

# Quick Installation Guide

## 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 PCIe 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.

## 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 input from ATX power
- 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 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

## Accessory

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



## Packing list

Model name	Model Description	Accessory
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	① X 1, ② X 3, ③ X 1, ④ X 1

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# IGPCS-E131GP

## Specifications

ORing Switch Model	IGPCS-E131GP
<b>Physical Ports</b>	
10/100/1000Base-T(X) Ports in RJ45 With P.S.E.	3
100/1000Base-X SFP port	1 On board S1 dip-switch for SFP speed setting (ON : 100Base-FX, OFF : 1000Base-X)
<b>Technology</b>	
Ethernet Standards	IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-TX and 100Base-FX, IEEE 802.3ab for 1000Base-T, IEEE 802.3ab for 1000Base-X, IEEE 802.3x for Flow control, IEEE 802.3af PoE specification (total power budget is 65Watts with maximum 30Watts per port)
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
100/1000Base-X SFP port indicator	Green for port Link/Act.
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
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
<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)	160g
<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 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

## 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

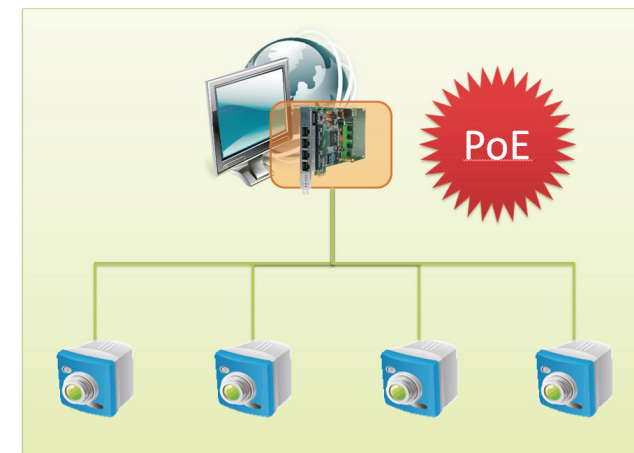
RJ45 Pin Definition	
Pin No.	Description
# 1	BI_DA+ with PoE Power input +
# 2	BI_DA- with PoE Power input +
# 3	BI_DB+ with PoE Power input -
# 4	BI_DC+
# 5	BI_DC-
# 6	BI_DB- with PoE Power input -
# 7	BI_DD+
# 8	BI_DD-

# Industrial Unmanaged Gigabit PoE Switch Card

## Practical Operation

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

### Network connection



## Front Panel

