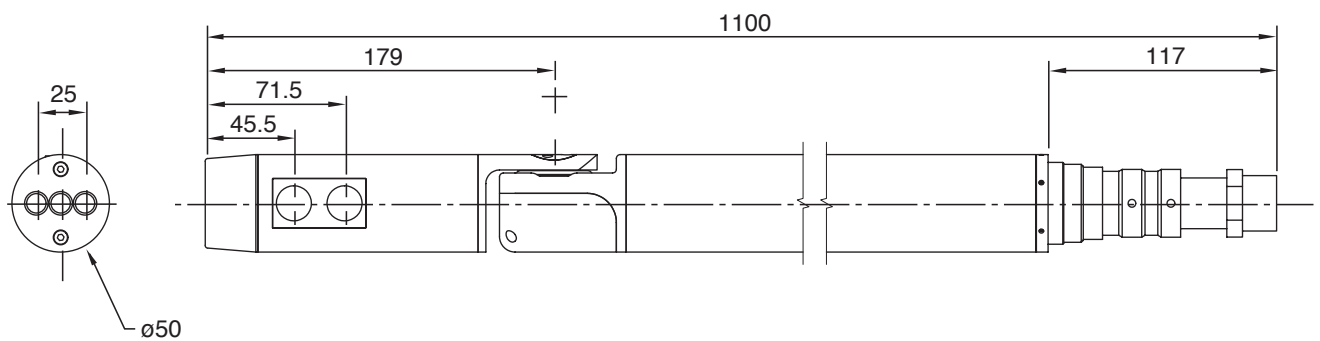


# C-ALS<sup>®</sup> Cavity Auto-Scanning Laser System



## C-ALS PROBE DIMENSIONS



Dimensions given in mm



**CLASS 1  
LASER PRODUCT**

**BREAK NEW GROUND**

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