

CHAPTER 2 LASERS

HIGH POWER CW LASER MODULES

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- HAM contains an internal fan & heat sink for thermal management
- HPM&HSM offer temperature control circuitry in addition to an internal fan & heat sink

HAM Laser Modules:

The HAM is designed for use with high power laser diodes with current requirements over 500mA. The HAM operates in either constant current or automatic power control mode, depending on the type of diode selected. For effective thermal management, the unit also contains an internal fan and heat sink.

HPM & HSM Laser Modules:

In addition to the internal fan and heat sink used by the HAM, our HPM and HSM modules incorporate an active temperature control circuit for those laser diodes with a built-in thermoelectric cooler. The HPM offers 1000mA of drive current, while the HSM features 2000mA. Both units operate in either constant current or automatic power control mode, depending on the type of diode selected.

Our HAM, HPM and HSM modules have a typical operating current greater than 500mA. These units are excellent choices for any number of power hungry applications, including high-resolution printing, imaging, illumination and biomedical analysis.

Safety Option



See page 3-65

MODULE SPECIFICATIONS	HAM	HPM	HSM
Dimensions, $\phi \times L$, in./mm	1.75x7.87 [44.45x199.90]	1.75x7.87 [44.45x199.90]	1.75x9.79 [44.45x248.67]
Operating Voltage (VDC)	12 \pm .25	12 \pm .25	12 \pm .25
Max. Operating Current (mA)	2400	3200	4200
Max. Laser Drive Current (mA)	2000	1000	2000
Physical Diode Compatibility	9mm, TO-3, C Block	TO-3 with TEC	TO-3 with TEC
Diode Compatibility	M type, N type, & 4-pin in APC, all in CC	M type, N type, & 4-pin in APC, all in CC	M type, N type, & 4-pin in APC, all in CC
Recommended Options*	D1, D2, X12, X16, X22, X26	D1, D2	X12, X16, X22, X26

* See page 1-24 through 1-26 for Options and Accessories