# GUIDELINE Laser Series

HIGHLY VISIBLE ALIGNMENT LASER 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

#### **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.



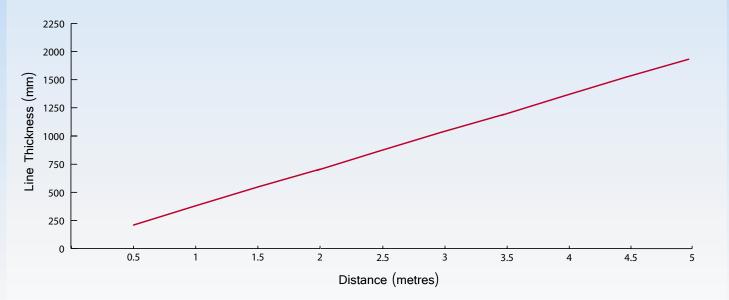
#### SIMPLE, FAST USER ADJUSTABLE FOCUS

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.



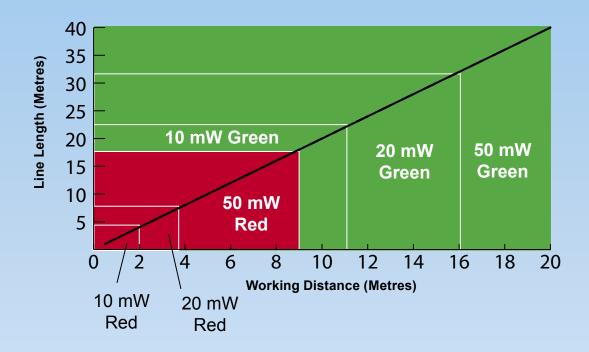
#### LINE THICKNESS

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 50 mW with 50 mW being the brightest. The 10 and 35 mW units are regarded as eye safe where as the 50 mW 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.

## **APPLICATION SURFACE GUIDE**



WOOD



MARBLE



FABRIC



PLASTIC



METAL



STONE



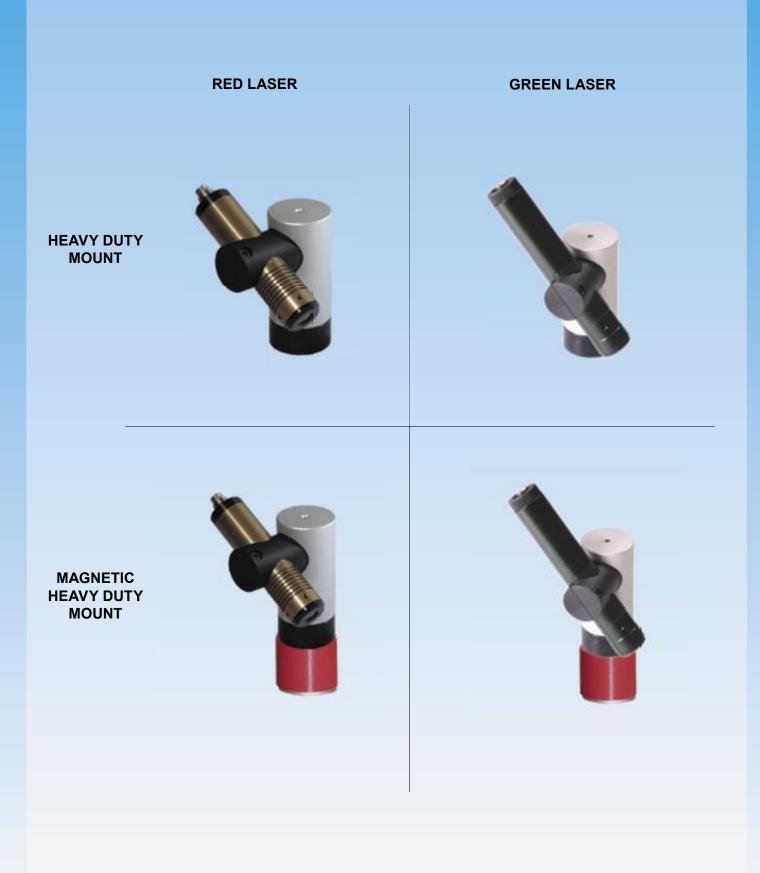
CARPET



RUBBER

## **MOUNTING CLAMPS**

The Guideline laser has two clamps available



# 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 adapter.



# LASER SAFETY

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

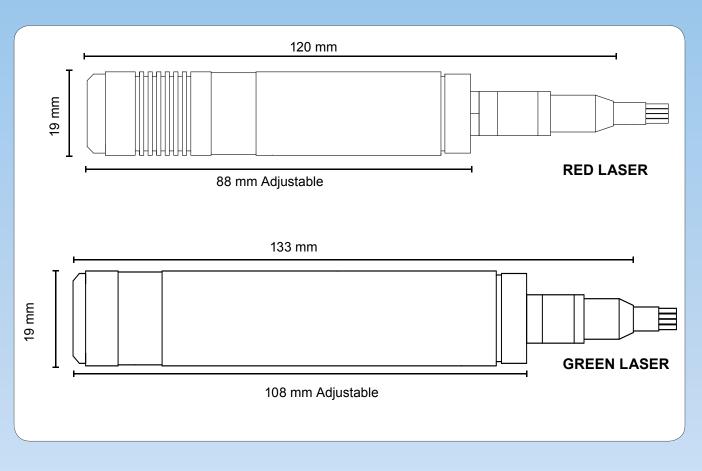


## SPECIFICATIONS

## **MECHANICAL SPECIFICATIONS**

	Red Laser	Green Laser
Weight	52 grams	74 grams
Dimensions	19 mm dia x 88 mm (not including connector)	19mm dia x 108 mm (not including connector)
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 SPECIFICATI	ONS	
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		
	5 Vdc ( <u>+</u> 10%)	3.5Vdc to 5Vdc
lanut valtaga	(standard) 12 Vdc or 24 Vdc	(standard) 12Vdc or 24Vdc
Input voltage	(via optional 11-32 Vdc adaptor)	(via optional 11-32 Vdc adaptor)
	110 Vac/240 Vac (via optional adaptor)	110Vac/240Vac (via optional adaptor)
Connector type	4 pin BINDER	4 pin BINDER
Reverse - Polarity protection	Yes	Yes
Over Temperature protection	Yes	Yes
RELIABILTY		
Life Time @ 25°C	20,000 hrs	5,000 hrs
Specifications are typical at 25°C unle * = varies with model	ess otherwise stated	

#### DIMENSIONS

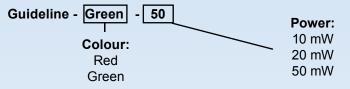


#### **QUALITY & WARRANTY**

The Guideline is supplied with a 12 month parts and labour warranty. Our manufacturing operations are certified to ISO9001.



#### ORDERING GUIDE



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



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Your Local Distributor Is: