



30 Watts,
12V Booster



IMC-100-PH12

10/100Base-TX to 100Base-FX with PoE + (PSE) Fiber Converter

IMC-100-PH12是一部 10/100Base-TX 對 100Base-FX 百兆乙太網光電轉換器，此產品光纖介面為固定式光纖收發器，也能透過電子RJ-45端口輸送PoE+電力。具有堅固的外殼及 Din Rail 軌道式或掛壁式安裝方式，此產品專為惡劣環境，如工業網路、安全自動化應用、交通監控、安防自動化應用、IP surveillance、城市安防及智能交通系統（ITS），也適用於許多環境條件超出一般商規產品規格的軍事和公用事業的市場應用中。

功能特色

- 10/100Base-TX 電口與 100Base-FX 光纖介面之間的傳輸介面轉換
- 雙電源輸入 12/24/48VDC(9.6~57VDC) 冗餘備援，內建非常高效率的電源升壓器(97~99%) 可提供穩定的 55VDC 供給 PoE 輸出
- 穩壓功能，穩定輸出電壓 55VDC，供給 PoE 輸出。
- 提供 IEEE802.3at PoE 埠輸出 (30W)
- 堅固的金屬外殼、IP30 防護、無風扇
- 寬溫工作範圍 (-20 ~ 75°C) (IMC-100-PHE12)
- 通過 CE, FCC, 鐵道交通 EN50121-4 認證
- 通過工業級 EMS(抗電磁干擾)，EMI (電磁波干擾)，EN61000-6-2, EN61000-6-4 認證
- 支援 Jumbo Frame 9K bytes packet
- 支援透過光纖端口斷線的方式，以重啟遠端 PoE PD

產品規格

| | |
|--------------------------------|---|
| 符合標準 | IEEE802.3 10Base-T 10Mbit/s Ethernet IEEE802.3u 100Base-TX, 100Base-FX, Fast Ethernet IEEE802.3x Flow Control and Back pressure IEEE802.3at Power over Ethernet+, PoE+ IEEE802.3af Power over Ethernet, PoE |
| RJ-45 端口 | 10/100Base-TX |
| 光纖端口 | 100Base-FX (SC or ST 光纖連接器) |
| 數據處理架構 | Store and Forward mode or Pass Through mode (Set by DIP SW) |
| Jumbo Frame | 9K bytes |
| 光纖參數 | Fiber Cable (Multi-mode): 50/125um, 62.5/125um Fiber Cable (Single-mode): 9/125um 波長: 1310nm (Multi-mode/Single-mode) 適用距離: 2KM (Multi-mode), 30KM (Single-mode), 50KM(Single-mode) |
| Link Fault Pass Through (LFPT) | TX-光纖: 當TX端口斷線，此時多媒體轉換器將強制將光纖端口關閉 光纖-TX: 當光纖端口斷線，此時多媒體轉換器將強制將TX端口關閉 |
| DIP Switch | ON: Disable Alarm For Power Loss OFF: Enable Alarm For Power Loss ON: Disable Alarm For Port Link-Failure OFF: Enable Alarm For Port Link-Failure ON: LFPT Enable, OFF: LFPT Disable Data process Architecture : ON: Pass through mode OFF: Store and Forward Switch mode PoE Output OFF: Enable PoE output ON: Disable PoE output Remote PD reset OFF: Disable Remote PD reset ON: Enable Remote PD reset by fiber port link down |
| Fiber Connector | SC 或 ST連接器: 2KM (Multi-mode), 30KM (Single-mode), 50KM(Single-mode) |
| 連接器及Pin腳配置 | SC 或 ST連接器: 2KM (Multi-mode), 30KM (Single-mode), 50KM(Single-mode) RJ-45 Socket: CAT-3/5 (10/100Mbps) Twisted Pair cable PoE (V+): RJ-45 pin 1, 2. PoE (V-): RJ-45 pin 3, 6. Data (1,2,3,6) |

