

# FDO<sub>2</sub> Optical Oxygen Gas Sensor

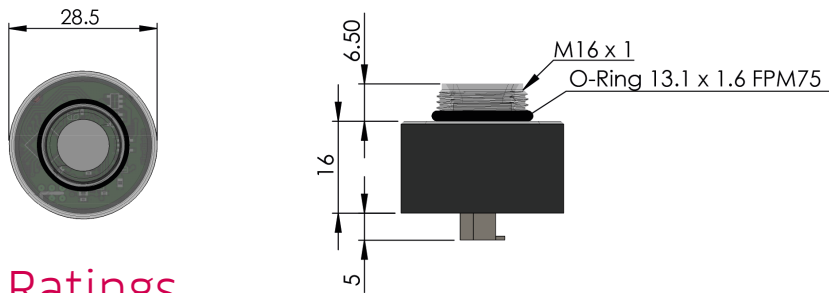
## Forget about replacing oxygen sensors

O<sub>2</sub>



- high-accuracy
- low drift
- factory calibrated
- long life, non-depleting
- fast response ( $t_{63} < 2s$ )
- digital output of oxygen partial pressure
- temperature compensation
- low power consumption
- lead free
- incubators
- oxygen concentrators
- inert gas processing chambers (glove boxes)
- exhaust gas measurement
- inert gas monitoring
- portable equipment
- monitoring fruit ripening and transport

# FDO2 Optical Oxygen Gas Sensor



## Ratings

Solvent	in units of % O <sub>2</sub> *	in units of hPa
Measuring range, Typical	0-50% O <sub>2</sub> (gas)	0-500 hPa
Measuring range, Maximum	0-200% O <sub>2</sub> (gas)	0-2000 hPa
Accuracy at 10°C - 40°C	±0.02% O <sub>2</sub> at 1% O <sub>2</sub>	±0.2 hPa at 10 hPa
	±0.5% O <sub>2</sub> at 20% O <sub>2</sub>	±5 hPa at 200 hPa
Resolution	±0.01% O <sub>2</sub> at 1% O <sub>2</sub>	±0.1 hPa at 10 hPa
	±0.1% O <sub>2</sub> at 20% O <sub>2</sub>	±1 hPa at 200 hPa
Detection limit	0.01% O <sub>2</sub>	0.1 hPa
Response time (t <sub>63</sub> )	< 2 sec.	
Drift at 25°C	<1% O <sub>2</sub> / year at 20% O <sub>2</sub>	
Max. number of measurements	>500 million	
Lifetime	>5 years	
Temperature range during operation	-10 to 60°C	
Supply Voltage	3.3 - 5.0 V DC	
Standby Current	ca. 8 mA	
Communication Interface	3.0 V UART (5 V tolerant)	
Connector	Molex 560020-0420	

\* at 1013 mbar ambient gas pressure

\*\*For typical indoor environmental conditions a 10 year operating life is expected

