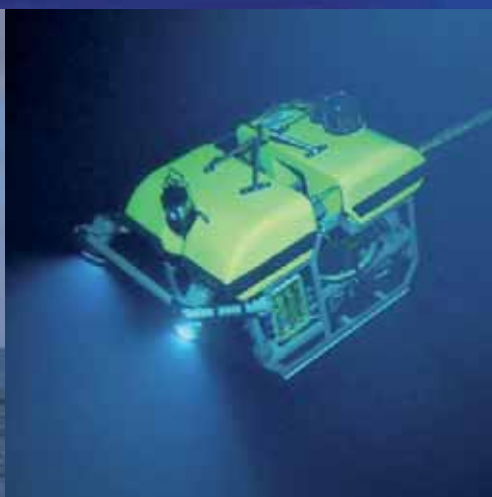




UNDERWATER MONITORING ACTIVE SYSTEM



UMAS: PRECISION, RELIABILITY AND ACCESSIBILITY OF INFORMATION



UMAS is a visual signaling system for ROV and Diving operations, associated to a signaling light system of the vessel's DP mode state. It clearly indicates the condition of the equipment during the operations and it passes on reliable information.

Thanks to this device, staff, especially the staff with responsibilities, can be informed from the wheelhouse, the engine office, clients offices, cafeterias, crew quarters and cabins, of whether a ROV and/or a Sat Dive is upwelling or on the deck as well as the DP alarm signals (green, blue, yellow and red).

ADVANTAGES: VISUAL INFORMATION, SECURITY, SPECIFICITY, ADAPTABILITY



VISIBLE AND ACCESSIBLE INFORMATION

Information is transmitted with light signals. It is simple, clear and precise.

Equipment and DP signalization information can be seen by everyone, and in particular staff with responsibilities and clients, from the wheelhouse, the PC control, ROV and Sat Dive control offices, cabins, common areas and any other place in which the client would find it necessary.

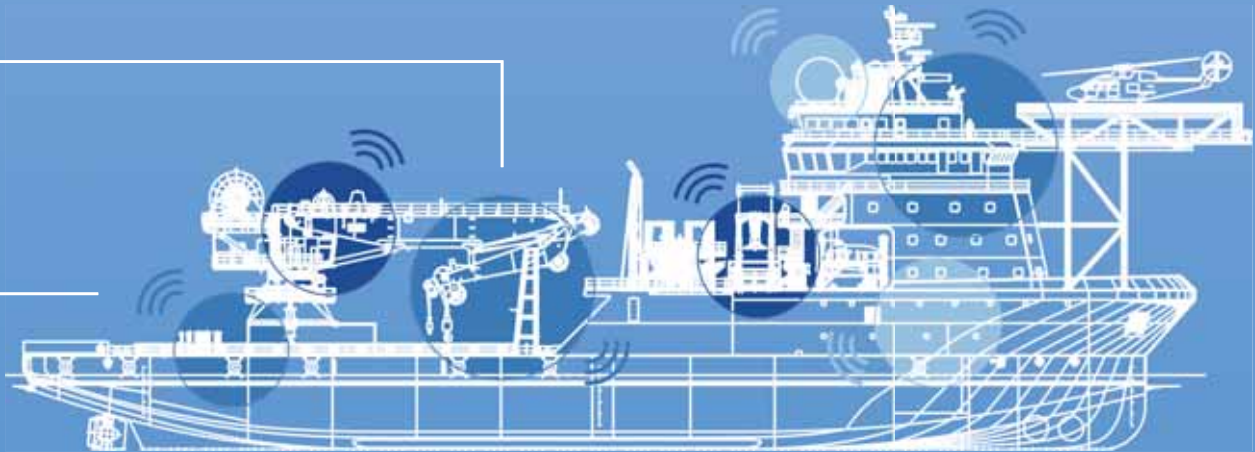
Each equipment has its own lights: green, yellow and red LED, indicating for example if a ROV or a Sat Dive is under water, upwelling or on deck; or in case of a crane on a drillship or a rig, if it is operating or stopped.



EASY TO INSTALL AND EVOLUTIONARY

The Power Line Communication technology is easy and quick to install on new vessels as well as on those already operating.

According to the client's needs, panels can be added wherever on board, thus ensuring the entire satisfaction of the clients' demand.



SECURITY TO WORK

Two steps in the green light authorization process in order to check that the instruction is well understood and registered: authorization (flashing light), then validation (steady light).

