# OxyGuard pH Manta and Redox Manta

Single-Channel Measurement Transmitters

## pH Manta Measurement Transmitter







The **OxyGuard pH Manta** is a single channel pH measurement transmitter with a 4-20 mA analogue output (0-20 mA on request). The unit is a simple, accurate and very rugged pH measurement unit intended for function as a primary measurement device in fish farms and similar, but it is also ideal in industrial or other control and monitoring systems that require a simple pH measurement.

As with all OxyGuard pH systems, a system using the pH Manta is not prone to problems caused by moisture or electrical noise. The latter is solved so effectively that ordinary screened cable can be used between the probe and transmitter.

pH Manta is designed for use with OxyGuard pH probes. There are several types, for both simple and more demanding measurement tasks in a large variety of mounting forms.

The **OxyGuard Redox Manta** is identical to the pH Manta, but is used with a Redox probe and measures redox potential (ORP).



## **Technical Information**

#### **Technical Advantages**

The **OxyGuard pH Manta** is a single-probe pH measurement system. As with all **OxyGuard** instruments it is reliable and easy to use. When used with an OxyGuard pH probe the problems traditionally associated with pH measurements, i.e. sensitivity to moisture and electrical noise, are effectively overcome. pH Manta consists of a wall-mounted transmitter that is connected to a probe by a five core cable. The transmitter houses an amplifier, display, power supply, terminals and calibration adjustments. The analogue output is as standard 4-20 mA, and is galvanically isolated from the rest of the circuitry. An output of 0-20 mA is available on request.

The OxyGuard pH Manta is reliable. The design of the probe is such that the electrode tip is well protected, avoiding yet another problem - the fragility of the electrode. Apart from calibration, and keeping the electrode clean, maintenance as such is not necessary. The electrode will need replacement after its limited, but long lifetime, but this is an easy task that can be performed in minutes. OxyGuard pH Manta is the ideal choice where there is a need for pH measurements of reasonable accuracy that can be relied on - day after day - week after week - with a minimum of attention to the equipment!

#### **Probe**

The **OxyGuard pH Manta** is designed for use with the range of **OxyGuard pH Probes** (please see the pH Probe brochure). These are designed so that problems due to moisture and electrical noise are eliminated. They are available in submersion, screw-in and flow-through versions in different materials and can be fitted with either light duty or heavy duty electrodes. For use in very dirty liquids they can be fitted with a cleaning system. The result is an accurate, very reliable and exceptionally easy to use system.

#### **OxyGuard Redox Manta**

The Redox Manta is identical to the pH Manta, but is used with a redox probe and has a measuring range of 0-1000 mV.

For use where monitoring, control or alarm is needed the OxyGuard Pacific is recommended. Pacific can also perform automatic temperature compensation if a temperature sensor is connected.

### **Specifications**

#### **Transmitter:**

Housing: Plastic enclosure, IP 65, hxbxd 120 x 120 x 58 mm.

Supply: 230 V, 110 V or 24 VDC

Output: 4-20 mA, galvanically isolated. 0-20 mA on request.

Measuring ranges:

pH Manta: pH 0-14 (pH 2-12 on request). Redox Manta: 0-1000 mV placed as ordered.

Display: 3½ digit LCD. Operating temperature: -20 to +60°C.

#### **Standard Accessories**

1 trimpot screwdriver. Spare Fuse, 0.16A.

## **Ordering Information**

J01: pH Manta unit WITHOUT probe and electrode. J04: Redox Manta unit WITHOUT probe and electrode.

J01 pH & Redox Manta brochure GB 2020 07

Data subject to change without notice