

HIGH TEMPERATURE PERFORMANCE LASER

HRM LASER MODULE

The Power Technology HRM laser extends our Extreme Environment Laser Portfolio with a rugged, high-temperature module designed for demanding operating conditions. With reduced size, weight, and power consumption compared to alternative solutions, the HRM supports compact integration while helping reduce field failures, extend service life, and lower system-level costs.

Available in visible, and infrared wavelengths with output power options up to 100 mW, the HRM is rated for operation up to 85°C. Its collimated, single-mode optical design provides stable performance in high-temperature environments where reliability and durability are critical. For added environmental protection, the module is IP67-rated for dust and water resistance and includes a sealed USB-C connector.



SKU	Product Name	Wavelength (nm)	Output Power (mW)	Beam Size @ Exit (mm)	Beam Divergence (mrad)	Operating Voltage (VDC)	Operating Temp Range* (°C)	Laser Safety Class
E867	HRM 405-5	405 +/- 5	4.5	1.03x2.33	<0.8	8	10 to +80	3R
E778	HRM 405-100	405 +/- 5	100	1.03x2.33	<0.8	8	10 to +80	3B
E780	HRM 520-5	520 +/- 10	4.5	0.84x2.63	<0.8	8	10 to +65	3R
E781	HRM 520-50	520 +/- 10	50	0.90x2.69	<0.8	8	10 to +80	3B
E794	HRM 639-5	639 +/- 10	4.5	0.97x4.11	<1.0	5	10 to +55	3R
E795	HRM 639-100	639 +/- 5	100	0.97x4.00	<1.0	5	10 to +55	3B
E782	HRM 660-5	660 +/- 10	4.5	1.22x4.00	<0.8	5	10 to +85	3R
E783	HRM 660-50	660 +/- 10	50	0.85x1.82	<1.0	5	10 to +85	3B
E868	HRM 780-5	780 +/- 10	4.5	1.22x2.08	<1.0	5	10 to +75	3R
E784	HRM 780-50	780 +/- 10	50	1.22x2.08	<1.0	5	10 to +75	3B
E796	HRM 850-150	850 +/- 10	100	0.98x1.84	<1.2	5	10 to +70	3B
E785	HRM 905-100	905 +/- 10	100	1.11x3.21	<1.2	5	10 to +65	3B

HRM Laser Defaults	
Optical Configuration	Collimated
Beam Shape	Elliptical
Transverse Mode	SM
Operating Mode	CW
Polarization State	Linear
Polarization Ratio	100:1
Power Stability over Temp	+/- 2%
Laser Control Method	Constant Power
Beam Pointing Stability	+/- 20 µR/°C
User Focusable?	No
Product Weight	0.125 lb
Module Dimensions	19 x 139 mm
Connector	USB-C
Connection Type	Flying Leads
Cable Length	1.0 m

*Module heatsinking is required to achieve maximum operating temperatures.

**Contact us to discuss customization option and accessories.

