

# Quick Installation Guide

## Introduction

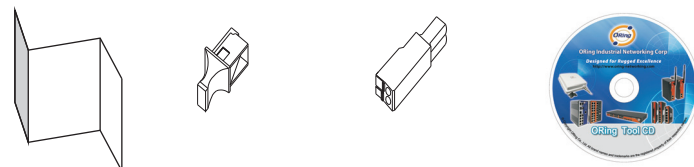
IGPCS-E140 is a PCI-Express unmanaged Gigabit PoE Ethernet switch card with P.S.E. function, IGPCS-E140 supports 4x10/100/1000Base-T(X) P.S.E. (Power Sourcing Equipment) ports. P.S.E. is a device (or hub for instance) that will provide power in a PoE port. IGPCS-E140 could be installed on any IPC motherboard with PCIe socket to make the IPC/embedded system able to communicate with other Ethernet devices. Therefore, IGPCS-E140 is the best solution to IPC/embedded system to feature Ethernet network.

## Features

- Provide 4x10/100/1000Base-T(X) PoE (P.S.E.) ports
- Support P.S.E. based on IEEE 802.3af standard up to 15.4 Watts per port
- PoE power sourced from 12VDC input from ATX power or external terminal block
- Each LAN port supports both PoE and Non-PoE connections (Auto Detect & Classification)
- Supports PCIe x1 bus and compatible x4, x8 and x16 PCIe slots
- Compliant with PCIe 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

## Accessory

- ① QIG
- ② Dust Cover (RJ-45)
- ③ Terminal block
- ④ CD



## Packing list

Model name	Model Description	Accessory
IGPCS-E140	Industrial 4-port PCIe unmanaged Gigabit PoE Ethernet switch card with 4x10/100/1000Base-T(X) P.S.E.	① X 1, ② X 4, ③ X 1, ④ X 1

**ORing** ORing Industrial Networking Corp.

Copyright © 2012 ORing  
All rights reserved.

TEL: +886-2-2218-1066 Website: www.oring-networking.com  
FAX: +886-2-2218-1014 E-mail: support@oring-networking.com

# IGPCS-E140

## Specifications

ORing Switch Model	IGPCS-E140
<b>Physical Ports</b>	
10/100/1000Base-T(X) Ports in RJ45	4
<b>Technology</b>	
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 802.3af PoE specification (up to 15.4 Watts per port for P.S.E.)
MAC Table	8K MAC addresses
Processing	Store-and-Forward
<b>LED Indicators</b>	
Power Indicator	Green: LED x 1
PoE power indicator	Green: PoE power LED x 1
10/100/1000Base-T(X) RJ45 Port Indicator and PoE Indicator	Green for port Link/Act, Green for PoE power injected
<b>Power</b>	
Input Power	PCIe bus-powered(for switch card system)
PoE Input Power	12VDC of ATX power or external power input in 2-pin terminal block
Power consumption(Typ.)	4.2 Watts (power device not included)
PoE Output Power	IEEE802.3af compliant, up to 30 Watts per port, totally 65 Watts maximum
Overload current protection	Present
<b>Physical Characteristic</b>	
Dimension (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)	150g
<b>Environmental</b>	
Storage 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
<b>Regulatory Approvals</b>	
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
<b>Operating System Supports</b>	
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 dor DOS (ODI driver) / Novell server driver (Support OS 5.x and 6.x)
Others	MacOS 10.4 / 10.5 / 10.6 / 10.7
<b>Warranty</b>	5 years

## PoE Pin Definition

### 10/100Base-T(X) P.S.E. RJ-45 port

RJ45 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

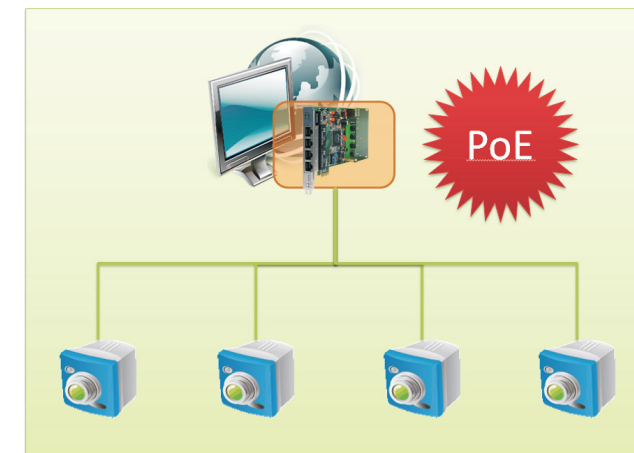
RJ45 Pin Definition	
Pin No.	Description
# 1	BI_DA+ with PoE Power input +
# 2	BI_DA- with PoE Power input +
# 3	BI_DB+ with PoE Power input -
# 4	BI_DC+
# 5	BI_DC-
# 6	BI_DB- with PoE Power input -
# 7	BI_DD+
# 8	BI_DD-

## Industrial Unmanaged Gigabit PoE Switch Card

## Practical Operation

IGPCS-E140 can be used in connecting several PoE P.D. Ethernet devices like IP-Camera or other Ethernet devices.

### Network connection



## Front Panel

