



Ocean Data System
MARINE ELECTRONICS SOLUTIONS



Another way
to experience
your voyage
at sea!

UpSideUp

A powerful and versatile solution
for sailing with....



Security

Serenity

Performance

UpSideUp: 3 versions for all sailboat projects

- From the simplest to the most powerful system,
- From the small day boat to the Mega Yacht, whether you are racing, cruising or yachting, single-handed or full crew,

... UpSideUp offers a comprehensive and relevant range of services while ensuring ease of use.

Three versions (Easy, Master, SuperYacht) are available depending on the project requirements, all of which can be configured according to the user's needs, sailing programme, boat specs and budget (choice of options, sensors, actuators).

UpSideUp EASY

Simple and autonomous for small multihulls.



The UpSideUp Easy version has been designed to secure small cruising yachts with an effective anti-capsize function. Alternatively, it offers an easy-to-implement load-limiting solution.

- Anti-capsize - Heel and pitch limiter,
- Single load limiter.



UpSideUp MASTER

With its wide range of options, UpSideUp Master is an essential safety device.



Extensive features and advanced control: "A la carte" configuration for racing and cruising yachts.

- Anti-capsize - Heel and pitch limiter,
- Load control in the running and standing rigging,
- Management of critical situations (man overboard, collision, shoal, wind strengthening)
- Detection and management of flooding,
- Heel and loads regulation with the autopilot,
- Alarm management.

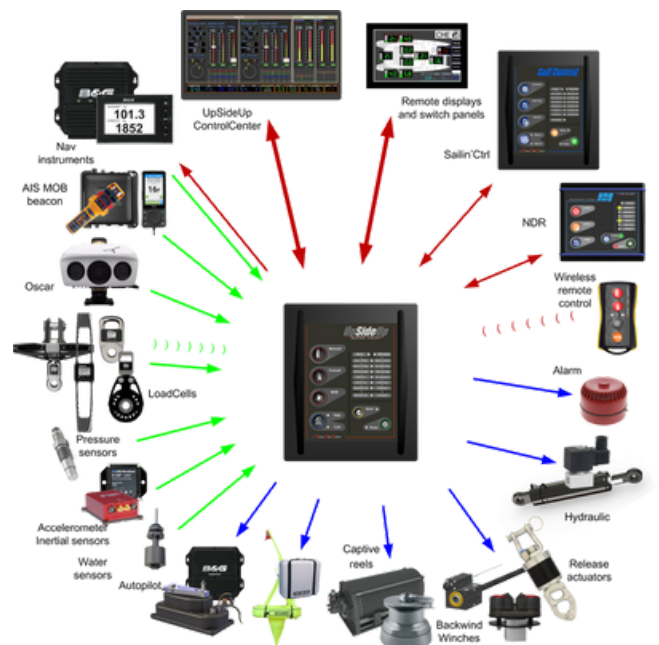


UpSideUp SUPERYACHT

Security and supervision for big sailing yachts.



- Supervision of sails, rigging, appendage systems,
- Advanced load control in the running and standing rigging,
- Management of critical situations (man overboard, collision, shoal, wind strengthening),
- Detection and management of flooding,
- Advanced alarm management,
- Data logging,
- Bespoke functions/services custom developments.



UpSideUp operations explained

Thanks to its numerous input options, UpSideUp collects a variety of data and signals, which are continuously analyzed.

These variables and signals are monitored in the ControlCenter by means of comprehensive and efficient numerical and graphical widgets.

When some trigger variables exceed predefined thresholds, or when detector signals are activated, the appropriate process is initiated.

Depending on the urgency level, UpSideUp:

- Alerts the crew: ControlCenter, Sounding alarms,
- Initiates automatic actions,
- Records the event details together with the contextual data, for tracking and post analysis.

Typical data triggers :

- Heel, pitch,
- Standing and running rigging loads,
- Wind speed and wind speed gradient,
- Water depth,
- Man Overboard detector,
- Obstacles,...

More widely,

- Any analogue sensor,
- Any device providing an electrical signal,
- Any NMEA data.

Function behavior and thresholds can be easily modified by the user via ControlCenter

Sounding Alarm	Any variable	<ul style="list-style-type: none"> • 3 alarm levels : Notification - Warning - Critical
Anticipize	Heel and Pitch	<ol style="list-style-type: none"> 1. Heel regulation with the autopilot seamlessly for the crew 2. Triggers the notification alarm → warning alarm → critical alarm 3. Sail dump : release actuators - Hydraulic ram - backwind winches - Captive reel
Load limiter	Load measurement on shrouds, mainsheet, forestays, mast compression,	<ol style="list-style-type: none"> 1. Rig load regulation with the autopilot seamlessly for the crew 2. Triggers the notification alarm → warning alarm → critical alarm 3. Sail dump : release actuators - Hydraulic ram - backwind winches - Captive reel
Wind gusts	True and apparent wind speed Gradient true wind speed	<ol style="list-style-type: none"> 1. Triggers the notification alarm → warning alarm → critical alarm 2. Sail dump : release actuators - Hydraulic ram - backwind winches - Captive reel
Shoal	Water depth vs Speed over ground	<ol style="list-style-type: none"> 1. Triggers the notification alarm → warning alarm → critical alarm 2. Sail dump : release actuators - Hydraulic ram - backwind winches - Captive reel 3. Emergency stop of the boat if under autopilot
Man overboard assistant	AIS MOB beacon, RF TX MOB Beacon, MOB button, UpSideUp remote Control, UpSideUp MOB button	<ol style="list-style-type: none"> 1. Triggers the critical alarm 2. Drops the jonbuoy or the powered rescue buoy 3. releases the sheets and dump the sails 4. Emergency stops the boat if under autopilot 5. Displays the Man overboard assistant on top in the ControlCenter
Flooding manager	Water sensor network	<ol style="list-style-type: none"> 1. Triggers the notification alarm → warning alarm 2. Displays the flooding assistant on top in the ControlCenter 3. Run the flood pumps automaticaly
Collision manager	AIS OSCAR	<ol style="list-style-type: none"> 1. Triggers the notification alarm → warning alarm → critical alarm 2. releases the sheets and dump the sails 3. Emergency stops the boat if under autopilot

