

CW

Laser Modules

NEW

PM, PMi, RS, SPM Modules



Features

PM

120mA drive current
Rugged design
Versatile
Diode compatibility:
N-type & P-type in APC, All in CC

PMi

500mA operating current
Current monitoring within 1% accuracy
Internal temp shutoff
Diode compatibility:
N-type & P-type in APC, All in CC

RS

Compact
Great for cost sensitive apps.
Wavelength choices of:
635nm, 650nm, 670nm, and 785nm
Diode compatibility: N-type

SPM

Separated head
Mounting flexibility
Diode compatibility:
N-type & P-type in APC, All in CC

The New PMi Laser Module (0.5 Amp PM) is a higher-power version of our rugged PM laser module. The PMi offers all of the features of a PM, including a precision current source and the flexibility of applications that benefit from its design, and now offers users from 50mA to 500mA, or 0.5A of power. This unit remains compact, but it 0.75 inches larger than our standard PM.

The PMi is an industrial-grade laser module designed for use in standard or rugged OEM environments. The PMi contains a precision current source that can deliver up to 500mA of drive current to the laser diode. For drive currents above 200mA and/or temperatures above 30 °C, we recommend a heat sink such as the Power Technology, Inc.'s customized heat sink option (H-option). The module is ideal for a wide variety of applications, from positioning to alignment to bar code reading.

For additional mounting flexibility, we offer SPM series modules that

have a separated head and power supply. Members of the SPM family of lasers offer all the advantages of a PM: rugged build, aspheric glass optics, and a versatile nature. In addition, SPM series lasers feature a separated head with a diameter of only .5 of an inch. With a diameter of only 6.99mm, the SPMB-214 is one of the smallest commonly manufactured PTI heads.

The RS is a compact module designed for your cost-sensitive application. The output power of the RS is preset to fall within the range of your desired laser class, and units that are class 3a and below are CDRH certified, provided that users connect to the power source through a switch. The RS operates in automatic power control mode. An optional factory-installed line generating lens is available that is permanently attached to the module at a fixed focal distance. No adjustment of the lens is possible. For particularly demanding applications, we recommend incorporating a heat sink into your RS.

MODULE SPECIFICATIONS	PM	PMi	RS	SPM-214	SPMB-214
Body or Head Dimensions, Ø x L, in. [mm]	.50 X 2.0 (12.57 X 50.80)	.75 X 3.2 (19.05 X 81.28)	.43 X 1.46 (10.97 X 37.01)	.50 X .62 (12.57 X 15.75)	.28 X .73 (6.99 X 18.64)
Drive Dimensions, L x W, in. [mm]	-	-	-	1.01 X .48 (25.66 X 12.2)	1.01 X .48 (25.66 X 12.2)
Operating Voltage (VDC)	3.3 - 9	3.3 - 9	3.3 - 9	3.3 - 9	3.3 - 9
Max. Operating Current (mA)	120	500	65	120	120
Max. Laser Drive Current (mA)	120	500	60	120	120
Temperature Range (°C)	-	10 - 30	-	10 - 35	10 - 35
Physical Diode Compatibility	9mm, 5.6mm	9mm, 5.6mm	9mm, 5.6mm	9mm, 5.6mm	5.6mm
Diode Compatibility	N-type & P-type in APC, All in CC	N-type & P-type in APC, All in CC	N-type	N-type & P-type in APC, All in CC	N-type & P-type in APC, All in CC
Micro lens Compatible	yes	yes	no	yes	yes
Recommended Options	D1, T	D1, T	L	C, L	G1, G7

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