Incomprehension risks and misunderstanding due to busy and noisy surroundings are therefore avoided.



AUTOMATIC AND SECURED RECORDS

All button actions from panels are recorded on a memory card. Thus, the historical record is automatic and more reliable.

AN INOVATING TECHNOLOGY: THE POWERLINE COMMUNICATION

UMAS uses the Power Line Communication technology. Display panels and control panels are connected to a single cable and data are carried on 2 conductors which are also simultaneously used for electric power transmission.

This technology offers:

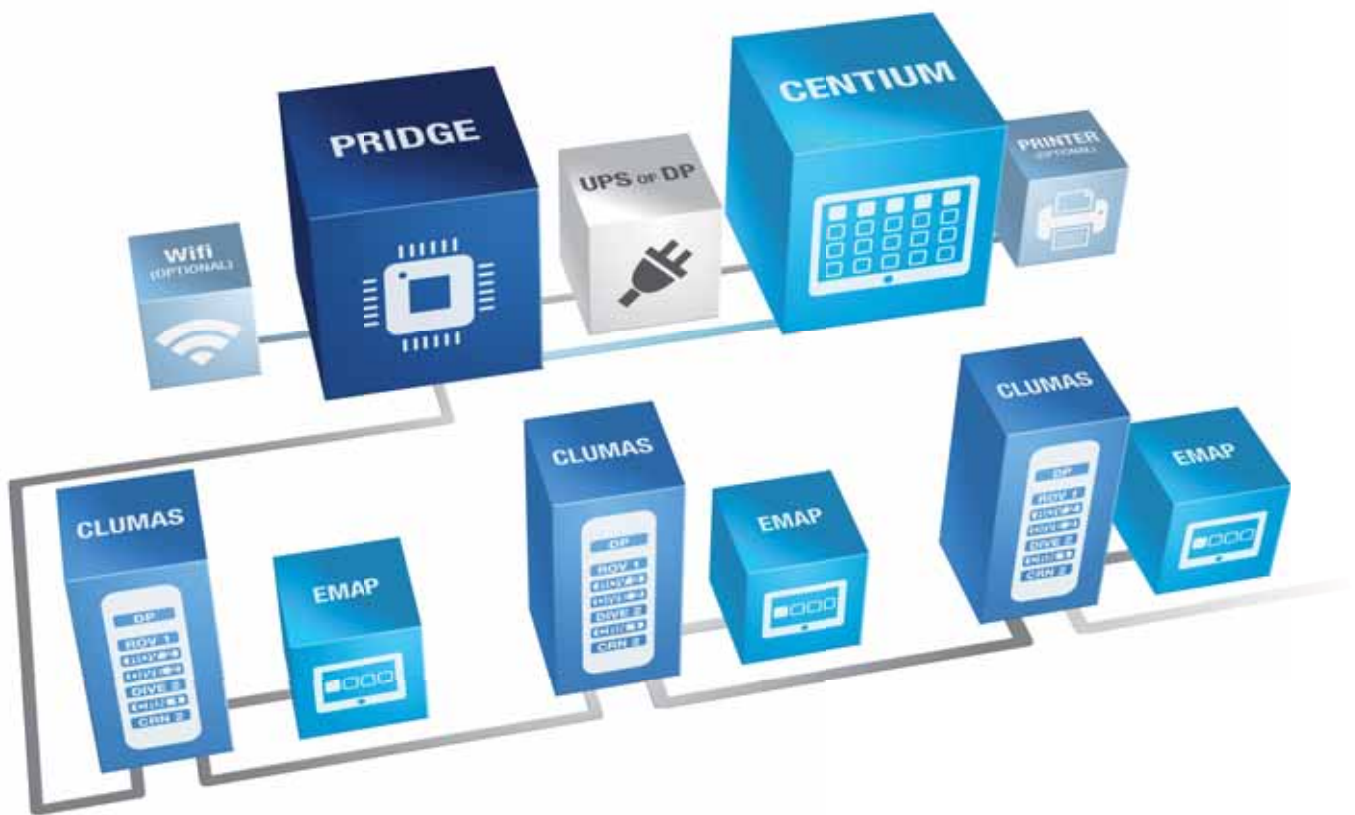
- wire weight reduction
- time saving in wiring
- saving costs
- perfect synchronization of signals
- online monitoring of each component

UMAS can have up to **20 LEDs** displays per line, thus offering a wide access to information.

