

## ***MDL-XL Laser Module***



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MDL-XL Series Laser is photoelectric integrated. They are made features of easy integration, high reliability, focus adjustable, good environmental adaptability. The user simply needs to provide a digital modulation signal to synchronize the enable time and disable time of the laser emission.

MDL-XL Series Laser Module with its stable performance and high reliability works professionally in 3D scan and measurement, position welding dimensional Inspection and rail road inspection, etc.

### ***FEATURES***

- Output power up to 3W
- Wavelengths from 375 to 980nm
- TTL/ Analog modulation up to 10kHz
- Selectable enable and disable time with duty cycle up to 20%
- Focus adjustable
- Over-temperature protected

### ***APPLICATIONS***

- 3D scan and measurement
- Position welding
- Dimensional Inspection
- Rail and road inspection



## SYSTEM SPECIFICATION\*

Wavelength(nm)	375	405	447	488	450	520	637	640	655	660	808	830	915	940	980
(Other wavelengths are available on request)															
Wavelength tolerance nm (typical)	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±3	±10	±10	±5	±10
Output power(W)	0.1	1	3	1.8	3	1	1	1	1	1	0.5	0.2	0.3	0.5	1
Long term power stability (8 hours)	<1%														
Line width@400mm	~200um(adjustable)														
Line angle	7°,10°,15°,30°,45°,50°,60°,75°,90°														
Luminance uniformity	80%														
Straightness error	Less than 0.5%														
Temperature & power stability	Less than 0.5%														
Expected lifetime	10,000h														

## ELECTRICAL SPECIFICATIONS

Operating voltage	5/12/24VDC
Modulation	TTL modulation Analog input adjusting power
Modulation frequency	TTL up to 10kHz Analog up to 10kHz
Maximum duty cycle	20%
Power supply cable	Cable with flying leads

## ENVIRONMENTAL CONDITIONS

Operating temperature	-10°C to 50°C
Storage temperature	-20 °C to +80 °C
Humidity	< 90 %, non-condensing
Dissipated heat	~1-5 W

## KEYNOTES

\*All testing data under the conditions of temperature 25°C.



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## MECHANICAL SPECIFICATIONS

Length	101 mm
Diameter head $\varnothing$	19 mm
Material	Aluminum

## DIMENSIONS OF MDL-XL SERIES LASER MODULE (mm):

