

## Multichannel Monitoring Systems for Dissolved Oxygen and Other Parameters

OxyGuard equipment is manufactured to give no-nonsense measurement, according to the following three criteria:

- 1) The equipment must be perfect for the job but people shouldn't have to pay for something they don't really need.
- 2) Anyone should be able to install OxyGuard equipment and use it without having to read through thick books first.
- 3) It should be possible for anyone anywhere in the world to service OxyGuard equipment.

The OxyGuard 6 and OxyGuard 8 epitomize the above criteria. They are metering and monitoring units for up to 6 and 8 channels respectively. Housed in the same size enclosure, they differ in that the OxyGuard 8 has an external power supply. They are modular - you only install the number of channels you need. Extension can be performed at any time by adding a probe and plug-in transmitter. Dissolved oxygen is the primary parameter, but the units are often used for pH and temperature.

The OxyGuard 6 and 8 feature full galvanic isolation between inputs and outputs. Each channel has analogue, control and low alarm (relay) outputs, and there are common low and high alarm outputs and a display with selector switch. Designed to be mains powered, the units can be permanently connected to an emergency supply of 24 VDC. Changeover will take place automatically and alarm will be given if the mains should fail. A Multilog can be connected to record measurements and act as a link to a PC for data processing and storage as well as the observation of here-and-now conditions.

OxyGuard systems are ideal both for stationary use and for use in vehicles and boats transporting living fish.

## Technical Advantages

MODULAR CONSTRUCTION: It is possible to begin with a single measurement and expand later - this can be performed by the user. You only pay for what you need!

LARGE SYSTEMS: Units can be combined as desired to form systems of any size.

**REGULATION AND CONTROL**: Each channel (measurement) has a change-over contact to control aerators or other dosing equipment.

ALARMS: There is an extensive alarm system, with individual low alarm, common high alarm and common low alarm contact outputs. The common alarms will also trigger on power failure.

SAFETY: The above alarm functions give good security. The units can also, as standard, be connected to 24 VDC, e.g. from a battery. Change-over will automatically take place if the mains supply fails. The units have no computer that can "hang". If a fault in one channel occurs the rest of the unit will carry on working - and the fault can easily be rectified by changing a transmitter.

DATA COLLECTION & RECORDER CONNECTION can easily be performed by making connection to the analogue output signals. The MultiLog is designed for this purpose, and will also give direct on-line connection to a PC.

INSTALLATION: As easy as installing a door bell!

**OXYGEN, TEMPERATURE and pH:** OxyGuard systems can also be used to measure, monitor and control temperature and pH as well as oxygen - mixed in the same system.

GALVANIC ISOLATION: Each input is galvanically isolated from all other circuits. This ensures good noise immunity and reliable measurement.

Specifications

Construction: Plastic enclosure with power supply, terminals, display with selector switch and

one plug-in transmitter per channel. Power supply for OxyGuard 8 is separate.

Dimensions: bxdxh =  $36 \times 14.5 \times 31$  cm. Power supply for OxyGuard 8:  $18.5 \times 10 \times 14$  cm.

Weight: 5 kg. Power supply 3.5 kg.

Supply: Either 220/240 VAC, 110 VAC, 24 VAC, 12 VDC or 24 VDC.

OxyGuard 8 unit itself 24 VDC from power supply.

Operating Conditions: -20 to +60°C. DO probes 0 to +40°C. Enclosure rated IP55/Nema 4.

Inputs: 6 or 8 inputs for signals from DO or temperature probes and pH local transmitters.

Inputs galvanically isolated from each other and from the rest of the circuits.

Outputs: 4-20 mA for each channel, galvanically isolated from inputs.

One Control relay output for each channel.

Common low alarm relay outputs - two changeover contacts.

Common high alarm relay outputs - two changeover contacts.

One Low alarm relay output for each channel.

All relay outputs are potential free (dry) changeover contacts.

For probe details please see the brochure for the OxyGuard Probe.

## **Ordering Information**

OxyGuard 6: A016n where n is the number of channels desired. Complete with integrated power supply.

OxyGuard 8: A018n where n is the number of channels desired. Power supply for 230 volt mains: A06DC230

Power supply for 110 volt mains: A06DC110

Please contact OxyGuard if you want to measure temperature and/or pH as well as oxygen.



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