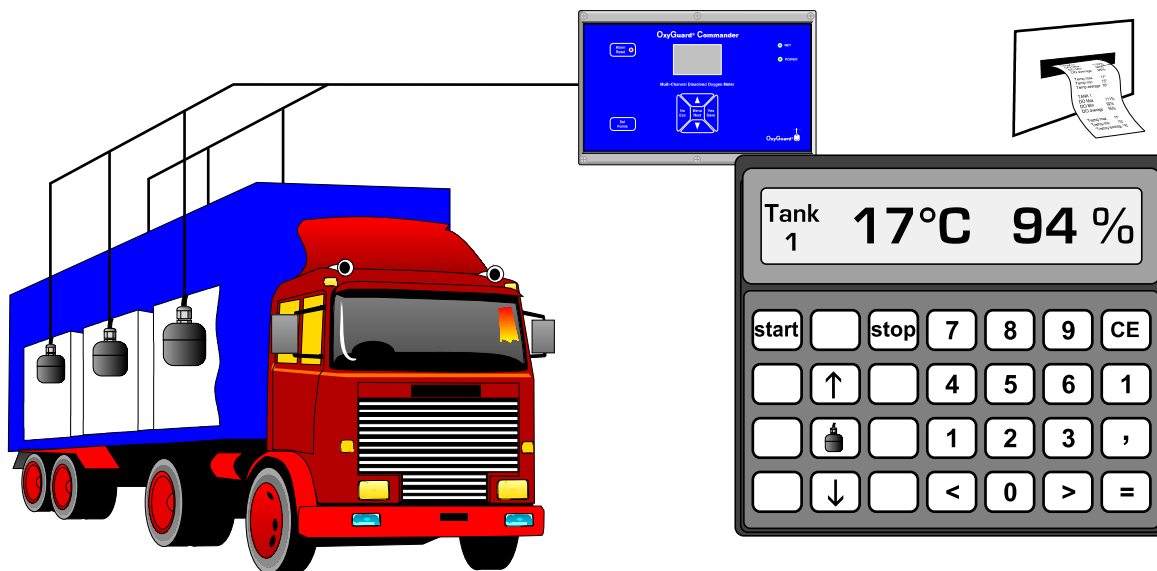


OxyGuard Convoy

An OxyGuard Commander system for Control, Monitoring and Data Logging during Fish Transport



The **Convoy** is an **OxyGuard Commander** system designed to control, monitor and record the dissolved oxygen and temperature of tanks in vehicles used for transporting living fish.

The system incorporates a number of features that make it exceptional for protecting the large values represented by such fish:

- * Proportional control of oxygen dosing to each tank.
- * Temperature control of each tank.
- * Full data logging at ten minute log intervals.
- * Hard copy of maximum, minimum and average values for each tank.
- * Automatic alarm - both in the cab and externally as desired.
- * Small yet effective control panel with display.

In addition to this, the Convoy incorporates all the advantages of the Commander system:

- *NEW DO PROBE:
 - * Even easier to use.
 - * Can be installed at any angle
 - * "Maintenance-free" - sealed to last years!
 - * Tougher membrane - yet again.
 - * Extreme long-term stability.
- * Advanced DO meter:
 - * Automatic calibration.
 - * Includes temperature measurement.
 - * Measures in both mg/l (PPM) and % saturation.
 - * Full temperature compensation.
 - * Barometric pressure compensation.

Technical Information

Advantages

This system controls the most important water quality parameters, dissolved oxygen and temperature, during the transport of living fish. Oxygen is injected proportionally - when a little more oxygen is needed, a little more oxygen is injected. This method ensures that dissolved oxygen levels are kept practically constant - the fish are stressed as little as possible, and no oxygen is wasted. Water temperature is controlled in a similar manner. Control is individual for each tank. The system is build up in modules and can be added to as appropriate.

As well as controlling water quality the Convoy also records values of dissolved oxygen, temperature and barometric pressure. This ensures that transport does not constitute a break in the establishment of a complete record of the conditions the fish have lived under. After the transport a hard copy of the maximum, minimum and average values for these parameters for each tank is generated in two copies.

The data can also be transferred to a PC. The system is set up by attaching a PC to it - the control and alarm set points cannot be altered during transport. The Convoy is part of the Commander family of equipment, and like the other Commander components uses the P-NET field bus system. When the same system is used in the hatchery, on-growth unit and during transport the data collected during transport can easily be integrated into a single record. The availability of know-how and parts should service be necessary is also ensured.

Specifications

Component Parts:	Up to 18 probes for dissolved oxygen and temperature. One or two DO meter/oxygen control boxes as appropriate. One main control panel. Alarm horn and flashing light as ordered.
Operating Conditions:	0 to 40° C
Power Supply:	24 VDC
Range:	ppm: 0-5 to 0-40 ppm. (mg/l). % saturation:, 0-50 to 0-400 % sat. Temperature: -5 to +45°C. Other ranges on request.
Accuracy:	Error less than +/- 2% of actual value when measuring temperature is the same as the calibrating temperature.

