ADP-PD

PoE+ Module

User's Manual

Edition 1.0
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Packing List:

Please check the package content before you starting using the adapter.

1 x ADP-PD-5V or ADP-PD-12V
BADPPD-5V_A(4120032011) /
BADPPD-12V_A(4120032021)

1 x DC Output Power Cable
(OALDC-DC3/1040614)

For use with COMMELL motherboard LP-176

1 x CN_LAN Cable
(OALPOE-01/1040627)Optional

For use with COMMELL Mini card MPX-350

1 x CN_LAN Cable
(OALPOE-02/1040628)Optional

For use with COMMELL Mini card MPX-210

1 x CN_LAN Cable
(OALPOE-03/1040629)Optional

1. < Product Specification

Product Description

Interface	RJ45 for connecting with PSE
	Internal 12-pin head for connecting with powered board
	Internal 2-pin terminal block for DC power of powered board
Accessories	DC Output Power Cable
	Cable (connect LP-176 to Motherboard)(OALPOE-01/1040627)Optional
	Cable (connect MPX350 to Mini card)(OALPOE-02/1040628)Optional
	Cable (connect MPX210 to Mini card)(OALPOE-03/1040629)Optional
Dimensions (L x W)	70.00mm x 40.00mm

Operating Conditions

Power Requirement	Port Voltage 37V to 57V from PSE
Temperature	-40~+125°C

General Specifications

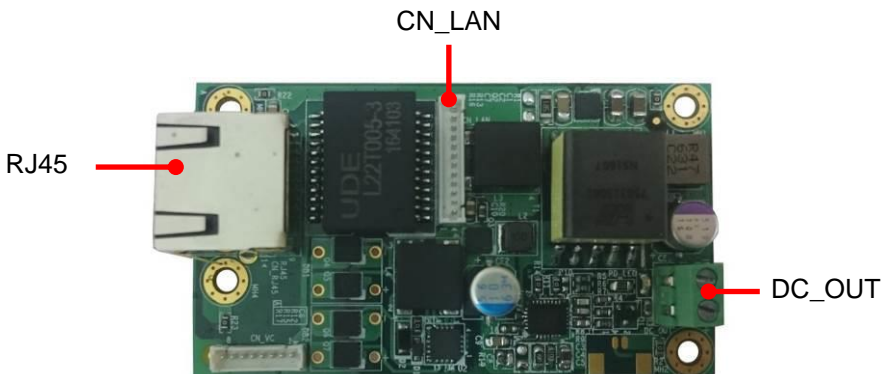| Compliance	IEEE802.3at/af
Ordering Code	**ADP-PD-5V :** IEEE802.3at/af compliant with DC output 5V/4.7A
	ADP-PD-12V : IEEE802.3at/af compliant with DC output 12V/1.9A

