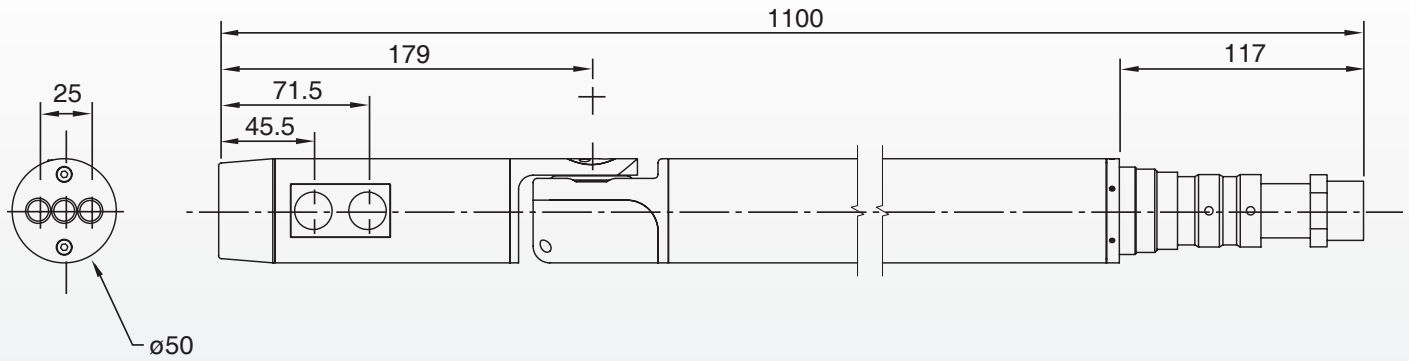


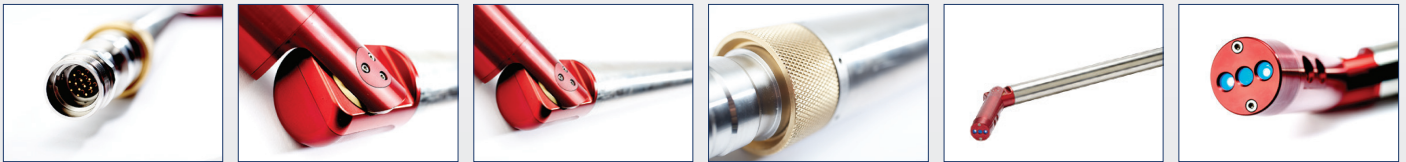
C-ALS[®]

Cavity Auto-scanning Laser System

C-ALS Probe dimensions



Dimensions given in mm



CLASS 1
LASER PRODUCT

C-ALS		
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	
Inertial Pitch-Roll Sensor	± 0.2°	
Angular Accuracy	0.2°	
Angular Resolution	0.1°	
Range	Vertical	-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 (optinal) accuracy	± 1.2°	
Physical data		
Construction	Machined aluminium and stainless steel	
Water and dust resistant	IP67	
Operating temperature range	Probe	0° C to +60° C
	Surface Unit	0° C to +50° C
Dimensions	Probe	1100 mm x Ø50 mm
	Probe with extension piece	2179 mm x Ø50 mm
	Surface Unit	270 mm x 245 mm x 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