

Guideline

Laser Series



Highly Visible Alignment Lasers For
Visually Demanding Surfaces

- Red / Green long visible lines
- Equal brightness across length of the line
- Uniform Line (no fading at ends of the line)
- Simple, fast user adjustable focus
- Compact, rugged plug & play system
- 5 Vdc, 12/24 Vdc or 110/240 Vac operation
- No technical laser experience required



**Global
Laser**

The logo for Global Laser features the text "Global Laser" in a bold, sans-serif font. The text is centered within a white circle that is partially overlaid by four overlapping, curved shapes in red, green, yellow, and blue, creating a colorful, dynamic background.

UNIFORM INTENSITY

The Guideline laser has a line profile that provides an even laser power from end to end. The uniform intensity line provides the user with an increased visible line which is beneficial in alignment applications, especially on visually demanding surfaces. Conventional lasers tend to use a Gaussian line profile where the laser fades towards the ends. This is illustrated below.



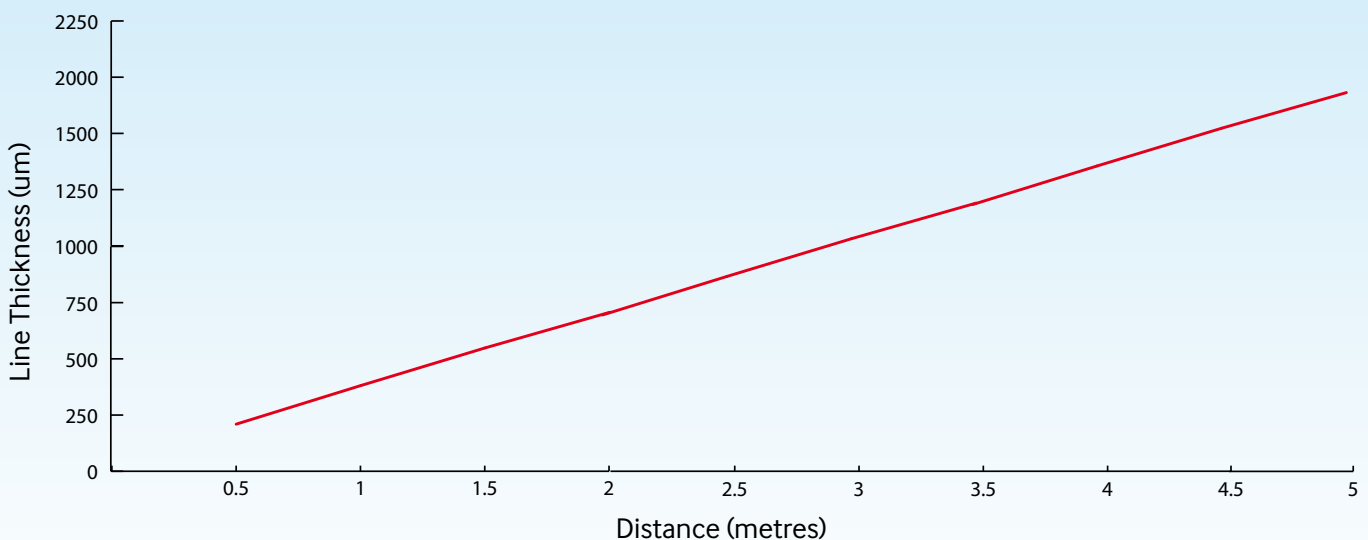
SIMPLE, FAST USER ADJUSTABLE FOCUS

The Guideline laser series provides a unique and user friendly method of changing the focus simply by rotating the control knob on the rear end of the laser. When the correct focus is obtained the mechanism can be locked into position.



