

FDO₂ Optical Oxygen Gas Sensor

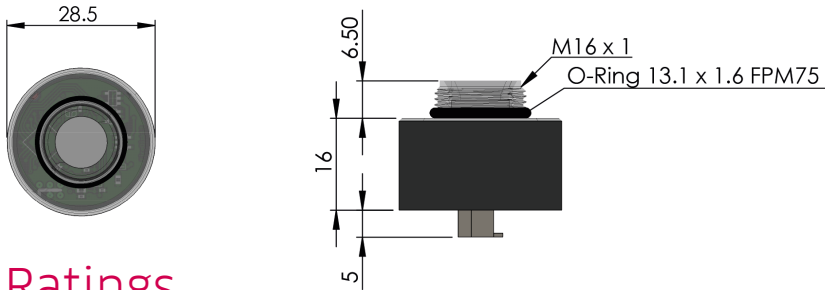
Forget about replacing oxygen sensors

O₂



- 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 ₂ *	in units of hPa
Measuring range, Typical	0-50% O ₂ (gas)	0-500 hPa
Measuring range, Maximum	0-200% O ₂ (gas)	0-2000 hPa
Accuracy at 10°C - 40°C	±0.02% O ₂ at 1% O ₂ ±0.5% O ₂ at 20% O ₂	±0.2 hPa at 10 hPa ±5 hPa at 200 hPa
Resolution	±0.01% O ₂ at 1% O ₂ ±0.1% O ₂ at 20% O ₂	±0.1 hPa at 10 hPa ±1 hPa at 200 hPa
Detection limit	0.01% O ₂	0.1 hPa
Response time (t ₆₃)		< 2 sec.
Drift at 25°C		<1% O ₂ / year at 20% O ₂
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