2. < Block Diagram >

```
        ┌─────────────────┐
        │  Power Sourcing  │
        │    Equipment     │
        └─────────────────┘
                 │ Input
                 ▼
     ┌──────────────────────────────┐
     │   ┌─────────────┐   ADP-PD    │
     │   │     LAN      │            │
     │   │  Connector   │            │
     │   └─────────────┘            │
     │          ↕                   │
     │   ┌─────────────┐            │
     │   │ Transformer  │            │
     │   └─────────────┘            │
     │      ↕        ↕              │
     │  DC output   LAN signal       │
     └──────────────────────────────┘
        ┌─────────────────┐
        │      Load        │
        └─────────────────┘
```
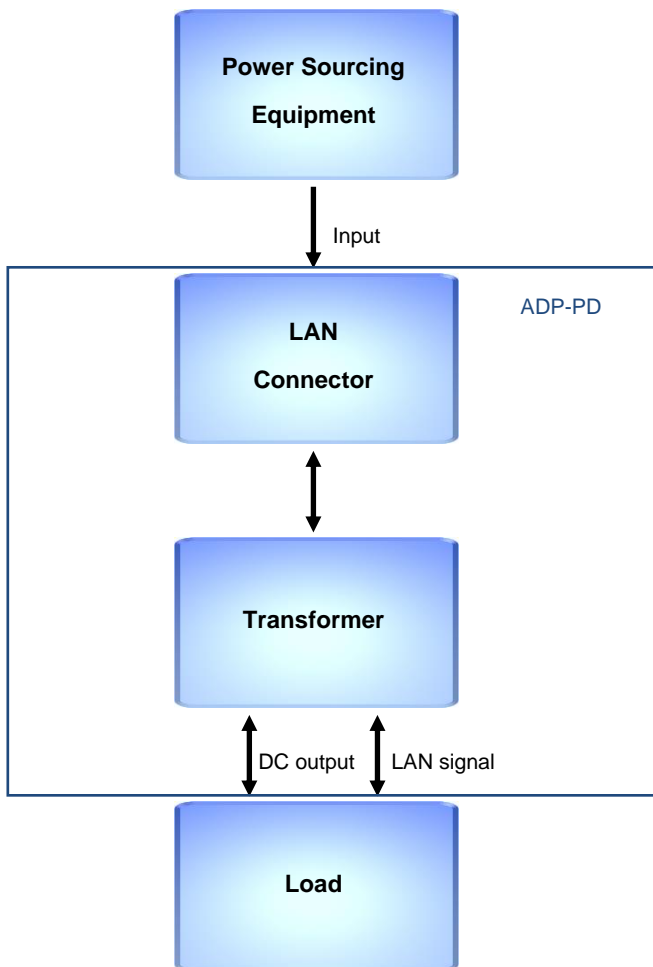
3. < Mechanical Drawing >
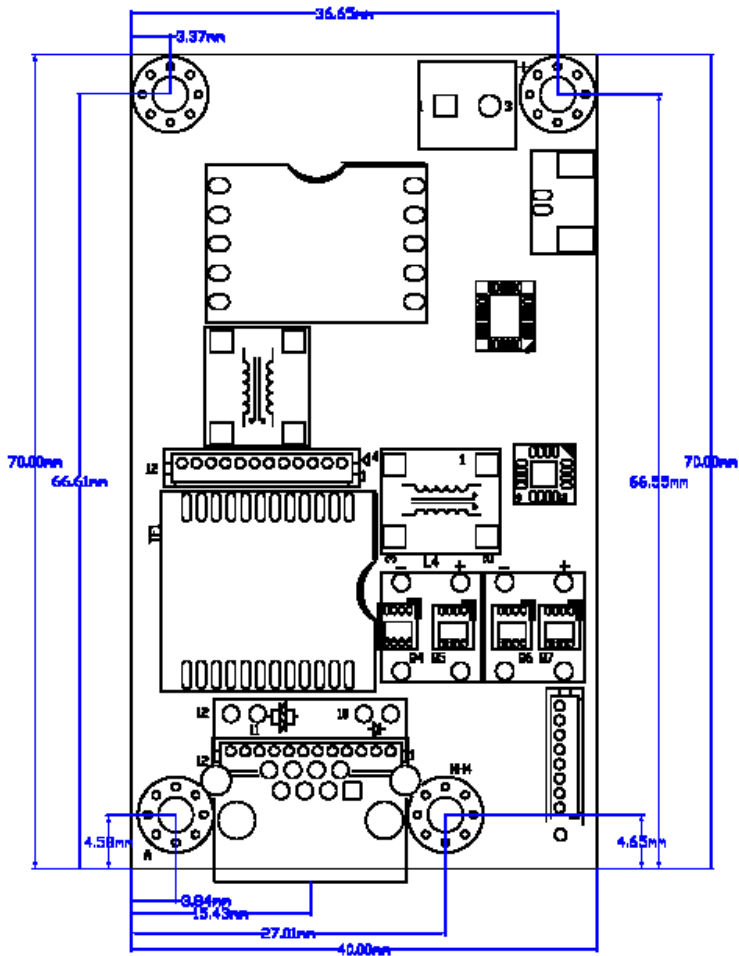
4. < Connector Location and Reference >

Connector	Function
CN_LAN	12-pin Ethernet Connector
RJ45	RJ-45 LAN Port
DC_OUT	2-pin power output with Terminal Block

LAN Connector : RJ45

Connector Type:

16-pin (8 x 2) 2.0 x 2.0 mm header

RJ45 10/100/1000Mbps connector
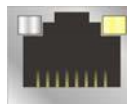
8   1

Pin	Description	Pin	Description
1	MI0+	2	MI0-
3	MI1+	4	MI2+
5	MI2-	6	MI1-
7	MI3+	8	MI3-
9	LINKLED	10	ACTLED
11	LINK100	12	LINK1000
13	GND	14	GND

Connector : CN_LAN

Connector Type:

12-pin (12 x 1) , pitch : 1.25 mm ,DIP type

Straight P.C.B Connector

12   1

Pin	Description	Pin	Description
1	ACTLED	2	LINK0
3	RTD0+	4	RTD0-
5	RTD1+	6	RTD1-
7	RTD2+	8	RTD2-
9	RTD3+	10	RTD3-
11	LINK1H	12	LINK1G

