X) P.S.E.
Packing List  • IGPCS-E140  • Quick Installation Guide  • ORing Tool CD		