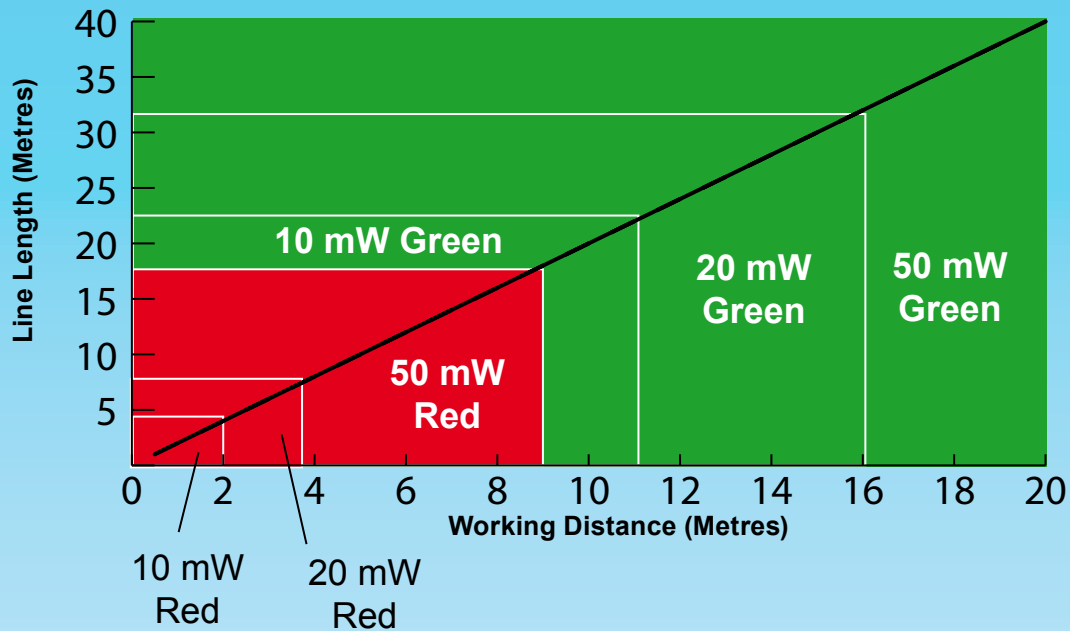
LINE THICKNESS

Below is a graph that will provide the thickness of the line projected from the laser at various working distances. This guide assumes the laser is perpendicular to the surface.



LINE LENGTH

The chart below provides the length of the line depending on the required working distance. The chart also illustrates a guide for which model would be suitable.



BRIGHTNESS OPTIONS

The Guideline laser is available in various powers for use in a wide range of environments, the lasers are available in either a Red or Green output and are available in powers of 10, 20 and 50mW. The 10 and 20mW units are regarded as eye safe whereas the 50mW versions requires the user to wear eye protection.

	Eye Safe (1M)	Eye Safe (2M)	Eye protection required (3B)
Red	10 mW	20 mW	50 mW
Green	10 mW	20 mW	50 mW

Please note other power options are available on request.

SAFETY GLASSES

To compliment the Guideline series there are a number of laser safety glasses available. Below is an example of some of the glasses available. For further information on laser safety glasses please refer to www.globallasertech.com.



DIA Laser Safety Glasses

Offers the user protection when using the Guideline Red 50mW



AL3 Laser Safety Glasses

Offers the user protection when using the Guideline Green 50mW

MOUNTING CLAMPS

The Guideline laser has two clamps available.

RED LASER

GREEN LASER

HEAVY DUTY MOUNT



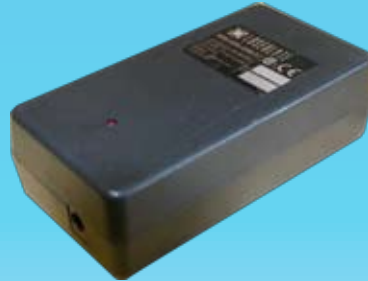
MAGNETIC HEAVY DUTY MOUNT



POWER SUPPLY OPTIONS

The Guideline Laser operates as standard from a low voltage 5 Vdc supply voltage. The Guideline is also available with a 12 / 24 Vdc adaptor or a 110 / 240 Vac adaptor.

110 / 240 VAC

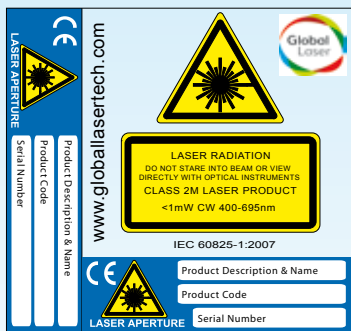


12 / 24 VDC

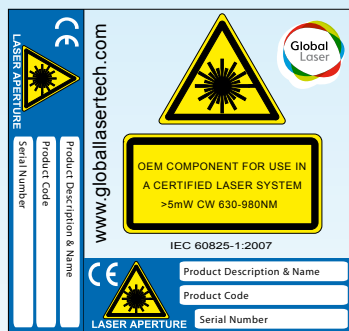


LASER SAFETY

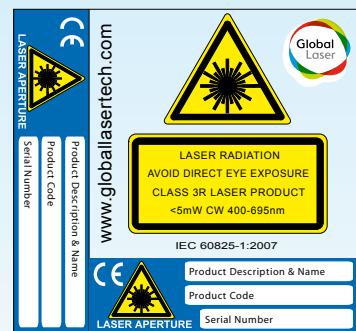
All of the Guideline Laser units are certified to IEC 60825 laser safety standards. All the units are eye safe except the 50mW version. For more information about eye safety and using lasers please refer to our website.



