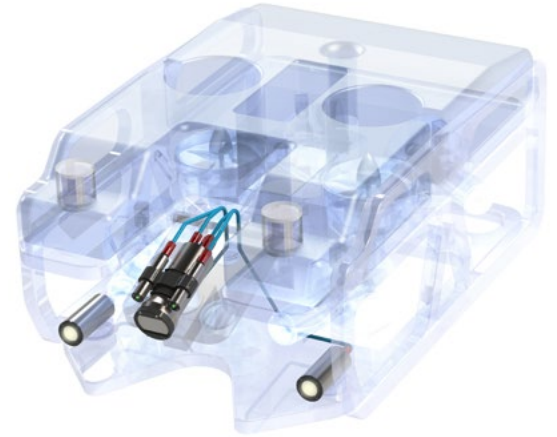


A cutting-edge solution that can transform your underwater inspections and surveys. Our state-of-the-art system allows you to obtain precise and high-quality images and data while saving both time and money. Its versatility and affordability make it an excellent choice for a variety of applications, including conventional ROV/AUV inspections, 3D modeling, stereo imaging, photogrammetry, remote monitoring, automated data capture, and more. Our system allows simultaneous High Definition video (1080p and 4K) and fast digital stills with exceptional resolution and zoom capabilities, making traditional video surveys a thing of the past.



Available to buy or [rent](#) as a complete system with LEDs and lasers, or as a stand-alone camera.



## Superior Optics for Highest Resolution

- 12.3MP sensor zoom (5x optical equivalent)
- Water-corrected LiquidOptics for high sharpness and low distortion
- A superior sensor optimal for low-light environments



## Flexible Storage

- 512 GB solid-state memory to capture and store thousands of digital stills
- Save images and video to NAS storage in real-time



## Built-in Auxiliary Ports

- SubC LEDs double as strobes and lamps to get the best exposure settings under all conditions
- Parallel, line and grid lasers provide a visual reference for scaling and measurements
- LEDs and Lasers powered from the Rayfin camera and controlled via the Rayfin camera control software



## Real-Time Video Control and Viewing

- Seamless real-time HD and 4K viewing and control with RTSP Ethernet video and low latency full HD
- Simultaneously review and download media while maintaining full control through the user-friendly Rayfin Control Software
- Stay on the cutting edge with firmware upgrades and software updates



## Easy Workflow Integration & Application Compatibility

- An open API allows for simple integration with your existing workflow and processing software
- Compatible with real-time 3D modeling softwares, such as ROV3D
- Enables:
  - Rapid Digital Imaging for offshore inspections and surveys
  - Stereo Imaging and SLAM
  - Photogrammetry
  - 3D modeling and reconstruction
  - Clip generation
  - Detailed images and data for analysis
  - And more

# Specifications

All Equipment	
Depth Rating	6000m
Materials	Sapphire, Grade 5 Titanium, Delrin
Temperature Rating	-10°C to +30°C (in Water)
Voltage	18-32 Vdc
Power - Camera	7-13.5 Watts
Power - LEDs	48 Watts each
Power - Lasers	3 Watt (MantaRay or Skate laser)
Control	Ethernet
Protection	Short circuit, under/over voltage, ESD, over-temperature

Aquorea LED - White Beam	
Lamp Output	Up to 15000 Lumens
Colour	5000K
Beam Angle	80° (circular)
Strobe Output	32000+ Lumens

Rayfin Camera	
Sensor	12.3MP CMOS 12-bit
Max. Exposure Setting	Shutter Speed 1/65000, ISO 3200
Lens	4.52mm f/2.0
LiquidOptics	81° diagonal field of view Less than 3.4% distortion
Zoom	12.3MP sensor zoom (5x optical equivalent)
Focus Range	15cm to infinity
Live Video	Ethernet - RTSP H.263 - 1080p, 720p
Still Rate	3Hz (JPEG) / 0.5Hz (RAW)
Recording	1080 HD and 4K UHD - H.264, H.265, MP4
Recording Capacity	40hr (HD) / 10.5hr (4K) - 512GB <i>Optional 1TB</i>
Media Transfer	Live SAMBA and NAS
Clock Sources	Internal and NTP Server
Data Logging	NMEA 0183/2000 format @ 1Hz

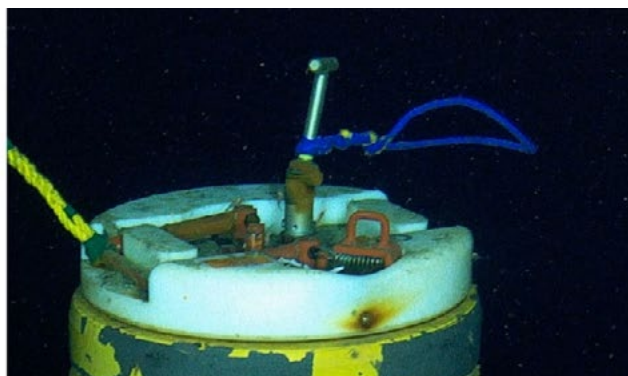
	MantaRay Parallel Lasers	Skate Line Laser	Skate Grid Laser
Pattern Type	Parallel dots	53.6° - line	17.1° - 10 x 10 dot grid
Uniformity	10cm ± 10mm @ 5m distance	±/- 20% (related to average power, within 80% of the line)	Dot spacing 24mm @ 1m distance
Output Power	≤5.00 mW	100 (mW-max.)	70 (mW-max.)
Wavelength	520nm ±10nm (green)		
Class	3R (avoid direct eye exposure)		

Specifications subject to change without notice. © 2010 SubC Control Ltd. All rights reserved. Rev. September 2022

## Use Case Example

### *Revolutionizing Offshore Asset Integrity with Rayfin Rapid Digital Imaging*

Traditional video imagery can miss crucial details, but Rapid Digital Imaging (RDI) captures a series of high-resolution still images that can be combined for a complete picture of the object being inspected.



SubC is here to help you plan your next project.

Our equipment is available for direct purchase or rental. To speak with an expert or schedule a demo please [contact us](#).

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