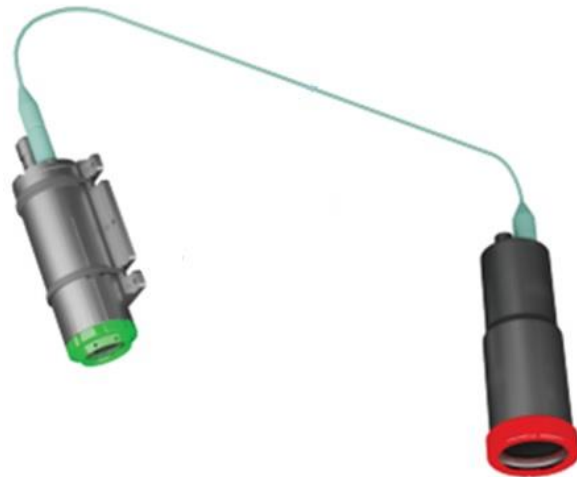


TRACKER

SINGLE SENSOR
MEASUREMENT SYSTEM



THE CATHX TRACKER Measurement System is a high-resolution camera combined with a high power laser & can be accommodated on most types of underwater survey vehicles.

CATHX TRACKER is a compact measurement system which can capture millimetre accurate laser measurement information at a range of up to 10 meters & speeds of up to 5 knots in favourable water conditions at a depth of up to 6000 meters.

CATHX TRACKER can be configured to capture up to 60 lines per second (LPS) laser profiling. An upgrade to one of our 3D imaging & measurement systems is easily accommodated.

The laser measurement data acquired by CATHX TRACKER can be processed with CATHX software to create accurate 3D visualisations of subsea assets.

For more information on our FDI® service offerings visit our [website](#).

TRACKER

TRACKER TECHNICAL SPECIFICATIONS

		Standard	Wide Angle*
SYSTEM CAPABILITIES			
Imaging	Optical Sensor	1 x 3D Laser Profiling	
Laser	<800mW diode	1 x 3D Laser Projection	
OPERATING CONDITIONS			
Target Operations	Seabed survey	Laser data capture	
Operating Range**	Seabed survey	Min range: 2m Max range : 10m	Min range: 1m Max range : 5m
Operating Temperature		0 to 35 °C	
Depth Rating		3,000m 6,000m (Optional)	3,000m
MECHANICAL			
Housing Materials	Optical Sensor SLG Laser	Titanium 6AL-4V Titanium 6AL-4V	
Weight***	In Air In Water	Nominal 6.9Kg Nominal 4.4Kg	Nominal 7.3Kg Nominal 5.2Kg
ELECTRICAL			
Power Requirements	60LPS laser	Nominal 12W	
Operating Voltages		24 VDC	
RECOMMENDED SEPARATIONS			
Laser System	Optical Sensor to SLG Laser	1,000 to 1,600mm at 5m range	
COMMUNICATION			
Ethernet		Gigabit Ethernet	
Time Synchronisation	PPS input	5V 10mA	
	NTP	TCP/UDP	
Navigation	NMEA String	TCP/UDP	
Triggers	Sync Out	5V	
	Sync In	5V	

TRACKER

TRACKER TECHNICAL SPECIFICATIONS

		Standard	Wide Angle*
OPTICAL			
Field of View		H48.5° V29° D56°	H67° V40° D74°
Aperture		f/1.0 - f/22.0	f/2.0 - f/22.0
CONTROL & CONFIGURATION			
Configuration		Cathx Mission Planning	
QA & Monitoring		Cathx Mission Control	
DATA CAPTURE			
Laser Profiling	BIN files	Up to 60LPS	
	CLP2 files	Up to 60LPS	
	UDP Stream	Up to 60LPS	
Laser Resolution****	2 m	Up to 1.3mm	
	4 m	Up to 2.6mm	
LASER			
Maximum Diode Power		<800mW	
Wavelength		510 - 530nm (Green)	
NOHD		4.5m in water	
		2.8m in air	
Pressure Activation Switch	Pressure Switch	CRE BRAPS	
	Activation Dept	> 60m	