UpSideUp ControlCenter




Provided with UpSideUp Master and SuperYacht packages, the « UpSideUp ControlCenter » software gives you total control of both the system and your security. It allows:

- User and system settings - Fully adaptable to the user's needs
- Security features supervision
- System administration and diagnosis
- Log files download
- Remote access for maintenance and updates

- Requires a Windows®, Linux or Mac OS®based computer.
- Ethernet link
- While the ControlCenter is required for system management and monitoring functions, the UpsideUp controller operates autonomously, ensuring safety, whether the ControlCenter connected or not.



			
Packages	Easy	Master	SuperYacht
Setup, Monitoring, Control			
ControlCenter software : system and user settings, monitoring,	No	Yes	yes
Personnalised user interface ControlCenter and Remote displays	-	No	yes
Remote display	No	Option	Option
Wireless Remote control : sails dump, MOB command	No	Option	Option
External push button(s) input : sails dump, MOB command,...	yes	yes	yes
Function keys on main unit front panel	2 (sails)	2 (sails) + 1 (MOB)	2 (sails) + 1 (MOB)
Personalised UpSideUp unit front panel	No	No	Option
Functions			
Anti-Capsize function : Heel and Pitch triggering	Yes	Yes	Yes
Load limiter function : Rig and structure loads triggering	No	Yes	Yes
Man Over Board management	No	Option	Option
Collision course management (AIS - OSCAR)	No	Option	Option
Wind and depth triggering : TWS, TWA, Gradient TWS, Depth	No	Option	Yes
Other variables triggering	No	Option	Yes
Multi alarm manager	No	Option	Yes
Flooding detection : sensors network	No	Option	Option
Autopilot control for Heel and load regulation, emergency stop, ...	No	Option	Option
Actuators leeward-windward context	No	Yes	Yes
Actuators port - starboard tack context	No	Yes	Yes
Anti-capsize sensibility user adjustable	Basic	Advanced	Advanced
Data and UpSideUp event logging	No	Yes	Yes
On demand functions and behaviours	No	Option (limited)	Option (extended)
Inputs / Outputs / Interfaces			
NMEA0183 / NMEA2000 - From and to nav instruments and display network	No/No	Yes/Yes	Yes/Yes
Analog and digital inputs/outputs expansion on CAN bus (optional CAN node)	No	Yes	Yes
Number of embedded relay outputs	2	6	6
Number of Analog inputs (according to other I/O configuration)	5	5 to 7	5 to 7
Number of digital inputs	2	5	5
RS232 serial port TX/RX (according to other I/O configuration)	0	2 to 4	2 to 4
CAN Bus (according to other I/O configuration)	1	1 to 2	1 to 2
Ethernet Link (Connexion to UpSideUp Controlcenter)	0	1	1
USB Key port (for files upload/download)	1	1	1
Internal Buzzer / Ouput for external alarm	1 / 1	1 / 1	1 / 1
Other specs			
Weight main unit	450gr	700gr	950gr
Dimensions main unit (mm)	H120 x L130 x P36	H220 x L130 x P36	H200 x L170 x P60
Power supply : voltage / power (according to connected devices)	10/32 vdc - 1.6 W typique		

BRETAGNE
DÉVELOPPEMENT
INNOVATION



Eco-designed and produced in Brittany/France

"Our commitment and dedication is to constantly innovate and improve cutting-edge technology wrapped in clever electronics and mechanical systems specifically designed for the boating industry and harsh marine environment."

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UpSideUp is onboard most of the offshore racing trimarans including SVR-Lazartigue skippered by François Gabart & Tom Laperche



We do not just dream about this stuff and build it. We live and play in the marine environment

Ocean Data System is a leader in state-of-the-art automated instrumentation & monitoring for sailing yachts.

Thanks to the UpSideUp and our worldwide expertise, we help owners, crews, designers and contractors use accurate information to ...

- Enhance sailing experience,
- Improve the security,
- Manage the yacht,
- Validate design assumptions.

Custom-made developments

In order to suit the specific requirements of each project, UpSideUp is open to bespoke developments.

ODS Developments has designed an effective hardware and software platform enabling the integration of other data sources, various devices and a different user interface.

A quick and cost-effective solution for the implementation of your own application.

UpSideUp is an open, modular system, to which custom functions and behaviours can easily be added.

Related services

Our role extends beyond the supply of tailor-made systems. Depending on your specific needs, we can provide you with all sorts of relevant services:

- Technological advice and assistance

Our dedicated engineers are here to assist you at all stages. They help you define your needs and choose the best solution. They'll see your project throughout, from planning to implementation.

- Pre-assembly in our workshop
- On-site installation in collaboration with your project technical team
- Complete commissioning: Calibration, training, sea trials