



OceanTools

C-Laser

Subsea spot or fan laser

The OceanTools **C-Laser** is a *compact, rugged and cost-effective* subsea laser. Available in spot and fan (line) formats, the **C-Laser** has been designed for a wide range of subsea pointing, scaling and ranging applications.



Overview

The **C-Laser** underwater laser offers a choice of spot or fan (line) beams. The Mark II is more compact than its Mark I predecessor, and available in a titanium housing with depth rating of 8000m as standard. The unit may be powered using anywhere from 10VDC to 30VDC, and has a low power consumption.

C-Laser incorporates a visible solid-state *Class IIIb / 3B* laser with an output power of up to 100mW, available in red (660nm) or green (520nm) as standard, with other colours on request. Direct eye exposure should be avoided, but the laser is considered safe if handled carefully.

Key Features

- Compact, rugged design
- Spot or fan (line) projection
- 8000m depth rating
- Wide input voltage range
- Red (660nm) or green (520nm) lasers
- Provision for mounting bracket or clamp
- 30 month standard OceanTools warranty



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
Laser colour/wavelength	Red/660nm or Green/520nm (other options 405nm to 850nm available)
Laser output power	1mW to 100mW (depending on laser diode)
Maximum beam divergence	1 mrad
Fan (line) angle	50° (other options 5° to 90° available)
Voltage input	10–30VDC
Maximum current	30mA to 150mA (depending on laser diode)
Depth rating	8000m
Housing material	Titanium
Window	3.5mm Sapphire
Standard connector	Subconn MCBH3M
Length (excl connector)	94mm
Diameter	21mm
Weight in air	200g
Weight in water	175g
Operating temperature	0°C to +50°C
Storage temperature	-10°C to +60°C