



第十九屆傑出光電產品獎

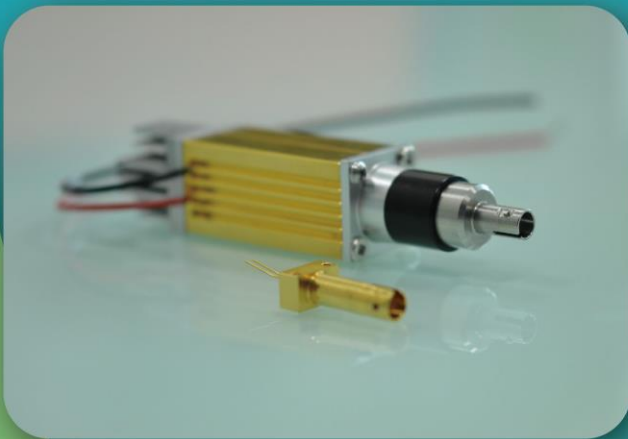
Taiwan Outstanding Photonics Product Award 2016

美環能股份有限公司

MH GoPower Company Limited

雷射光電能量轉換器

Photovoltaic Power Converter (PPC)



產品特色：

技術性：

雷射光電能量轉換器技術領先同業，可達成輸出功率大於280W且輸出電壓大於30V，並可搭配主動式或被動式散熱設計。

創新性：

使用矽基MIH[®]垂直多接面光電電池（設計應用於高功率雷射環境），雷射光電能量轉換器可以提供彈性的尺寸、電壓及功率需求，並可搭配高可靠性、高功率與成本優勢的9xx nm 雷射光源。

市場性：

光纖供電技術具有免除雜訊干擾、電壓隔離及不產生火花等特性，可應用於電網、感測器、通訊、無人機與電力電子等產業。

整體設計：

美環能的專利結構設計與特殊光導設計確保光電電池上的光照均勻度，藉此達成雷射光電能量轉換器的最佳電能輸出。

其他優良特性：

美環能掌握關鍵MIH[®]垂直多接面光電電池的生產技術，可快速因應市場客製化要求。

產品簡介：

1. 光纖供電技術是利用光纖將雷射能量傳送至雷射光電能量轉換器，並將雷射能量轉換成電力提供用電。
2. 美環能的雷射光電能量轉換器可依據客戶尺寸、電壓與功率的需求客製化。
3. 美環能的光纖供電解決方案可達成高可靠性、高輸出功率與低整體成本。

Product Introduction :

1. Power over Fiber (PoF) is the delivery of power via laser light through a fiber optic cable, where the delivered light is converted to electricity by the Photovoltaic Power Converter (PPC).
2. Our PPCs are customizable in size, voltage, and power to meet customer needs.
3. Our PoF solutions achieve superior field reliability, higher power, and lower system costs.

Product Features :

Technology :

Delivering industry leading high power (>280W) and high voltage (>30V) PPCs with both passively and actively cooled options.

Innovation :

With silicon-based MIH[®] VMJ PV cell (designed for high intensity laser applications), the PPC is able to deliver unparalleled flexibility in size, voltage, and power, and use more reliable, higher power and lower cost 9xx nm lasers.

Market :

PoF provides a noise immune, voltage isolated, and spark free power delivery solution for diverse industries, including the utility, sensor, communications, UAV and power electronics industries.

Design :

Patented PPC housing with specially designed waveguide ensures optimal beam uniformity over the PV cells, maximizing the PPC's power output.

Other :

With flexible MIH[®] VMJ PV cell manufacturing in house, MH GoPower can quickly respond to any customized request.