



Aanderaa Oxygen Optodes - Quick Reference Selection Guide

The Aanderaa Oxygen Optodes measure temperature and oxygen concentration in μM , mg/l and % air saturation in natural waters. From streams to deep sea, fish farms to waste water, inside ice to hydrothermal vents.

Optode Selection Guide					
Model	4835	4330/4330Fast	4831/4831Fast	4531Aqua	5730 Puck
Max depth (m)	300	6000*	6000*	100	100
Signal output	AiCap/rs232	AiCap/rs232	rs232/0-5V	rs232/0-5V/4-20 mA	rs232
Accuracy (DO)	4 μM , 3 %	2 μM , 1.5 %	2 μM , 1.5 %	8 μM , 5 %	4 μM , 3 %
Foil options	FDO701	FDO**/Pst3/Pst3F	FDO**/Pst3/Pst3F	FDO701	FDO701
Response time (DO) T(63%) > sec	> 30	> 30/ > 25/ > 8	> 30/ > 25/ > 8	> 30	> 30
Typical field drift per year**	0.2%	0.2%/0.5%/0.5%	0.2%/0.5%/0.5%	0.5%	0.5%
Pressure effects per 1000 m depth	N/A	-2%**/-4%(Pst3)	-2%**/-4%(Pst3)	N/A	N/A
Accuracy (Temp) degC	± 0.05	± 0.03	± 0.03	± 0.03	± 0.03
Response time (Temp) sec	10s	2s	2s	2s	2s
Connector Options	LEMO (10 pins)	LEMO (10 pins)	Subconn	Various	Molex 5pin
Dimension	$\text{\O}36 \times 86 \text{ mm}$	$\text{\O}36 \times 86 \text{ mm}$	$\text{\O}36 \times 111.5 \text{ mm}$	$\text{\O}382 \times 193/273 \text{ mm}$	$\text{\O}39.1 \times 35.8 \text{ mm}$
Weight	118 g	175 g	217 g	160 g	150 g

COMMON FEATURES	*11000 m rated version on special request.
Calibration	40 points, automatic system. Winkler titration as reference method.
Sensor Range	0 - 1000 μM , 0 - 32 mg/l , 0 - 300% air saturation.
Calibrated range	0 - 500 μM , 0 - 16 mg/l , 0-120 % air saturation, range can be expanded on request.
Sensor Resolution	Better than: 0.1 μM , 0.0032 mg/l , 0.05 %.
Foil Lifetime	+10 years, high biofouling might affect lifetime, do not clean with sharp objects.
Supply Voltage & Current Drain	5-14 V. Current Drain: $0.16 + 48\text{mA}/\text{S}$, where S is sampling interval sec, max/sleep 100/0.16 mA.
About Foils	**FDO701 foils have lower drift, less affected by pressure, no dry out effects