



# New Product

# FireFly Mini

## New 15mm 532nm Green Laser Module

The new Firefly Mini green range sets a new standard for small industrial grade, green laser diode modules. A radically new design provides TE stabilised performance without TE size cost and power consumption.

The self-contained laser offers the user impressive power stability over a wide operating temperature with a quick warm up time.

The new unit is ideal for space constricted applications whilst still offering the high performance linear and TTL/PWM Modulation capabilities that have come to be expected from Global Laser.

High accuracy bore sight aligned spot with low divergence and achieved by the intergrated optics allows focusing over a wide operating range.

### Features

- Compact 15mm diameter
- No thermo-electric (TE) cooling
- Wide operating temperature range
- Fast warm up time
- Power stability better than 10% over full operating temperature range
- Power stability better than 1% at constant temperature
- Low beam divergence
- High level of bore sight accuracy
- Analogue or TTL modulation
- Low operating current



# Specifications.

Mechanical Information		
Dimensions (mm)	15 mm dia x 75 mm	
Weight (grams)	30 grams	
Housing	Green anodized aluminium	
Isolated Body	Yes	
Input Leads	Red (+ve)	
	Black (0 V)	
	Yellow (Modulation)	
Optical Information		
Wavelength (nm)	532 nm	
Diode Power (mW)	1,3	
Intensity Distribution	TEM00	
Focus range (mm)	115 mm to infinity	
Warm up time to 75% of ull power	<30 Seconds	
Power stability over operating range	< 10%	
Power stability over constant temparatue	<1%	
Beam Size at Aperture	1mm	
Minimum Beam Divergence	05mrad	
M <sup>2</sup>	<1.2	
Focus	User Adjustable	
Boresight	< 2 mrad	
Environmental Information		
Operating Case Temperature (°C)	+5 to +35	
Storage Temperature (°C)	-10 to +85	
Operating Humidity (%RH)	90 (non condensing)	
MTTF @ 25°C (hrs)	>10,000 hours	
Electrical Specifications		
Input Voltage +ve (Vdc)	3.3 Vdc to 5 Vdc	
Operating Current	350 mA max (diode dependant)	
Connector Type	Flying Leads	
Cable Length (mm)	250	
Reverse Polarity Protection	Yes	
Over temparatue Protection	Yes	
Modulation	LC	PWM
Typical Rise & FallTime	<10 us	<10 us
Frequency Range	DC to 10KHz	DC to 10KHz
Control Voltage Range	0 - 1 V (See chart)	N/A
Modulation input voltage	0 - 1 V	<.4V = Off >2V = On

Specification are typical at 25°C unless otherwise stated