

MIR-Pac 2.94µm 1W Laser Module

- Made in the USA
- Hermetically sealed
- Free-space output of 1W
- Compact and lightweight
- Typical TEM₀₀ M² value of 1.12
- Wall plug efficiency of 10%
- Laser/TEC driver available separately (see below)
- Applications include sensing, rangefinding, and medical
- Fiber-coupled version available soon

The world's first commercially available, hermetically sealed 2.94µm DPSS laser module.



- Required for use with MIR-Pac 2.94μm
 1W Laser Module
- Can drive one diode and up to two TECs simultaneously
- Constant power and constant current modes
- Laser diode current up to 10A
- TEC drive current up to ±4A
- Compact and lightweight (130 x 115 x 70 mm)
- Overheating protection for laser diode
- Easy to use LED screen and buttons
- Computer interface via USB (software included)

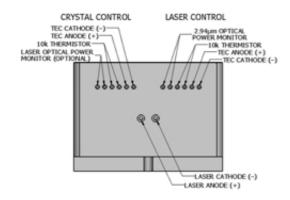


High Power Laser Diode / TEC Driver

SHEAUMANN

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System Integration & Thermal Management

The Sheaumann MIR-Pac 2.94µm laser is a modular component sold for use in OEM equipment. The OEM is responsible for compliance with all applicable regulations.

Thermal management of the MIR-Pac 2.94 μ m must be included in the OEM design. There is no warranty on failures caused by inadequate thermal management. To ensure proper cooling, the base plate of the MIR-Pac 2.94 μ m must be attached to a heat sink.

For assistance in thermal management and other system integration issues, please contact our sales department at 508-970-0600.

SPECIFICATIONS

• WAVELENGTH 2.94 μm

CW OUTPUT POWER 1 W

LASER DRIVE CURRENT <6 A

SPATIAL MODE TEM₀₀

WAVELENGTH STABILITY
 <1 cm⁻¹

BEAM DIAMETER @FWHM <2.0 mm

• BEAM DIVERGENCE <20 mrad

POWER STABILITY <±2.0% over 8 hours

• WARM UP TIME <5 min

POLARIZATION RATIO Random

STATIC ALIGNMENT TOLERANCE

BEAM POSITION ±0.5 mm
BEAM ANGLE ±5 mrad

MIR-PAC DIMENSIONS (L x W x H)

114 x 52 x 38 mm (4.5 x 2.1 x 1.5 in)

MIR-PAC WEIGHT

0.82 kg (1.8 lbs)

AMBIENT OPERATING TEMP. RANGE 15 to 40°C
 POWER DISSIPATION FROM MIR-PAC <100 W
 HEATSINK TEMP. FOR CONDUCTIVE COOLING 0 to 45°C
 NON-OPERATING STORAGE TEMP. -10 to 65°C

Sheaumann follows a policy of continuous product improvement. Specifications are subject to change without notice.

