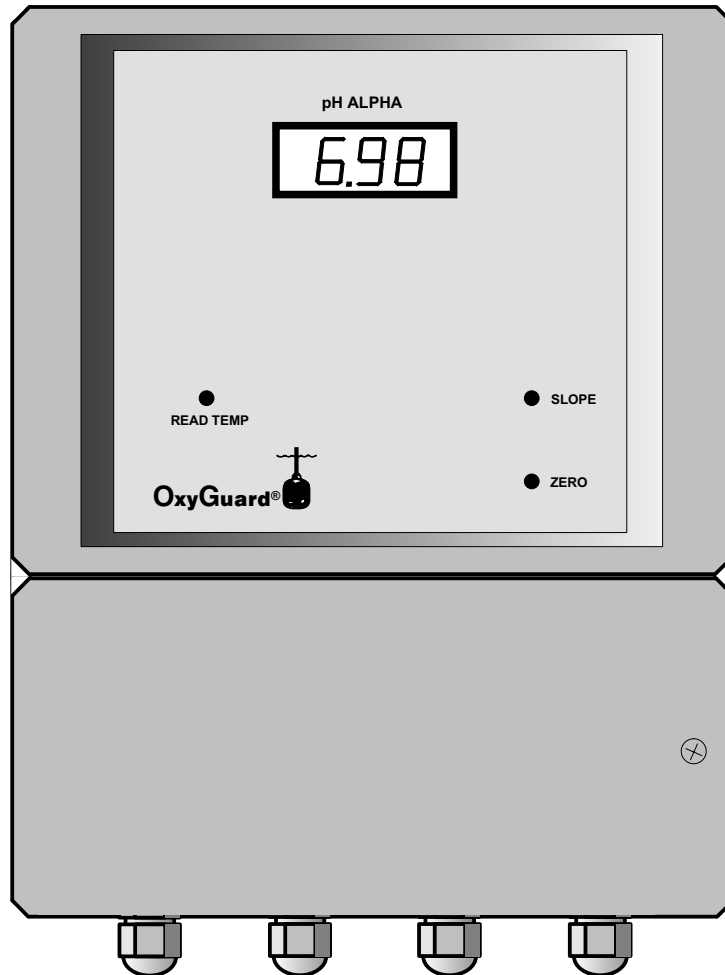


# OxyGuard pH Alpha

*Single-Channel pH Measurement Transmitter*

## pH Measurement Transmitter



The OxyGuard pH Alpha is a single channel pH measurement transmitter with automatic temperature compensation. It has a 4-20 mA analogue output. The unit is a simple, accurate and very rugged pH measurement unit intended for function as a primary measurement device in industrial or other control and monitoring systems.

As with all OxyGuard pH systems, a system using the pH Alpha 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 Alpha is used with an OxyGuard pH probe. There are several types, for both simple and more demanding measurement tasks in a large variety of mounting forms.

The OxyGuard pH Plus is found for users who need a pH measurement system incorporating alarm and control outputs.

# Technical Information

## Technical Advantages

This system is a no-compromise pH measurement system with built-in temperature compensation. The unit is built into a solid, waterproof metal cabinet with a clear plastic lid covering the front panel. "SLOPE" and "ZERO" adjustments for calibrating the electrode are situated on the front panel. Temperature (if measured) is displayed when a pushbutton is pressed.

The unit can be used with or without a temperature measurement. When used with a temperature measurement the unit automatically compensates for the temperature error of the pH electrode. The measured temperature is shown on the display when the "READ TEMP" pushbutton is pressed. When used without a temperature measurement the temperature at which pH measurements are made is set using a small trimpotentiometer behind the front panel.

## Probe

The **OxyGuard pH Alpha** is designed for use with the range of **OxyGuard pH Probes**. These are available in two main categories. Light-duty probes have gelled electrolyte combination electrodes that are suited to the more "harmless" process fluids. Heavy-duty probes have combination electrodes to which liquid reference electrolyte is fed continuously, extending probe lifetime in most "difficult" fluids. Each is available in a variety of immersion, submersion and flow-through versions in different materials - they are described in separate brochures. All OxyGuard pH probes are designed so that moisture problems are eliminated, and the inclusion of an impedance converter immediately above the electrode effectively prevents electrical noise problems. The result is an accurate, very reliable and exceptionally easy to use system.

## OxyGuard pH Plus

The pH Plus is identical to the pH Alpha except that it has alarm and pulse-pause controller outputs.

## Specifications

Construction:	Cast metal enclosure with front panel with display and adjustments. Waterproof to IP65.
Dimensions & weight:	190 x 240 x 100 mm (WxHxD), approximately 3 kg
Supply:	230, 110 or 24 VAC, specify on order, 20 VA.
Operating temperature:	-20 to +60°C.
Measuring ranges:	pH 0-14 (pH 2-12 on request).
Accuracy:	Depends on calibration.
Repeatability:	Better than 0.25%.
Transmitter non-linearity:	Less than 0.1%.
Analogue Output:	4-20 mA, isolated from input. 0-20 mA on request.

## Standard Accessories

1 trimpot screwdriver                      1 connection box.  
Spare fuses.

## Ordering Information

J02: pH Alpha WITHOUT probe  
or electrode.

