dp & operations state
signaling system

Innovative Solutions for the Marine Industry
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, ADAPTABLETY

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 15 CLUMAS per line, thus offering a wide access to information.

SYSTEM ORGANISATION

UMAS is composed of:

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

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

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

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**: 2.5mm²
- **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 230VAC
- **CONNECTIONS**: 1 x 230VAC input (P, N, E) 1 x 230VAC output (P, N, E) 1 x 230VACL output (P, N, E) 1 x Ethernet 1 x RS485 3 x output dry contacts
- **CABLES SECTION**: 2.5mm²
- **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 230VCL 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**: 2.5mm² for 230VCPL, 0.34mm² 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**: 2.5mm²
- **TESTING**: Via HMI
- **ELECTRICAL PROTECTIONS**: Fuse 2.0A

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Seamatic Technology Ltd  
Room 23C, 23/F, Trade Center Building  
235 Wing Lok Street  
Sheung Wan, Hong Kong  
Tel: +852 8193 0972  
contact@seamatic-technology.com  
www.seamatic-technology.com