

Laser Source

LSM-020

Datasheet



Key Features:

- 976nm laser source
- Up to 20W laser power out
- Adjustable power levels
- SMA standard connector
- 2 meter, 105um, 0.22 NA output fiber
- Standalone system; easy operation

Applications:

- High voltage current measurement for utility
- Powering remote electronics and sensors
- Noise free and isolated power source for high power IGBT/MOSFET driver circuitry EMC Testing
- Factories requiring spark-free delivery of electrical power
- Test equipment requiring 100% EMI immunity

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 a PV cell on the receiving end, also known as photovoltaic power converter (PPC). Targeting the utility, electric vehicle, renewable, rail traction, and other industries, MHGP's innovative PoF solution provides three major benefits: **(1) noise immunity**, **(2) voltage isolation**, and **(3) spark free operation**.

Laser Source Module (LSM)

MHGP's LSM series laser systems provide customers with a simple, turn-key solution to get started with PoF. The systems include a laser source module (LSM) with a fiber patch cord to be connected to MHGP's photovoltaic power converters (PPC). The laser source generates the laser power which is transmitted through the fiber patch cord to the PPC. MHGP's patent pending PPC converts the laser power back to electricity.

MHGP's LSM is very easy to operate. By turning a knob on the front panel, thus modifying the internal pot setting, the user adjusts the output laser power to the desired application, or testing requirement. The LSM also incorporates a robust laser driver circuit, which protects the laser source from inappropriate operating behaviors.

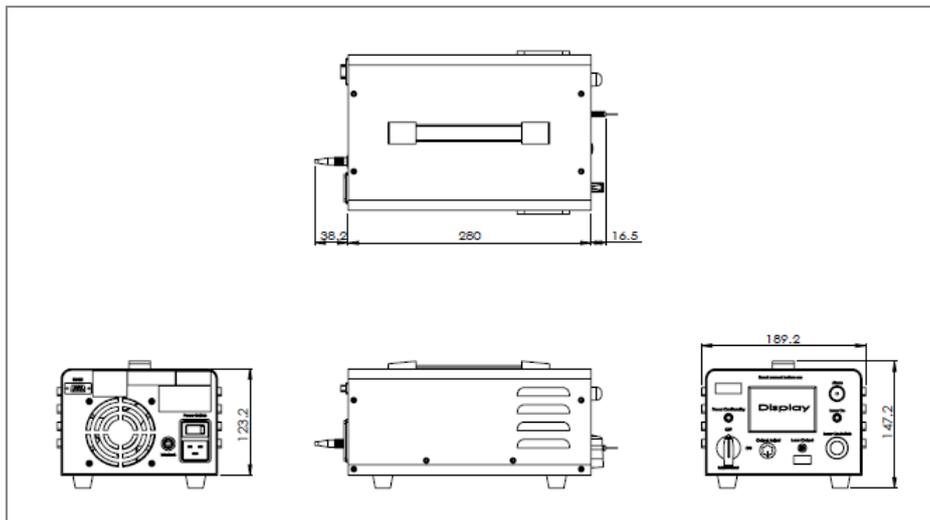
For more information, please contact MHGP customer service at: info@mhgopower.com.

Laser Power Settings

The pot settings to generate specific laser power output levels are illustrated in the table below. Actual pot settings may vary per LSM system, and exact settings will be included with the LSM system. The maximum laser power output at pot setting is 20W. Driving the laser power over 20W will cause the laser source system to shut down, and will require turning the Driver Current pot setting to 0, and then restarting the system. If there is any discrepancy between datasheet and test report, the info in the test report shall prevail.

Laser Output (W)	Driver Current (A)
1.0	1.08
2.5	1.60
5.0	2.48
7.5	3.36
10.0	4.22
12.5	5.11
15.0	5.97
17.5	6.87
20.0	7.76

Mechanical Dimensions



Net Weight: 4.2kg