SYSTEM ORGANISATION

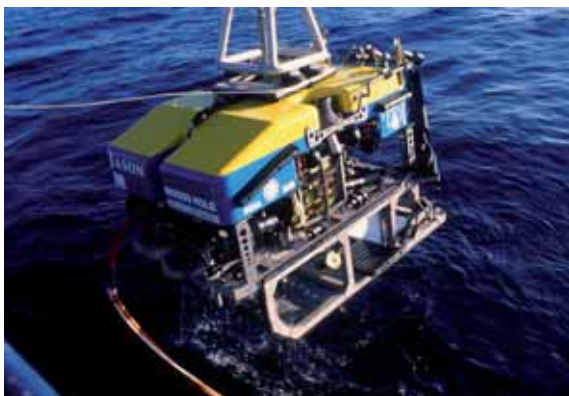
UMAS is composed of:

- LEDs display panels: located in common areas, operations offices, cabins and cranes, which give information about the equipment operation mode



- local control panels: placed in ROV and Sat Dive operations offices, on which the operating mode is chosen and the DP alarm is validated; in cranes too in order to know when they are operating

- one main panel in the wheelhouse: to give the “green light” to ROV and Sat Dive operations control offices, and which displays the state of the DP alarm system and the acknowledgements from the different operations offices simultaneously



UMAS BRINGS GENERAL COMFORT, GIVING **SECURED PROCEEDINGS AND SPECIFIC INFORMATION** WHICH ARE RELIABLE AND QUICKLY ACCESSIBLE.

IT IS AN IMPORTANT ASSET FOR YOUR CLIENTS, GIVING THEM **ACCESS TO THE DIFFERENT OPERATION STEPS ON VARIOUS PLACES ON BOARD.**

TECHNICAL SPECIFICATIONS

CENTIUM



DIMENSIONS (LxHxD)	204 x 143 x 49mm
WEIGHT	0.8Kg
HUMIDITY	Ip65
FIXATION	Built-in with hooks and screws (9mm console max thickness)
MATERIAL	Black coated aluminium
POWER	+24VDC (from 20VDC to 30VDC)
CONSUMPTION	0.5A max
CONNECTIONS	9 x (RS232) 9 x (RS422/RS485) 1 x USB 1 x Ethernet 1 x SD card 3 x (+24VDC, 0VDC, Earth)
CABLES SECTION	2.5mm ²
TESTING	Via HMI
ELECTRICAL PROTECTIONS	Fuse 3.15A

PRIDGE



DIMENSIONS (LxHxD)	180 x 108 x 63mm
WEIGHT	1Kg
HUMIDITY	Ip44
FIXATION	DIN rail
POWER	230VAC
CONSUMPTION	5W for the bridge, 10A max on 230VCPL
CONNECTIONS	1 x 230VAC input (P, N, E) 1 x 230VAC output (P, N, E) 1 x 230VCPL output (P, N, E) 1 x Ethernet 1 x RS485 3 x output dry contacts
CABLES SECTION	2.5mm ²
TESTING	Via HMI
ELECTRICAL PROTECTIONS	Fuse 12,5A for VCPL line, Fuse 160mA for bridge part

CLUMAS



DIMENSIONS (LxHxD)	300 x 100 x 30mm
WEIGHT	0.6Kg
HUMIDITY	IP44
FIXATION	Screws
MATERIAL	Flame retardant polycarbonate
POWER	230VAC
CONSUMPTION	15W max for the column, 20W max if EMAP is connected
CONNECTIONS	1 x 230VCPL input (P, N, E) 1 x 230VCPL output (P, N, E) 1 x +24VDC 1 x 0VDC 1 x MODBUS RTU serial (two wires)
CABLES SECTION	2.5mm ² for 230VCPL, 0.34mm ² shielded for MODBUS
TESTING	Magnet
ELECTRICAL PROTECTIONS	Fuse 100mA

EMAP



DIMENSIONS (LxHxD)	145 x 104 x 43mm
WEIGHT	0.5Kg
HUMIDITY	IP65
FIXATION	Built-in with hooks and screws (11mm console max thickness)
POWER	+24VDC (from 20VDC to 30VDC)
CONSUMPTION	3.6W
CONNECTIONS	9 x (RS232) 9 x (RS422/RS485) 1 x USB 1 x Ethernet 1 x SD card 3 x (+24VDC, 0VDC, Earth)
CABLES SECTION	2.5mm ²
TESTING	Via HMI
ELECTRICAL PROTECTIONS	Fuse 2.0A



(pending approval)

Subject to change without further notice



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