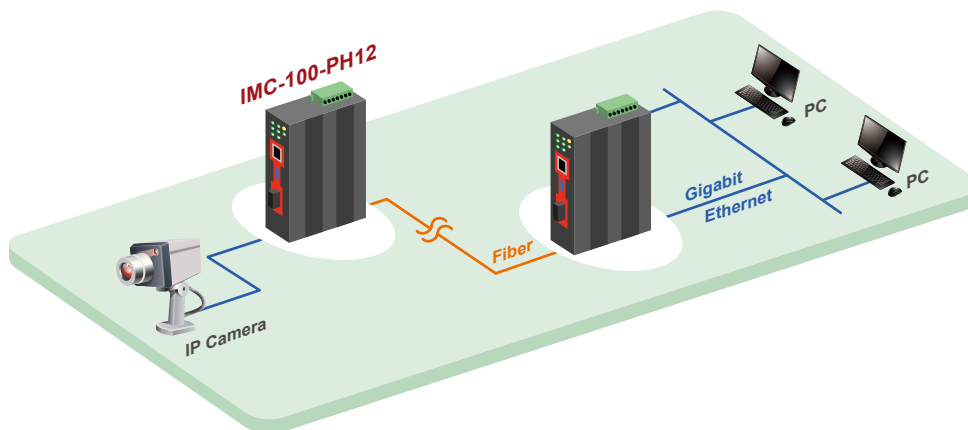
| LED指示燈 | Power 1 (綠), Power 2 (綠), Fault (琥珀色) Fiber LNK/ACT(綠): ON:網路連線, OFF:無網路連線, BLK:傳送/接收數據 光纖速度: 綠:100Base-X RJ-45埠: 速度: 10(關閉), 100(綠) LNK/ACT for RJ-45(綠): ON:網路連線, OFF:無網路連線, BLK: 傳送/接收數據 PoE狀態(綠): 閃爍: PoE Fault (過載或短路), ON: PoE功能正常 OFF: PoE無電力輸出 | | | | | | | | | | | | | | | | | | | | |
|---------|---|--------|---------|--------|---------|------|-------|-----|------|-----|-------|-------|-------|------|-----|-------|-------|-------|------|-----|-------|
| 電壓極性保護 | 提供 | | | | | | | | | | | | | | | | | | | | |
| 電流過載保護 | 提供 | | | | | | | | | | | | | | | | | | | | |
| 電源供應 | 12/24/48VDC,可拔插式配接器具保護功能之極性冗餘備援內置高效率電源升壓器(升壓效率達97~99%)供給PoE輸出穩定的55 VDC電壓 | | | | | | | | | | | | | | | | | | | | |
| 耗電量 | <table border="1"> <thead> <tr> <th>輸入電壓</th> <th>總電源消耗</th> <th>設備消耗功率</th> <th>PoE最大功率</th> <th>升壓效率</th> </tr> </thead> <tbody> <tr> <td>12VDC</td> <td>34W</td> <td>3.5W</td> <td>30W</td> <td>98.4%</td> </tr> <tr> <td>24VDC</td> <td>34.4W</td> <td>4.1W</td> <td>30W</td> <td>99.0%</td> </tr> <tr> <td>48VDC</td> <td>34.9W</td> <td>4.3W</td> <td>30W</td> <td>98.0%</td> </tr> </tbody> </table> | 輸入電壓 | 總電源消耗 | 設備消耗功率 | PoE最大功率 | 升壓效率 | 12VDC | 34W | 3.5W | 30W | 98.4% | 24VDC | 34.4W | 4.1W | 30W | 99.0% | 48VDC | 34.9W | 4.3W | 30W | 98.0% |
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| 12VDC | 34W | 3.5W | 30W | 98.4% | | | | | | | | | | | | | | | | | |
| 24VDC | 34.4W | 4.1W | 30W | 99.0% | | | | | | | | | | | | | | | | | |
| 48VDC | 34.9W | 4.3W | 30W | 98.0% | | | | | | | | | | | | | | | | | |
| 告警繼電器規格 | Relay outputs with current carrying capacity of 1 A @24VDC | | | | | | | | | | | | | | | | | | | | |
| 可插拔式配接器 | Provide 2 redundant power, alarm relay contact, 6 Pin | | | | | | | | | | | | | | | | | | | | |
| 工作濕度 | 5%~95% (無冷凝) | | | | | | | | | | | | | | | | | | | | |
| 工作溫度 | -10°C~60°C (IMC-100-PH12) -20°C~75°C (IMC-100-PHE12) | | | | | | | | | | | | | | | | | | | | |
| 儲存溫度 | -40°C~85°C | | | | | | | | | | | | | | | | | | | | |
| 外殼 | Rugged Metal, IP30 Protection and fanless | | | | | | | | | | | | | | | | | | | | |
| 尺寸 | 106 x 62.5 x 135 mm (D x W x H) | | | | | | | | | | | | | | | | | | | | |
| 重量 | 655公克 | | | | | | | | | | | | | | | | | | | | |
| 安裝方式 | Din Rail 軌道式安裝或壁掛式 | | | | | | | | | | | | | | | | | | | | |
| MTBF | 419,822小時 MIL-HDBK-217 | | | | | | | | | | | | | | | | | | | | |
| 產品保固 | 5年 | | | | | | | | | | | | | | | | | | | | |

認證

| | |
|-----------------|--|
| EMC | CE |
| EMI | FCC Part 15 Subpart B Class A, CE EN 55022 Class A |
| 軌道交通 | EN50121-4 |
| 重工業環境 抗電磁干擾 | EN 61000-6-2 |
| 重工業環境 電磁輻射干擾 | EN 61000-6-4 |

