RLH Industries, Inc.

DATA SHEET

The leader in rugged fiber optic technology.

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Power Over Fiber

INDUSTRIAL POWER SOLUTIONS

PoF Transmitter Unit

PoF Receiver Card

Description

Our patented Power Over Fiber (PoF) system provides power transmission over three multimode (62.5/125) optical fibers. The PoF system is able to provide true isolated power to a remote location utilizing Laser Light at the transmitter and a photovoltaic power converter at the remote location. The remote location device utilizes super capacitors to ensure a smooth and constant voltage is supplied to the remotely powered devices. RLH patented PoF system utilizes state of the art photonic technology and safety interlock systems to provide a convenient method of remote powering RLH's low power consumption Fiber Link Cards or other low power consumption devices.

PoF Transmitter Unit

The PoF Transmitter unit is a self contained housing that may be 19/23" rack or wall mounted. The housing is constructed of powder coated aluminum with LED and LCD indicators located on the front panel to report system status and operation. The PoF transmitter requires a 24~56 VDC power source. The transmitter unit contains two high power laser diodes and one fiber receiver for signal feedback.

PoF Receiver Card

The PoF receiver card may be installed into any Fiber Optic Link card housing. The PoF receiver card has two fiber ST photovoltaic power converters (PPC) and one fiber ST transmitter. The PPC converts laser light into electricity. The PoF Receiver will also transmit a fiber signal to the PoF transmitter unit for voltage monitoring and safety shutoffs in case of a break in fiber continuity. The PoF receiver will provide up to 1 Watt of 24 Volt DC Power, power output attenuates over distance. For higher power or voltage applications systems can be use together with the receiver cards connected in series or parallel.

Key Features
Send Power Over Fiber
Environmentally Rugged Receiver Card: -40˚F to +158˚F (-40˚C to +70˚C)
Available with ST connectors for multi-mode fiber
LCD Display and LED Status Indicators
Power RLH Fiber Link Cards: T1, 4W Audio Data, 56K DDS, Contact Closure, and 4~20mA
Made in the USA

Ordering Information

Description	Part Number
Power Over Fiber Laser Transmitter Unit	**8806-1600-03**
Power Over Fiber Receiver Card	**8806-1610-02**
6 Fiber multimode (OM1/62.5) OSP fiber cable, ST connectors, 3mm break out, and 1 pulling sheet.	**RLH-06COMM3-STST-XXXXF-1**

- A complete system requires one (1) **Transmitter Unit** and one (1) **Receiver Card**.
- Compatible fiber cables are ordered to length by replacing ***-XXXX*** for the desired length in feet.
- Please contact your RLH sales representative for pricing and delivery information

General Specifications

Transmission method	High power light via three optical fibers	
	Multimode: 830nm	62.5/125µm
Fiber Connectors	ST	
Power Connectors	Screw clamps 12-24 AWG wire	
Power Consumption	24 - 48 Volts DC, 75 Watts Maximum	
Power Output	24VDC & 45mA (1.08 Watts) at 32.8 Feet	
	Power output declines over longer distances, see derating curve for details	
Alarm Contact	Voltage Max. 220VDC/250VAC (60W)	
Operating Temperature	Transmitter Unit	-4°F to +104°F (-20°C to +40°C)
	Receiver Card	-40°F to +158°F (-40°C to +70°C)
Mounting	Transmitter Unit	19” or 23” Equipment Racks or Wall Mount
	Receiver Card	RLH Fiber Link Card Housing
Dimensions	Transmitter Unit	13” x 11” x 3.5”, 6 lbs.
	Receiver Card	7” x 4” x 1”, 1 lbs.
Humidity	95% non-condensing	
Warranty	Limited 1 Year	*Visit* www.fiberopticlink.com *for warranty details*