Connector : DC_OUT

Connector Type:

2-pin (2 x 1) , pitch : 3.81 mm

Straight P.C.B Connector

Pin	Description	Pin	Description
1	GND	2	Power output

For ADP-PD-5V , PIN2 with +5V/4.7A Output

For ADP-PD-12V , PIN2 with +12V/1.9A Output
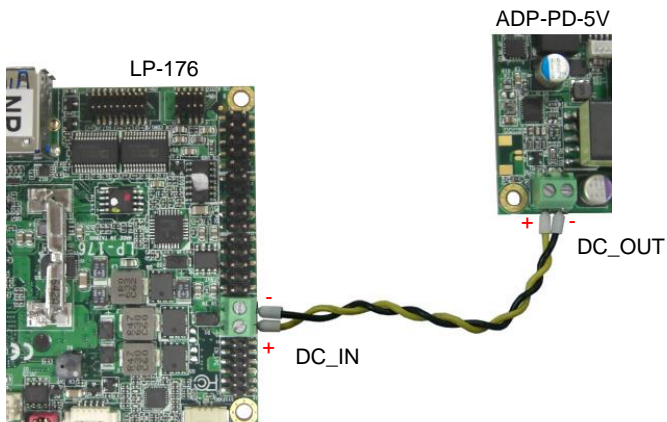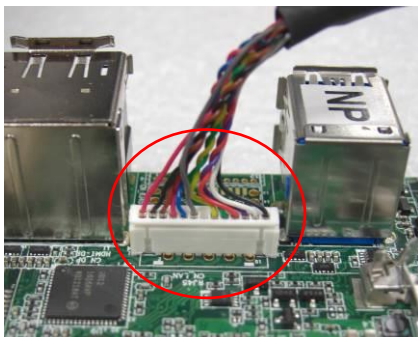
5. < ADP-PD Installation Guide >

Following implement to use ADP-PD with "COMMELL's PICO M/B(LP-173 or

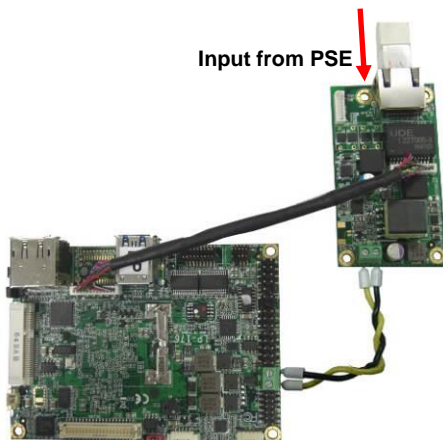**LP-176) for complies as PoE Power Device.**

1. DC cable connection between ADP-PD and Motherboard

(Connect ADP-PD-5V "CN_OUT" to LP-176 "DC_IN") .

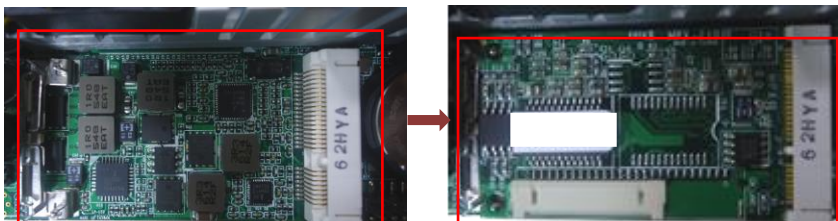**2-2. Plug PoE cable(OALPOE-01) to LP-176 and ADP-PD .**

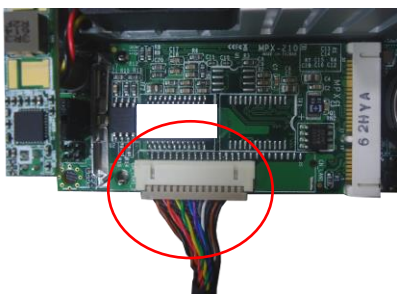**2-3. Connect RJ45 connector from PSE to ADP-PD via LAN cable .**

Input from PSE

3. **The procedures shows how assembly COMMELL's Mini_PCIe LAN Card(MPX-350、MPX-210) on "COMMELL's PICO M/B(LP-173 or LP-176)**

3-1. Insert COMMELL Mini_PCIe LAN Card(MPX-210) on Motherboard.

3-2. Plug PoE cable(OALPOE-03) to MPX-210 and ADP-PD , refer step 1 for DC connection , then ready for use .

Contact information

Any advice or comment about our products and service, or anything we can help you please don't hesitate to contact with us. We will do our best to support you for your products, projects and business.

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