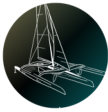


# EXOCET GOLD FLIGHT CONTROLLER

## AN ADVANCED FLIGHT CONTROL TECHNOLOGY THAT CAN BE ADAPTED FOR INDUSTRIAL USE

We bring our expertise to shipyards, designers and project managers to install a flight controller on board any type of hydrofoil vessel. Developed by our design office, our flight control solution is reliable and can be mass-produced. We equip vessels as varied as Ultims ocean-going trimarans and passenger ships. We supply the toolbox or the complete flight control system for a prototype or a series of boats.

## MAIN FEATURES



**ADVANCED FLIGHT CONTROL ALGORITHM**



**FUSION OF MEASURES & HEIGHT ESTIMATION**



**OPTIMISED TAKE-OFF AND LANDING MANAGEMENT**



**AUTOMATIC DETECTION AND SENSOR FAILURE MANAGEMENT**



## EXOCET GOLD OFFER

### ON QUOTATION

- An EXOCET Gold box
- Two connection cables: CAN + Ethernet CAN
- An Exocet Bracket
- The installation guide
- A licence to use the flight controller



**CUSTOMISATION OF THE CONTROLLER TO THE SPECIFIC NEEDS OF YOUR PLATFORM (optional)**

### OPTIONAL COMPLEMENTARY PRODUCTS

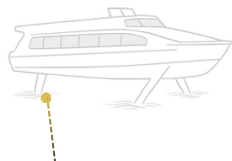
- EXOCET Blue
- EXOCET Voice
- EXOCET Cloud
- Exocet Keyboard
- Additional cables: serial and IO/analog
- ExoConnect : analog, serial, or digital input

### OPTIONAL ADDITIONAL SERVICES

- Engineering services to adapt the flight controller to the specific requirements of your platform
- A system integration service
- Fibre optic instrumentation service
- Customised dashboard design service

# HOW DOES IT WORK ?

MEASURES COLLECTED BY EXOCET GOLD



## SENSORS

**Instrumentation:** height, load, appendage position and angle sensors, fibre optic sensors

**Hydraulics and mechanics:** pressures, forces, position of cylinders, ballast, motor power

**Navigation:** wind, attitude, performance, GPS, environment

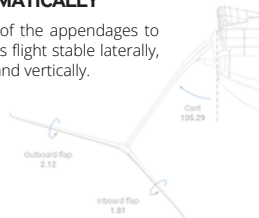


- ADVANCED FLIGHT CONTROL ALGORITHM
- SENSOR FUSION
- FLIGHT HEIGHT ESTIMATION
- SENSOR FAILURE MANAGEMENT
- PROVIDES POSITION & FLIGHT STABILITY
- ACTIVE CONTROL OF APPENDAGES



## ACTS AUTOMATICALLY

Active control of the appendages to make the ship's flight stable laterally, longitudinally and vertically.



## INFORMS THE CREW

Customisable alerts



- User control and monitoring
- Commissioning interface
- System settings and status

Intuitive, responsive web interface



# WHY CHOOSE EXOCET GOLD ?

- ✔ Compatible with all types of platforms: flying ferries or tenders, flying sailboats, etc
- ✔ Height estimation by fusion of inertial measurements and height sensors: very robust and accurate to the centimetre in all sea conditions.
- ✔ Optimised management of take-off and landing phases.
- ✔ Stable flight, even in adverse conditions (sensor failure, rough seas, etc.)
- ✔ Smooth, stable steering with the option of inclined or flat turns.
- ✔ Validation possible on simulator to guarantee a very short test period on the water.
- ✔ Derived from the aeronautics and space industries, the algorithms are tuned using a tool chain developed by Pixel sur Mer to automate the flight control parameters based on the simulation model. This guarantees optimum behaviour at all speeds, for all loading conditions and in rough seas.

# SPECIFICATIONS

## PHYSICAL AND ENVIRONMENTAL

- Weight: 350 g
- Size: 113 x 97 x 40mm
- Materials: Anodized aluminum
- Operating temperature: -10°C / +50°C
- Water resistance: IP67
- Input voltage: 9 - 51V
- Power consumption: 4W
- Certifications: CE EN 60945 and FCC

## INPUT/OUTPUT INTERFACES

- 1x Ethernet
- 2x CAN 2.0
- 6x Entrées analogiques - 16 bits 50 Hz
- 2x Entrées contact numérique
- 3x Sorties contact numérique
- 5x Séries RS232
- 1x Séries RS232 / RS422

# APPLICATIONS

- MAKE FLYING ACCESSIBLE
- SECURE YOUR NAVIGATION IN FLIGHT
- CONTROL SPEED TO EXTEND THE FLIGHT RANGE
- GUARANTEE PASSENGER COMFORT ON BOARD