



Orbisphere K1100/K1200 Oxygen Sensors

Orbisphere K1x00 Sensors are maintenance-free, optical Luminescent Dissolved Oxygen Sensors designed for monitoring oxygen in power plants. The K1x00 series also includes a sensor version for nuclear power applications.

One zero point calibration per year is all that is needed with the K1x00 sensor series. Traditional electrochemical (EC) sensors display significant drift after only a few months, demanding regular re-calibration and substantial operator time. Due to its luminescent technology, the K1x00 sensor series is designed for minimal drift, resulting in it being the most stable sensor with the longest calibration interval in the nuclear industry.

With no membranes to replace and no electrolyte solution to replenish, the K1x00 series is virtually maintenance-free requiring only two minutes of maintenance per year. Sensor accuracy is unaffected by process changes or low flow events with no polarisation time, eliminating unnecessary operator interventions in radioactive zones. In addition, corrosive or hazardous chemicals are not required, making the annual task faster, easier and safer without reducing measurement precision.

The complete system consists of a 510 Controller, cable, and the K1x00 Luminescent Dissolved Oxygen Sensor series. The sensor is compatible with Orbisphere 28 mm flow chambers previously used with EC sensors, eliminating the need for engineering changes to weld, add, and test new connections: an ideal retrofit. The installation is fast and easy and does not require special preparation. The plug-and-play sensor is ready immediately ready for measurement.

Part Number	Parameter	Measuring range	Accuracy	Calibration	GBP Price
K1200-S00H	Oxygen	0 - 40 ppm dissolved O ₂ (DO)	± 0.02 ppm or 3 % whichever is greater	Two points at cap replacement (zero and air), one during use (air)	Contact Us
K1100-KTO-W-IMP	Oxygen	0 - 2000 ppb dissolved O ₂ (DO)	± 0.8 ppb or 2 % whichever is greater	Single point zero calibration with standard 99.999% nitrogen (quality 50) or equivalent oxygen free gas	Contact Us
K110H-KTO-P-IMP	Oxygen	0 - 40 ppm dissolved O ₂ (DO)	± 0.02 ppm or 3 % whichever is greater	Two points at cap replacement (zero and air), one during use (air)	Contact Us
K110H-KTO-W-IMP	Oxygen	0 - 40 ppm dissolved O ₂ (DO)	± 0.02 ppm or 3 % whichever is greater	Two points at cap replacement (zero and air), one during use (air)	Contact Us
K1100-S00	Oxygen	0 - 2000 ppb dissolved O ₂ (DO)	± 0.8 ppb or 2 % whichever is greater	Single point zero calibration with standard 99.999% nitrogen (quality 50) or equivalent oxygen free gas	Contact Us

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K1200-S00	Oxygen	0 - 2000 ppb dissolved O ₂ (DO)	± 0.8 ppb or 2 % whichever is greater	Single point zero calibration with standard 99.999% nitrogen (quality 5.0) or equivalent oxygen free gas	Contact Us
K1100-KTO-W-MET	Oxygen	0 - 2000 ppb dissolved O ₂ (DO)	± 0.8 ppb or 2 % whichever is greater	Single point zero calibration with standard 99.999% nitrogen (quality 50) or equivalent oxygen free gas	Contact Us
K1100-S00H	Oxygen	0 - 40 ppm dissolved O ₂ (DO)	± 0.02 ppm or 3 % whichever is greater	Two points at cap replacement (zero and air), one during use (air)	Contact Us
K1100-KTO-P-MET	Oxygen	0 - 2000 ppb dissolved O ₂ (DO)	± 0.8 ppb or 2 % whichever is greater	Single point zero calibration with standard 99.999% nitrogen (quality 50) or equivalent oxygen free gas	Contact Us
K1100-KTO-P-IMP	Oxygen	0 - 2000 ppb dissolved O ₂ (DO)	± 0.8 ppb or 2 % whichever is greater	Single point zero calibration with standard 99.999% nitrogen (quality 50) or equivalent oxygen free gas	Contact Us
DGK510KK-P-IMP	Oxygen	0 - 2000 ppb dissolved O ₂ (DO)	± 0.8 ppb or 2 % whichever is greater	Single point zero calibration with standard 99.999% nitrogen (quality 5.0) or equivalent oxygen free gas	Contact Us
DGK510KK-P1025	Oxygen	0 - 2000 ppb dissolved O ₂ (DO)	± 0.8 ppb or 2 % whichever is greater	Single point zero calibration with standard 99.999% nitrogen (quality 5.0) or equivalent oxygen free gas	Contact Us
DGK510KK-W-IMP	Oxygen	0 - 2000 ppb dissolved O ₂ (DO)	± 0.8 ppb or 2 % whichever is greater	Single point zero calibration with standard 99.999% nitrogen (quality 5.0) or equivalent oxygen free gas	Contact Us
DGK510KK-W1025	Oxygen	0 - 2000 ppb dissolved O ₂ (DO)	± 0.8 ppb or 2 % whichever is greater	Single point zero calibration with standard 99.999% nitrogen (quality 5.0) or equivalent oxygen free gas	Contact Us
DGK510KKK-P-IMP	Oxygen	0 - 2000 ppb dissolved O ₂ (DO)	± 0.8 ppb or 2 % whichever is greater	Single point zero calibration with standard 99.999% nitrogen (quality 5.0) or equivalent oxygen free gas	Contact Us

Part Number	Parameter	Measuring range	Accuracy	Calibration	GBP Price
DGK510KKK-W-IMP	Oxygen	0 - 2000 ppb dissolved O ₂ (DO)	± 0.8 ppb or 2 % whichever is greater	Single point zero calibration with standard 99.999% nitrogen (quality 5.0) or equivalent oxygen free gas	Contact Us