

# Rayfin Single Channel Inspection

(Rayfin SCI)



## Your Complete End-To-End Solution For Single-Channel Live Inspections and Surveys

### Key Features:

- Real-time media & data transfer eliminates the need for downloads
- High-quality 12MP stills and video recording topside
- Organized data structure for immediate access in customizable files
- Automated logging includes date, time, GPS, sensor data, and embedded EXIF
- Rapid Digital Imaging (RDI) with adjustable capture rate up to 2Hz
- Integrated control for camera, LED, and laser management
- Enhanced documentation with live and recorded video overlay and annotation

## Why Choose Rayfin SCI?

**Efficient Data Handling:** Real-time data transfer and automatic organization reduce redundancy.

**Time and Cost Savings:** Immediate access to topside data, automated logging reduces human resources.

**Improved Visibility and Quality:** Faster, more accurate inspections with high-quality imaging.

**Integrated Control:** Centralized operation with simplified system integration.

**Enhanced Documentation and Analysis:** Better documentation with overlay, annotation, and embedded EXIF data.

### System Includes:



DVR+O SCI Inspection Software



Rayfin Camera



Lights & Lasers

# Specifications

All Equipment	
Temperature Rating	-10°C to +30°C (in Water)
Voltage	18-32 Vdc
Power - Camera	7-13 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

Camera Options		
All Rayfin Camera Models		
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.264 - 4K, 1080p, 720p	
Media Formats	<b>Video:</b> MPEG4, H.264, H.265   <b>Stills:</b> JPEG   <b>Data:</b> CSV	
Media Transfer	Live video, stills, and data transfer to topside storage (HDD, SSD, NAS)	
Continuous Stills (Rayfin Rapid Digital Imaging)	Configurable rate 2 per sec (2Hz) - 1 every 10 seconds (0.1Hz)	
Clock Sources	NTP Server, Time from Data string	
Data Logging	NMEA 0183/2000 format @ 10Hz	
Integrated Sensors	Tilt and Roll	
	Rayfin Coastal & Rayfin Micro	Rayfin Benthic
Depth Rating	500m	6000m
Materials	Sapphire, Anodized Aluminum	Sapphire, Grade 5 Titanium, Delrin
Available Connectors	BPC	HDE, SD, HDC, and UHDF

Accessories			
Aquorea LED - White Beam			
Lamp Output	Up to 15,000 Lumens		
Colour	5,000K		
Beam Angle	80° (circular)		
Strobe Output	32,000+ Lumens		
	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)		

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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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