Remote Camera System
Liquid Robotics Wave Glider

Waterproof HD digital camera with Iridium remote control
Telemetry & Management

FASTWAVE is an authorised global Systems Integration Partner for Liquid Robotics Wave Glider™ autonomous vehicles. We are experienced specialists who design, develop, manufacture, operate and maintain innovative autonomous marine, subsea and data systems. FASTWAVE is also an authorised IRIUM Value Added Manufacturer of satellite communications equipment.

Introduction

Fastwave’s Remote Camera System adds high-performance optical imaging capability to the Wave Glider, providing situational awareness of the ocean environment around the Wave Glider and of the vehicle float module itself. Iridium global satellite communication ensures telemetry and control from anywhere in the world. The system includes the very latest and innovative GoPro 4 HD camera integrated within a durable metal subsea enclosure rated to 100m depth that ensures optimum imaging performance, small size, reliability and durability in the ocean environment.

This latest Remote Camera System is a direct replacement for Liquid Robotics’ obsolete SV2-only camera that has been retired and no longer available.

Operation

Using a Graphical Management interface provided with the camera system, operators can remotely command the camera to record and store photos and videos via the online Wave Glider Management System (WGMS). Recording can be commanded manually or configured for automatic time-interval or event-based recording. Files can be sent back to the operator for online viewing as option. A variety of other camera tasks can also be configured and operated remotely via Iridium telemetry.

The camera system is compatible and transferable across SV2 and SV3 Wave Gliders*. Importantly, the camera system now includes its own dedicated Iridium communication link, therefore provides optimum telemetry performance because its Iridium link does not need to be shared or queued with vehicle navigation data.

The system can also be operated as standalone Remote Camera System outside of a Wave Glider, e.g. on a buoy, ship, car or observatory centre etc and managed online with a graphical user interface.

Summary

- New GoPro Hero 4 integrated camera for HD photo & videos
- Iridium remote telemetry, command and control
- Management via WGMS graphical user interface with online Web Browser
- Configurable recording schemes include manual, automatic, time interval, geo-location and event-based
- GPS Location and Timestamp data
- Onboard camera storage up to 64 GB capacity
- Onboard Data Port for local access and maintenance
- Durable waterproof protection for ocean environment
- Power supply from a standard Wave Glider Payload Port
- Small size, lightweight and low power consumption
- Easy and straightforward to install

Vehicle Mounting Configurations

Included in the system are a Camera Module, Electronics Module, Antenna Module, cables, connectors, mounts and fixings.
Camera Module may be mounted in the following positions:
- Fore deck
- Mid deck
- Aft Deck
- Raised on a central mast (mast is included)

Electronics Module may be mounted in the following positions:
- Mid deck
- Fore Payload bay
- Aft Payload bay

Mounting positions must be specified upon order to ensure supply of suitable parts. Custom mounting solutions are possible upon special request.

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