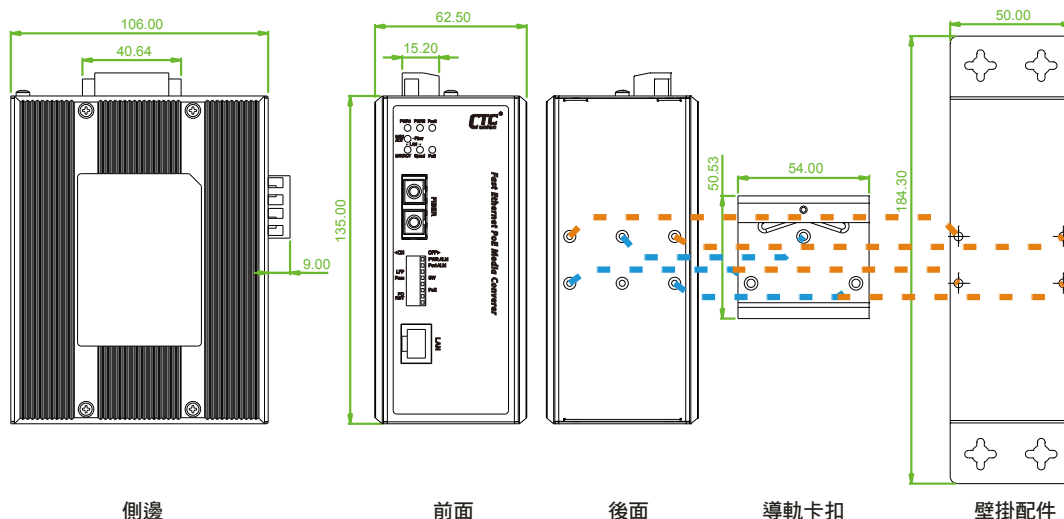
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|---|---|
| EMS (Electromagnetic Susceptibility) 抗電磁干擾等級 | EN61000-4-2 (ESD) Level 3, Criteria B |
| | EN61000-4-3 (RS) Level 3, Criteria A |
| | EN61000-4-4 (EFT) Level 3, Criteria A |
| | EN61000-4-5 (Surge) Level 3, Criteria B |
| | EN61000-4-6 (CS) Level 3, Criteria A |
| | EN61000-4-8 (PFMF) Field strength 300A/m Criteria A |
| Safety | UL60950-1 (pending) |
| 防撞擊 | IEC 60068-2-27 |
| 防摔 | IEC 60068-2-32 |
| 防震 | IEC 60068-2-6 |

應用圖



圖例：IMC-100-PH12 Industrial PoE Transmission

機構尺寸



側邊

前面

後面

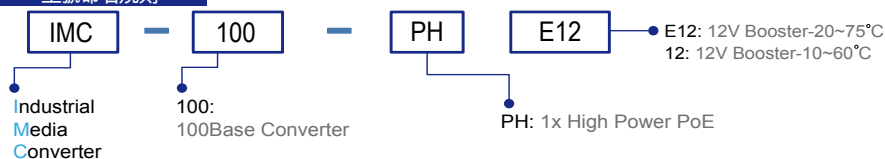
導軌卡扣

壁掛配件

訂購資訊

| 型號 | 光纖 | | PoE埠 | | 輸入電壓 (Boost) | 認證 | | | | 操作溫度 |
|---------------|-------------------|------------|----------------------|-----------------|-----------------|-------------------|----------------------------|----|-----|----------|
| | 10/100 Base-TX | 100Base-FX | IEEE802.3at (PSE) | Power Budget | | 鐵道交通 EN50121-4 | EN61000-6-2 EN61000-6-4 | CE | FCC | |
| IMC-100-PH12 | 1 | 1 SC/ST | 1 | 30W | 12/24/48VDC | V | V | V | V | -10~60°C |
| IMC-100-PHE12 | 1 | 1 SC/ST | 1 | 30W | 12/24/48VDC | V | V | V | V | -20~75°C |

型號命名規則



| Fiber Connector Type | Connectivity Distance |
|----------------------|--|
| SC, ST | 002: 2km (M/M) 030: 30km (S/M) 050: 50km (S/M) 020A: WDM 20km A Type (TX:1310nm) 020B: WDM 20km B Type (TX:1550nm) |

選購配件

| | |
|-----------|---|
| DR-4524 | Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 48W, -10 ~ +50°C |
| MDR-40-24 | Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 40W, -20 ~ +70°C |
| MDR-60-24 | Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 60W, -20 ~ +70°C |

Temperature Connector Type Connectivity Distance
IMC-100 -PH 12 -
 Example: IMC-100 - PHE12 - SC002