

SPCO-2808-3011 - pump diode module

What are SPCO modules?

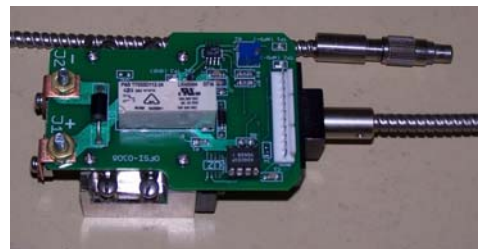
Our SPCO modules incorporate a linear diode laser array (or bar) to generate high level of optical power. We use a proprietary technique to couple the output beam of the diode laser bar into a small bundle of optical fibers without using any additional optical element, resulting in a compact, rugged, high-performance and cost-effective device.

Standard Features:

- * High Power
- * Rugged construction
- * Sealed package
- * Industry-compatible (SPI)

Specific Features

Our SPCO modules are direct replacement for Spectra-Physics pump diode modules. They include an internal 10 kohms NTC thermistor, a monitoring photodiode, and an interface PCB with on-board EEPROM and safety relay for full compatibility.



Applications:

- * 3D Rapid Prototyping
- * Laser and Amplifier pumping
- * Soldering
- * Material processing
- * Illumination

Ordering Information: **SPCO-2808-3011-F-500**

General specifications:

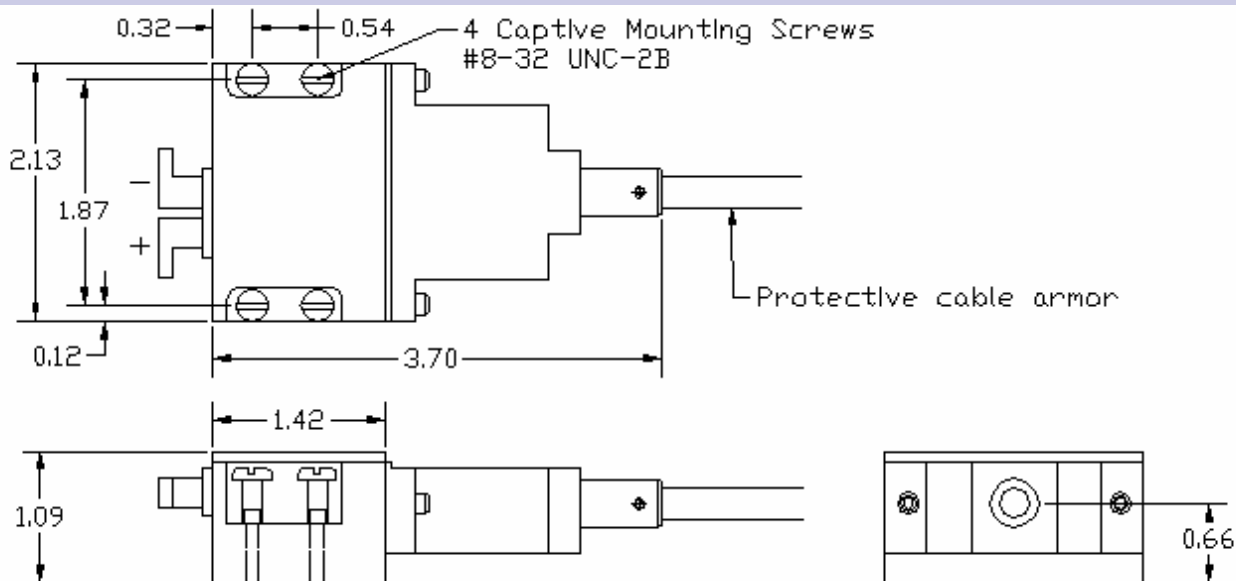
Wavelength:	808 \pm 3 nm	Fiber Diameter	1.10 \pm 0.05 mm
Delivered Power:	Up to 30 W cw	Fiber Numerical Aperture:	0.12
Compliance Voltage:	2.5 V maximum	Fiber Length:	5m
Drive Current	60 A maximum	Fiber Protection	SS cable armor, 6.5-mm OD
Operating current (TYP):	35A (30W)	Operating Temperature	15 C to 35C

Disclaimer:

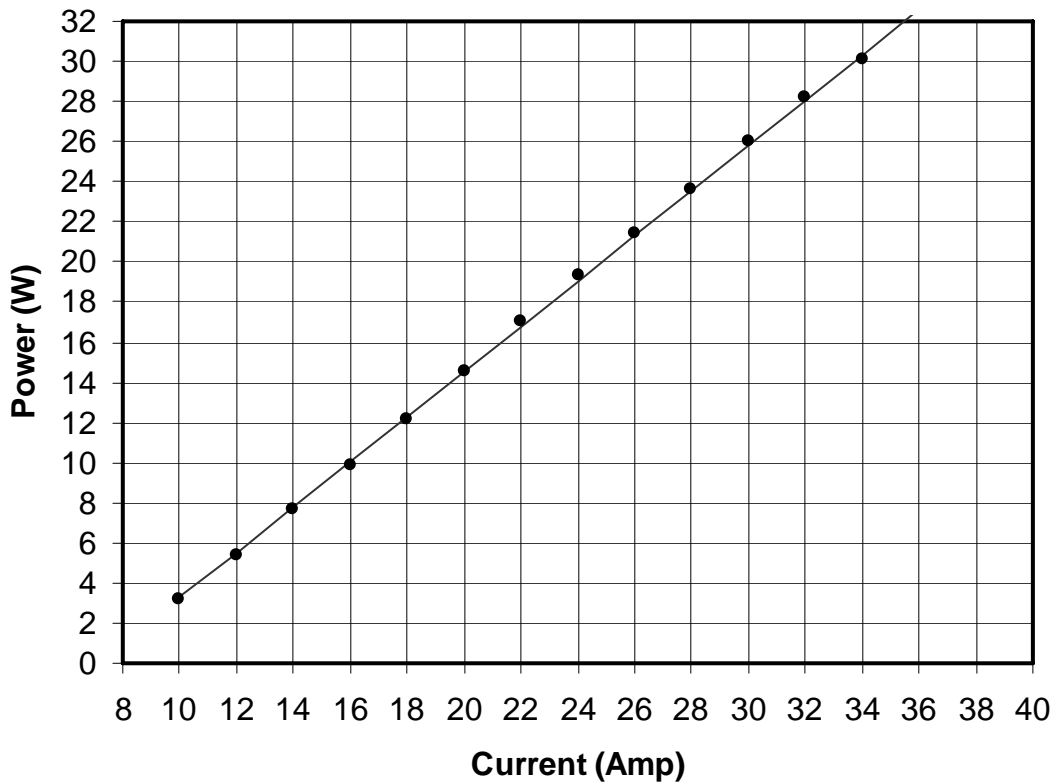
This laser product is designated solely as an OEM component to be incorporated into another end product. Therefore, it does not comply with the appropriate requirements of FDA 21CFR, section 1040.10 and 1040.11 for complete laser system.

SPCO Fiber-coupled diode laser module

Mechanical drawing (dimensions are in inches):

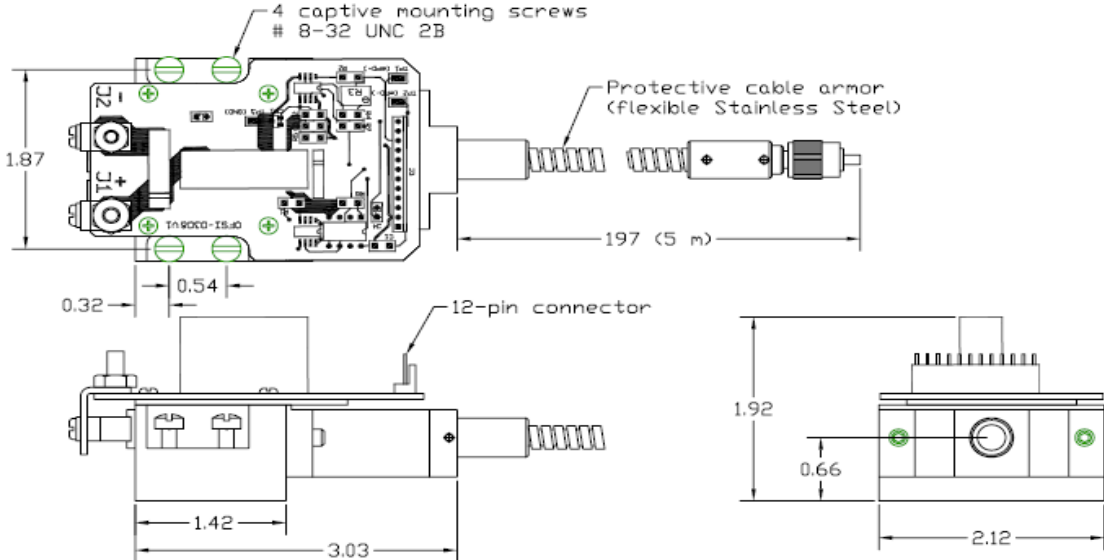


Typical Power versus Current (SPCO-2808-3011-F-500)



SPCO-2808-3011-F-500

Mechanical Outline Drawing (Dimensions in inches)



Optical and Electrical Characteristics (T=25 °C):

Optical Output Power	30 W MAX
Threshold Current (Amp)	< 10.0 (8.0 Typical)
Slope (W/Amp)	> 0.75 (1.00 Typical)
Operating Current (Amp) @ 30W	< 45.0 (34 Typical)
Operating Voltage (Volt) @ 30W	2.2 MAX
Operating case temperature	10.0 to 40.0 C
Center Wavelength (nm) @ 30W / 25C	808.0 +/-3
Linewidth FWHM (nm)	< 3.5 (2.0 Typical)
Fiber Core Diameter	1100 ±20 micron
Fiber Numerical Aperture	0.12 ±0.02
Fiber Output Connector	FC
Fiber length	5 ±0.1m