

# Rayfin Uplink 500m

*Real-Time Digital Imaging. No Ethernet Required.*



## Digital Imaging over Coax or Twisted Pair | Live Streaming | 4K & HD Video

This compact subsea camera delivers real-time 4K and HD video, high-resolution stills, and full camera control without requiring Ethernet or fiber. Built on the field-proven Rayfin Micro platform, it gives legacy ROV systems access to digital imaging that was previously out of reach. Capture, record, annotate, and enhance subsea video using your existing coax or twisted pair cabling. No need to upgrade your ROV multiplexer and tether.



### Low-Latency Viewing & Camera Control

- Real-time visual feedback and camera control, ideal for ROV piloting.
- Real-time data annotation into video overlays and audio narration for clear, in-context documentation\*
- Aux ports support integration with external lights, lasers, and sensors.

### Core Capabilities

- ▶ Rated to 500m depth
- ▶ 4K/HD video and 12.3 MP high-resolution still image capture
- ▶ 10x digital zoom (equivalent to 5x optical zoom)
- ▶ Low-latency live video for real-time camera control
- ▶ Rapid Digital Imaging (RDI) with adjustable capture rate up to 2Hz
- ▶ Real-time enhancement & anti-turbidity mode
- ▶ Tilt, roll, and NMEA data logging
- ▶ Embedded EXIF GPS-tagged, geo-referenced images
- ▶ Internal or topside recording with live video streaming
- ▶ Includes DVR+ single channel license
- ▶ Aux ports & integrated controls for lights, lasers, and sensors

### Exceptional Imaging

- 4K/HD video and high-res stills with 10x digital zoom (equivalent to 5x optical zoom).
- Wide field of view and LiquidOptics™ for sharp, distortion-free images.
- Real-time enhancement and anti-turbidity mode for low-visibility environments.

### Fast, High-Resolution Data Capture

- Rapid Digital Imaging (RDI) enables fast, consistent still capture with strobe sync—ideal for inspections and surveys.
- Designed for efficient workflows where speed and image quality are critical.

### Internal or Topside Storage

- Record internally or save directly to a topside PC. No downloads required.
- Store hours of 4K video and thousands of stills.
- DVR+ single channel license included, with multi channel upgrade options.

### Built-In Data Logging

- Log tilt, roll, and other metadata alongside your footage.
- Automatically embeds EXIF and NMEA data from GPS, altitude, and external sensors.

*\*In Topside Storage mode only*

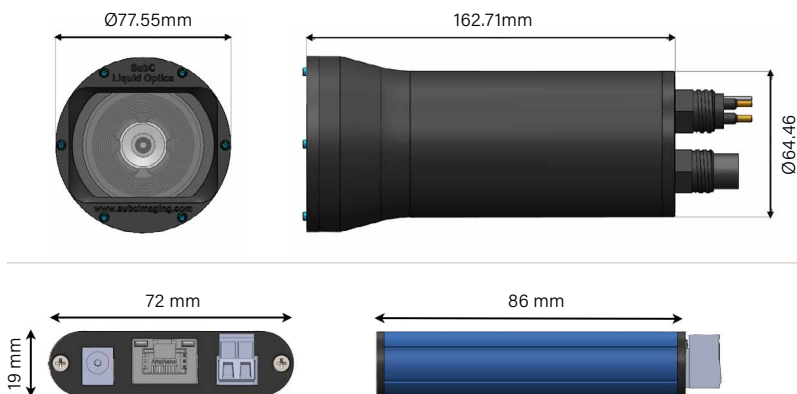
## Specifications

Lens and Optics		Water-corrected, scratch-resistant sapphire LiquidOptics™
Angle of View (in water)		81° Diagonal   71° Horizontal   57° Vertical   less than 3.4% distortion
Image Sensor		12.3MP   4056 x 3040 pixels   12-bit CMOS
Zoom		10x Digital (5x Optical zoom equivalent)
Focus Range		Modes: Auto Anti-Turbidity and Full Manual Range: 15cm to infinity
Ethernet Video		RTSP @ 4K   1080p   720p   480p   Adjustable from 1 - 100 Mbps
Data Capture Modes	Real-Time Media Transfer	Real-time digital stills and data to topside over Twisted Pair or Coax. Stored on HDD, SSD or NAS
	Internal Storage	512GB: 10+ hours of 4K video, 40+ hours of HD video and thousands of photos. Optional 2TB for 4x the capacity
Media Formats		Video: MPEG4, H.264, H.265   Stills: JPEG   Data: CSV
Control		Over twisted pair or coax with provided ETP unit and SubC DVR+ software   Rayfin API is available for 3rd party integration
Data Logging		NMEA 0183 & 2000 format @ 10Hz
Clock Sources		NTP Server, Time from Data string
Aux Ports		Two ports, capable of powering and controlling <a href="#">LED Strobe/Lamps</a> , <a href="#">Lasers</a> and other devices
Built-in Sensors		Tilt and Roll
Cable Length		Twisted Pair 600m   Coax 800m
Voltage & Max. Power		12 - 32.5 Vdc @ 7.4 Watts
Protection		Short circuit   Under-over voltage   ESD   Over-temperature
Temperature (in water)		-20°C to +30°C
Depth Rating		500m
Materials		Anodized 6061-T6 Aluminum, Delrin, Sapphire
Weight (in water)		0.46 Kg
Dimensions		Front Ø 77.55mm   Back Ø 64.5mm   165mm length excluding connector

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## Built to Do More

The Rayfin isn't just a camera. It comes fully equipped with advanced software and built-in tools to capture high-quality imagery and log critical data. No upgrades needed. No add-ons required. Just everything you need, ready to go.



*\*Available in alternative bulkhead configurations*

*Comes with Rayfin Uplink unit for conversion of twisted pair or coax data into 100Mb Ethernet.*

Available for purchase from SubC Imaging and exclusively for rent through STR.  
To speak with an expert or schedule a demo please [contact us](#).

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