OEM Class Label



Class 2M Label



Class 3R Label

APPLICATION SURFACE GUIDE



WOOD



METAL



MARBLE



STONE



FABRIC



CARPET



PLASTIC



RUBBER

SPECIFICATIONS

MECHANICAL SPECIFICATIONS

	Red Laser	Green Laser
Weight	52 grams	74 grams
Dimensions	19 mm dia x 88 mm <i>(not including connector)</i>	19mm dia x 108 mm <i>(not including connector)</i>
Housing	Bronze anodized Aluminium	Green anodized Aluminium
Isolated Body	Yes	Yes
Input Leads (5 Vdc version)	2, Red (+ve), Black (0 V)	2, Red (+ve), Black (0V)
Lead length	250 mm	250 mm

OPTICAL SPECIFICATIONS

Diode Power	10, 20, 50 mW *	10, 20, 50 mW *
Wavelength	660 nm	532 nm
Intensity distribution	Uniform along length, Gaussian along width	Uniform along length, Gaussian along width
Fan Angles	90 degrees	90 degrees
Line Thickness	Varies with distance & wavelength	Varies with distance & wavelength

ENVIRONMENTAL SPECIFICATIONS

Operating case temperature	-10°C to +50°C	+5°C to +35°C
Storage temperature	-10°C to +80°C	-10°C to +80°C
Operating Humidity (%RH)	90 (non condensing)	90 (non condensing)

ELECTRICAL SPECIFICATIONS

Input voltage	5 Vdc (± 10%) (standard) 12 Vdc or 24 Vdc (via optional 11-32 Vdc adaptor) 110 Vac/240 Vac (via optional adaptor)	3.5Vdc to 5Vdc (standard) 12Vdc or 24Vdc (via optional 11-32 Vdc adaptor) 110Vac/240Vac (via optional adaptor)
Connector type	4 pin BINDER	4 pin BINDER
Reverse - Polarity protection	Yes	Yes
Over Temperature protection	Yes	Yes

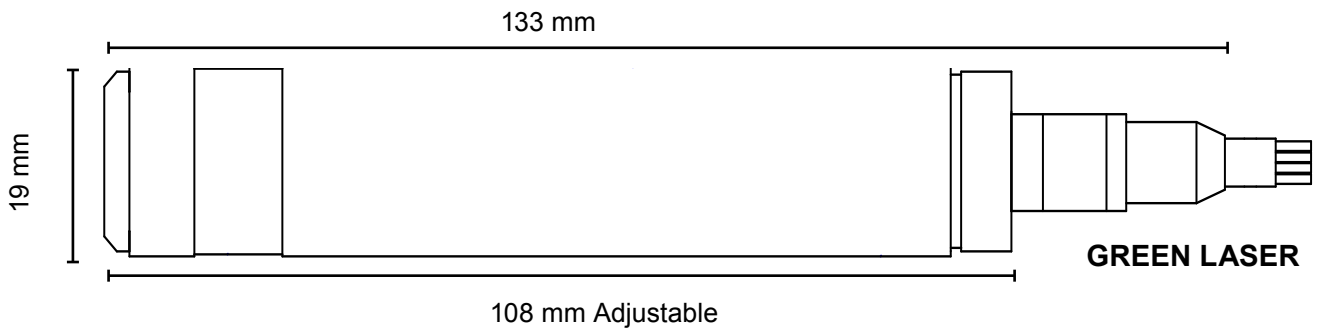
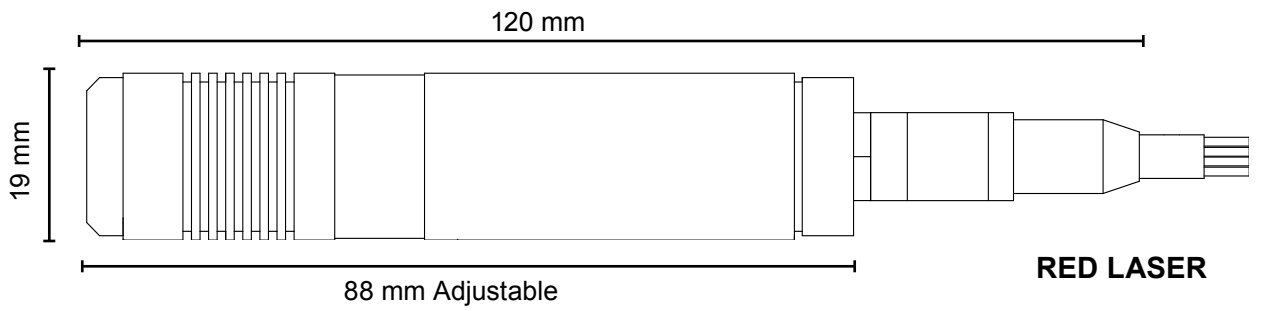
RELIABILITY

Life Time @ 25°C	20,000 hrs	5,000 hrs
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Specifications are typical at 25°C unless otherwise stated

* = varies with model

DIMENSIONS



Please note: Global Laser reserve the rights to change descriptions and specifications without notice.



ISO9001 Certified

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