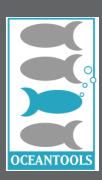
C-Gauge Underwater Laser based measurement system



Key Features:

- 700 data points per scan, 15 scans per second
- Accuracy to 0.5mm, resolution to 0.3mm
- 3000m depth rating
- 2D & 3D display modes



The field-proven OceanTools C-Gauge underwater measurement system offers sub-millimetric underwater measurements. The highly compact & rugged package comprises an OceanTools C-Laser, underwater camera, deployment frame and analysis software. The system has been designed for a wide range of subsea measurement applications including:

Cracks and gaps

Pipeline ovality, diameter and radial measurement Precise distance and angular measurements

Depending on the range, C-Gauge can generate results with an accuracy of 0.5mm and with a resolution of 0.3mm. The package is very compact and has been designed to fit onto the smallest of ROV systems. The system requires a single 24VDC input and a video link to the surface.

The laser has a very low power consumption and draws just 250mA at 24VDC. Because the power of the laser is below 70mW they are therefore classed as 'Laser class III-a' meaning no special training is required to operate them.

Lasei

Maximum range C-Gauge LR: 5m @ 10mm accuracy Maximum range C-Gauge SR: 2m @ 0.5mm accuracy

Laser colour / wavelength: Blue / 450nm

Laser power: 70mW

Fan beamwidth (underwater): 45° Depth rating, standard: 3000m

Voltage input: 24VDC

Power requirements: 250mA @ 24VDC Materials: Hard anodised aluminium

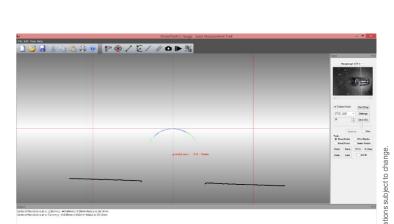
Dimensions

Weight in air: 0.5kg Weight in water: 0.3kg

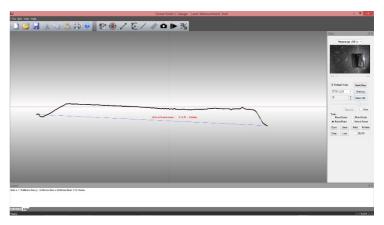
Environmental

Shock rating: 5g

Operating temperature: -5° C to 35° C **Storage temperature:** -10° C to 50° C



Precision radius/diameter measurement



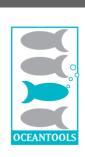
Precision distance measurement

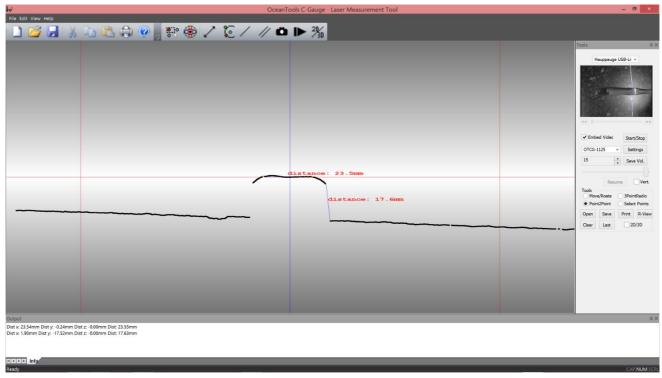




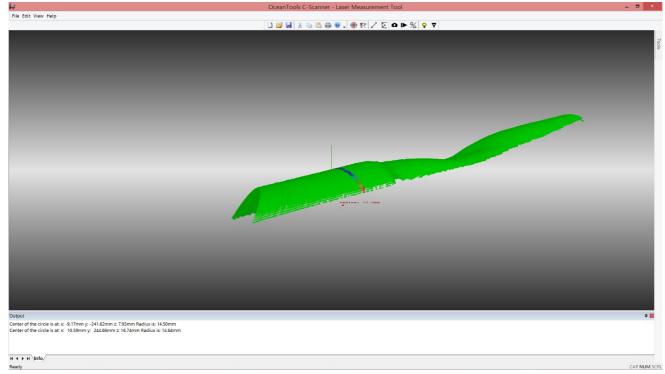
C-Gauge

Underwater Laser based measurement system





Multiple distance measurements



3D representation taken from multiple scans