

# OxyGuard TGP Probe

*Total Gas Pressure probe for OxyGuard systems*



The OxyGuard TGP probe measures Total dissolved Gas Pressure and is designed specifically for use with OxyGuard Commander or Pacific systems. It can be added to existing systems. It contains sensors for dissolved gas pressure and temperature.

The gases dissolved in water consist of oxygen and “other gases”. “Other gases” are mainly nitrogen. It is important to measure if the water is supersaturated in order to prevent the fish from getting gas bubble disease.

The Commander or Pacific system to which the probe is connected uses a dissolved oxygen measurement made by a DO probe placed near the TGP probe for calculations and presents the degrees of saturation for the total gas, dissolved oxygen and for “other gas”.

# Technical Information

## Advantages

The OxyGuard TGP probe can be directly connected to OxyGuard Commander and Pacific systems. It can only be used with these systems. It does not need a separate transmitter or input unit, but communicates values directly via its field bus connection.

The TGP is designed for easy use. Should the sensor element become fouled or damaged it can easily be replaced.

The TGP is calibrated by placing it in the air and starting the automatic calibration procedure in the Commander or Pacific system.

The system uses a DO measurement from a probe in the water near the TGP probe so that % saturation values are obtained for the total gas, for the dissolved oxygen and for the “other gas”.

## Specifications

Construction:	POM plastic parts with silicon rubber tube.
Dimensions:	Diameter 58 mm, overall length 107 mm (without cable gland)
Cable length:	7 metres or as ordered.
Weight:	700 gram with 7m cable.
Output signal:	OxyGuard field bus data signal for Commander, Convoy or Pacific systems.
Supply:	Nominal 24 V DC +/- 10%, abs. max. 28V.
Connections:	P-NET field bus data cable. Yellow = 0V, green = 24 V DC +/- 10%; white = “A”; brown = “B”; Screen = “S”
Operating Conditions:	-5 to +45°C. Depth depends on cable length.
Range:	To 500%, 5 bar, 50m depth. Temperature -5 to + 45°C
Accuracy:	+/- 2% 0 to 40°C.