

OceanTools

C-Laser

Subsea spot or fan/line laser

The OceanTools **C-Laser** is a *compact, rugged and cost-effective* spot or fan (line) subsea laser, designed for a wide range of subsea pointing and scaling applications.



Overview

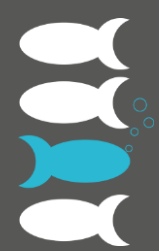
The **C-Laser** underwater laser offers a choice of spot or fan (line) projection. The Mark II is more compact than its predecessor, and available in a titanium housing with depth rating of 8000m as standard. The unit has a wide input voltage range of 10 to 30VDC with low power consumption.

C-Laser incorporates a visible solid-state *Class 2 or Class 3B* laser with output power options ranging from 1mW to 60mW. Green (520nm) or red (635nm) lasers are available, with other colours on request. Direct eye exposure should be avoided, but the laser is considered safe if handled carefully.

The laser output power is fixed as standard, or power adjustment by means of an external potentiometer, analogue voltage signal or digital modulation control can be specified as an option.

Key Features

- Spot or fan (line) beam projection
- Potentiometer, analogue or digital modulation options
- 8000m depth rating
- Wide input voltage range
- Green (520nm) or red (635nm) lasers



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Applications

The **C-Laser** subsea lasers are designed to be used by a Remotely Operated Vehicle (ROV) using video from the ROV cameras to take measurements. By mounting two lasers in parallel and calibrating them for set distances, reasonably accurate measurements may be taken from video images.

Specifications

	C-Laser	C-Laser-60
Laser colour/wavelength	Green/520nm or Red/635nm (other options 405nm to 850nm available)	
Laser output power	1mW spot or 10mW line Class 2 (others on request)	55mW spot or 60mW line Class 3B (others on request)
Maximum beam divergence	1 mrad	
Fan (line) angle	90° (other options 5° to 90° available)	
Control options	Potentiometer / Analogue Signal / Digital Modulation	
Voltage input	10–30VDC	
Maximum current	30mA to 150mA (depending on laser diode)	
Depth rating	8000m	
Housing material	Titanium	
Window	Sapphire	
Standard connector	Subconn MCBH3M	
Length (excl connector)	107mm	134mm
Diameter	21mm	30mm
Weight in air	200g	400g
Weight in water	175g	300g
Operating temperature	0°C to +50°C	
Storage temperature	-10°C to +60°C	

Product datasheets, GA drawings, case studies and other supporting documents are available to download from data.oceantools.co.uk

All specifications are subject to change without notice. E&OE.

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