

# MIH<sup>®</sup> Power over Fiber Platform PoFP Series



Power over Fiber (PoF) is a novel power delivery technology which delivers electrical power by sending laser light through lightweight, non-conductive fiber optic cable to a remote photovoltaic receiver or photovoltaic power converter (PPC) to power remote sensors or electrical devices. MHGP's innovative PoF solution provides three major benefits: (1) noise immunity, (2) voltage isolation, and (3) spark free operation.

The PoF Platform (PoFP) helps designers build their own PoF based product for unique applications. It includes an Arduino based, easy-to-use hardware and software platform that controls a class 1 compliant power interface module (PIM) and a sensor interface module (SIM). The PIM sends laser power to the SIM, and communicates with the SIM optically via a transmitter and receiver. The PPC on the SIM powers the communications and conditioning electronics on the SIM. The SIM provides a completely voltage isolated conditioned DC power output of 250mW at 3.3V and 5V to customer electronics, such as sensors. The PoFP aims to make PoF more accessible to inventors, makers, and research teams, which will dramatically reduce development time, budgets, and the technical risk of innovative PoF products.

## Features

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- Flexible Arduino-based platform
- Provides voltage isolated power
- Bidirectional noise free communication
- Plug and play interface
- Class 1 laser safety compliant
- 250mW electrical output at 3.3V and 5V from the SIM

## Advantages

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- Easy to use
- Enables rapid integration of application specific features
- Reduces development time and risk
- Makes PoF more accessible to research teams, helping to proliferate new applications
- Decreases time to market, accelerating market adoption of PoF

