

Diode Laser LMxxx



Dr. Mergenthaler GmbH & Co. KG

The laser is a complete high power industrial laser with internal safety equipment. The laser may only be used in an environment, which complies with your national and international laser safety regulations. An integrated interlock device can be used to control door opening in laser safety environment or disconnection of the laser fiber from the laser. In case of peltier cooled devices, a temperature controller shows actual diode temperature at the heat sink and switches the laser off in case of overheating. We use a patented, very fast, low noise constant current source as laser driver. Laser current can be regulated by a external 0-10V voltage and is shown on the frontside by a digital display. A second input can be used for blanking the laser power (option) . The laser has an on/off button, key lock, emergency stop and a start and stop button for regular operation. Two alarm lights are integrated for laser radiation warning.

Technical data:

Laser Type:	fiber coupled diode laser	
Laser Class:	4	
Optical Power:	30W,45W, 75W, 140W, 300W passive cooling, 140W , 210 W , 400W active cooling	
Wavelength:	808 nm , 940nm, 980 nm	
Fiber Connector:	FSMA905	
Fiber Diameter:	400µm, 600µm, 400 W : 600µm only	
Fiber Length:	5m , 10m (standard), others on request	
Num. Aperture:	0,22	
Cooling:	integr. Peltier cooler up to 75W, 6HU water cooler others	
Power Control:	analog 0 - 10V	
Current Noise:	0.1%, typical 50mA peak-to-peak	
Rise Time t_{90} :	350 µs	
Dimension:	19"-4HU-electronic rack, 84TE large, 450mm depth	
Weight:	25 kg, 55 kg with water cooler	
Protection:	Front IP50	
Power supply:	110V-230VAC, 50-60Hz, 5A max.	
Options:	Look at homepage for actual options and laser parameters	