DRASS®

iAN-MULTI ENVIRONMENTAL ANALYZER

Description

The Drass product: iAN-MULTI ENVIRONMENTAL ANALYZER is specifically tailored to the submarine/hyperbaric industry, where a turnkey solution is required to monitor the key environmental parameters of a confined submerged/hyperbaric space.

This advanced solution provides our clients with both a superior measuring accuracy and a robust hardware that consists of a Control Panel and a Remote Module, connected via a single cable used for both power and data system.

**The iAN-MULTI ENVIRONMENTAL ANALYZER is designed to:**

- Be highly modular and flexible so that it can be easily integrated into customized environmental monitoring solutions;
- Obtain stable and reliable readings for Oxygen, Carbon Dioxide, Carbon Monoxide, Hydrocarbons and VOCs (Volatile Organic Compounds), Pressure (Depth), Temperature and Relative Humidity.
- Require little or no maintenance activity at all, setting it apart from other gas analyzers on the market.
- Represent a "black-box" recording all environmental data for an unlimited amount of time on USB memory stick.

A 7" high-resolution resistive colour touch screen display on Control Panel clearly shows all measured values, and permits the user to set thresholds, to calibrate the analyzer, and to perform all required activities.

A smaller 4.3" high-resolution colour screen on Remote Module always shows all measured values. All sensors (O2, CO2, CO, HC, Pressure, T, RH) are housed inside the Remote Module, which can be installed even remotely from the Control Panel. A datalogger is integrated in the Control Panel, to support post-mission analysis.

As standard for hyperbaric use, readings for gas concentrations are expressed in mbar pp (partial pressures), temperature in °C, RH in %, pressure (depth) in MSW (Meter of Sea Water); customized measuring units can be agreed and simply introduced just uploading a customized firmware using the USB port via a common USB memory.
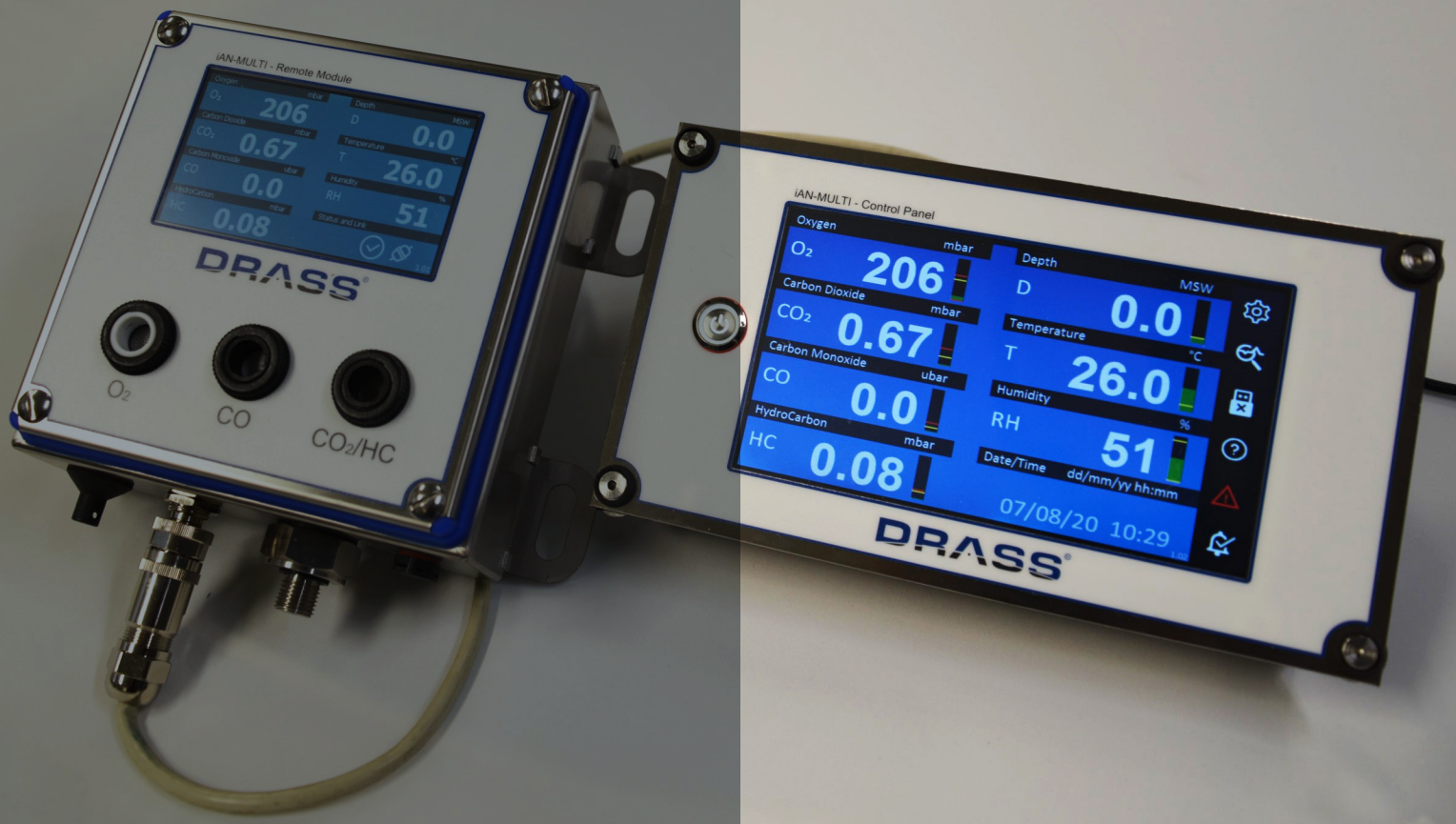
The Control Panel can be interfaced to external systems using embedded Ethernet and RS485 ports. Each system, composed of a Control Panel and a Remote Box, is individually tested and calibrated before delivery; also, the system comes with required ancillaries to permit calibration on site (calibration gas to be sourced locally).

Main Technical Specifications:

- 24 VDC power supply to the Control Panel, powering the Remote Module via the single cable connection; the power to the whole system is controlled by a pushbutton on the front of the Control Panel;
- Stainless steel enclosures with protection for damp environments (Control Panel and Remote Module);
- USB port for firmware update and download of logged data (no PC required);
- RS485 and Ethernet digital serial ports for connection to remote systems;
- One analog 4..20 mA output for each measured value for easy connection to additional remote displays.

Environmental limits:

- **Temperature:** -10°C to +55°C
- **Relative Humidity:** up to 96%
- **Ambient pressure:** up to 5 bar gauge in air
- **Enclosure:** IP 55/56 in salt mist atmosphere, including the rear side
- **Vibration:** Class A according to IACS UR E10
- **EMC:** Class A according to IACS UR E10

Measuring ranges:

- **O_2:** 0 to 2000 mbar ppO2
- **CO_2:** 0 to 50 mbar ppCO2
- **CO:** 0 to 500 µbar ppCO
- **HC-VOC:** 0 to 50 mbar ppHC-VOC
- **Depth:** -10 to 70 MSW
- **RH:** 0 to 100%
- **Temperature:** -10°C to +55°C

Conformity and Certifications:

- Tested in independent laboratory according IACS UR E10 Rev.7 and EC applicable Rules
- EC marking.

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