* Wide angle camera option with distortion correction lens

** Operating Range depends on water conditions & theta angle of laser

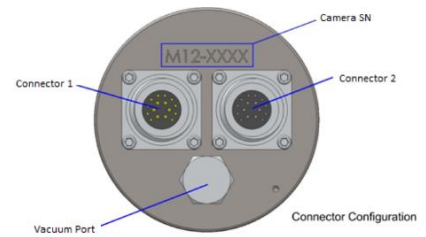
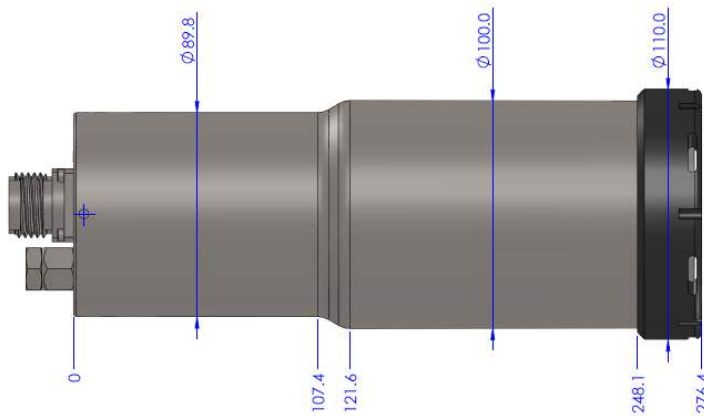
*** Total weight includes 1 laser camera, 1 SLG laser and excludes cabling

**** Laser x-spacing along the laser line

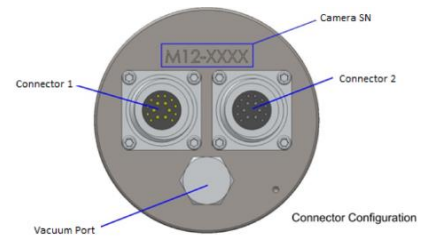
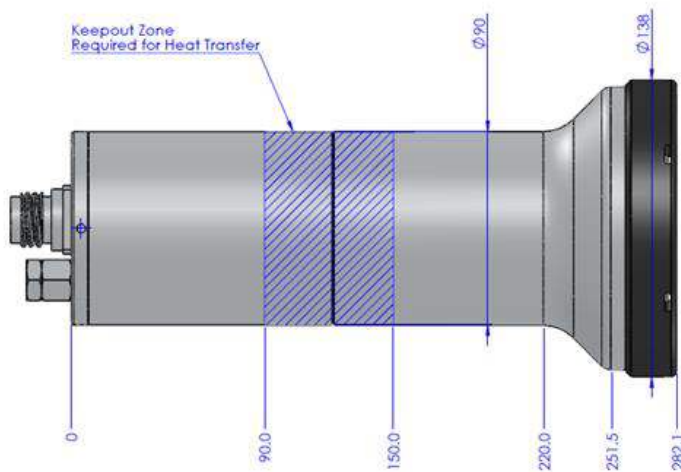
TRACKER

DIMENSIONS

Optical Sensor



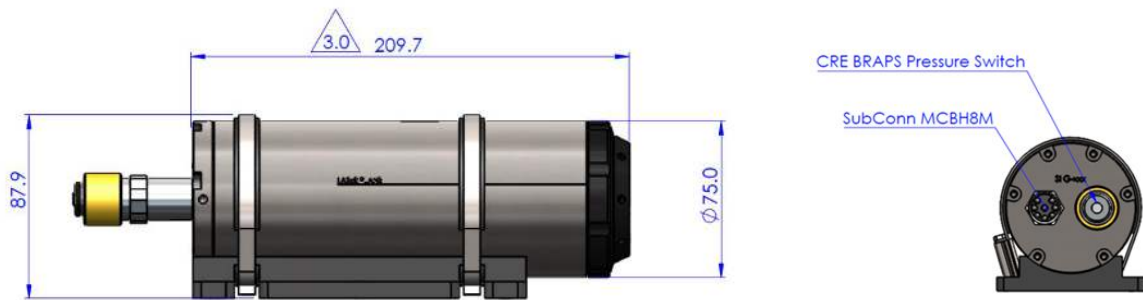
Wide Angle Optical Sensor with Distortion Correction Lens



TRACKER

DIMENSIONS

SLG Laser



*LED panels for **2D colour imaging** are an optional extra.
See Cathx Tracker Colour Datasheet.*

*Information is correct as of July 2023.
Technical specifications can change without notice.*