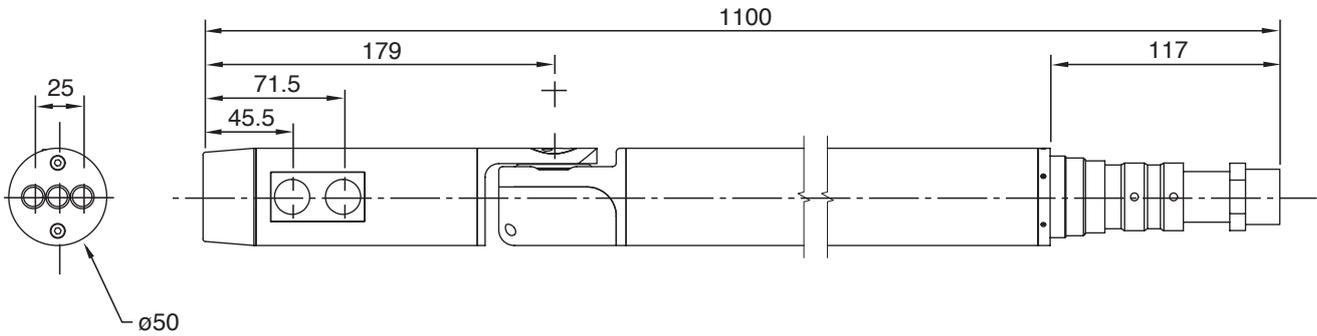


# C-ALS<sup>®</sup> Cavity Auto-Scanning Laser System

## C-ALS PROBE DIMENSIONS



Dimensions given in mm



**CLASS 1  
LASER PRODUCT**

Laser module		
<b>Laser classification (BS EN 60825-1 : 2014)</b> (21 CRF 1040.10 and 1040.11 except for deviations pursuant to Laser No 50, dated 24 June 2007)		Class 1
<b>Type</b>		InGaAs laser diode
<b>Wavelength (typical)</b>		905 nm
<b>Resolution</b>		1 cm
<b>Maximum range to a passive target*</b>		Up to 150 m
<b>Minimum range</b>		0.5 m
Angle measurement		
<b>Type</b>		Opto-electronic encoder
<b>Accuracy</b>		0.2°
<b>Resolution</b>		0.1°
<b>Range</b>	<b>Vertikal</b>	-90° to 90°
	<b>Horizontal</b>	0° to 360°
<b>Motion</b>		Servo-driven gear system in both axes with manual clutch override system
Boretrak Sensors		
<b>Type (standard system)</b>		Triaxial sensor
<b>Pitch-and-roll accuracy</b>		± 0.2°
<b>Pitch-and-roll range</b>		360°
<b>Compass (optional) accuracy</b>		± 1.2°
Physical data		
<b>Construction</b>		Machined aluminium and stainless steel
<b>Water and dust resistant</b>		IP67
<b>Operating temperature range</b>	<b>Probe</b>	0-10° C to +60° C
	<b>Surface Unit</b>	0° C to +50° C
<b>Dimensions</b>	<b>Probe</b>	1100 mm × 50 mm
	<b>Probe with extension piece</b>	2179 mm × 50 mm
	<b>Surface Unit</b>	270 mm × 245 mm × 170 mm
<b>Weight</b>	<b>Stainless steel probe</b>	5.9 kg
	<b>Single-section steel extension piece</b>	3 kg
	<b>Main C-ALS cable</b>	0.18 kg/m
	<b>1 m Boretrak rod</b>	0.4 kg
	<b>Surface Unit</b>	4.1 kg
<b>External power input</b>		12-15 V dc and 110-240 V ac
<b>Power consumption during scan</b>		0.8 to 2.0 A

\* Max measuring ranges are recorded against Kodak white card (90% reflectivity).

For further information and the best possible application and performance support please contact Carlson at [lasermeasurement@carlsonsw.com](mailto:lasermeasurement@carlsonsw.com)