

# IFF PROBE XB2-S

**A submersible probe for measuring water pH at fish farms**



## Effective and easy measurement at fish farms

Measuring water pH is an important water quality parameter. The XB2-S probe is used to measure pH in the standard range (0-14 pH), for fresh water and salt water applications. It consists of a stainless-steel head with the option of replaceable electrodes, a body with integrated electronics and a durable cable.

## Advantages

Every fish species requires a specific pH value for its optimum development. A rising pH causes  $\text{NH}_4^+$  to be converted to toxic undissociated  $\text{NH}_3$ , which results in fish mortality. Depending on the species of fish being farmed, XB2-S probe measurements can be used to ensure optimum pH value. Intermittent water pollution can also be detected if this probe is located at the inflow. The probe uses an external supply tank of gel electrolyte and a multi-level reference system, which prevents the probe from being poisoned by sea water and extends its service life.



Highly durable sheath



Protection of electrodes against growth of biological encrustation



Nano-filter preventing growth of microorganisms



External gel electrolyte supply tank



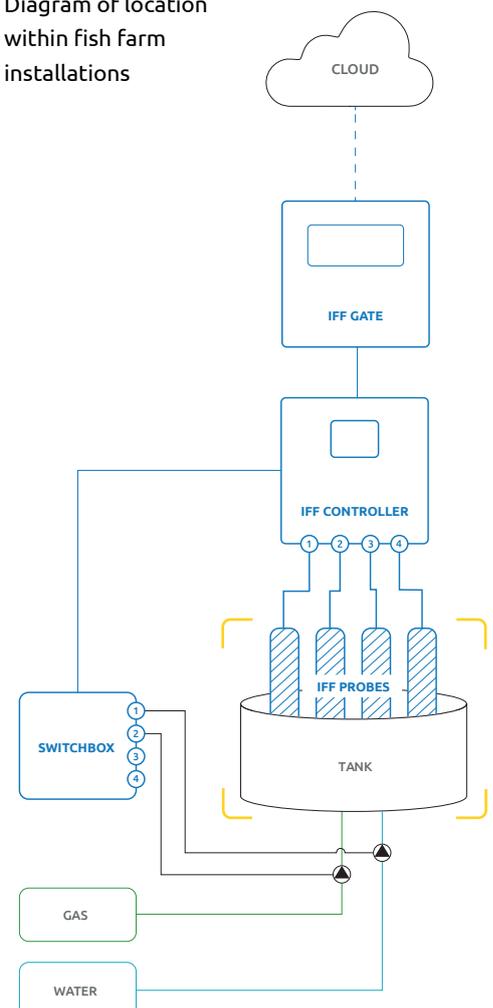
Minimum operating costs



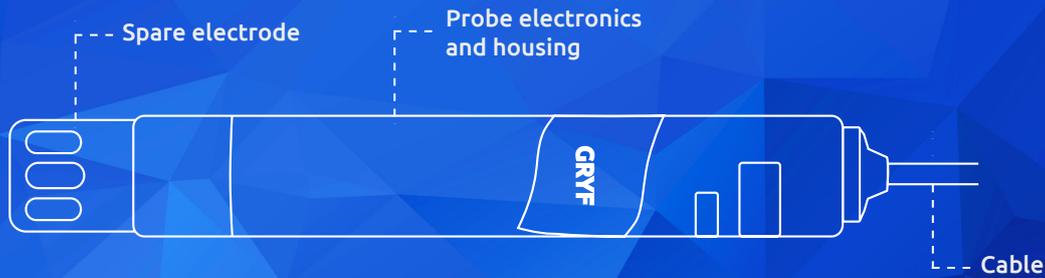
Multi-level reference system

## Structure

Diagram of location within fish farm installations



## System includes



### Basic technical parameters

Power supply	external source 18 ÷ 35V DC/ 30 mA
Signal output	4 ÷ 20 mA + MODBUS
Temperature measuring range	-20 ÷ 120 °C
Temperature measurement accuracy	± 0,2 °C; ± 1 dig.
Measuring range - pH; mV	1,000 ÷ 14,000 pH; -1200,0 ÷ 1200,0 mV
Measuring accuracy - pH; mV	± 0,01; ± 0,01 %; ± 1 dig.
Input resistance for pH sensor	10 <sup>12</sup> Ω
Temperature compensation	automatic, manual -10 ÷ 110 °C
Operating temperature range	0 ÷ 50 °C
Storage temperature range	-20 ÷ 70 °C
Pressure range	0 to 1 bar (0 ÷ 10 m water column)
Temperature sensor	Ni 1000
Protection rating	IP 68
Dimensions	270 x 36 mm
Dimensions (box)	320 x 200 x 75 mm
Material	stainless steel 1,4404; PVC-U black; PUR (cable)
Maximum immersion depth	30 m



## GDM - Mobile measurement system

Probe can be connected to your mobile phone and measure anywhere

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