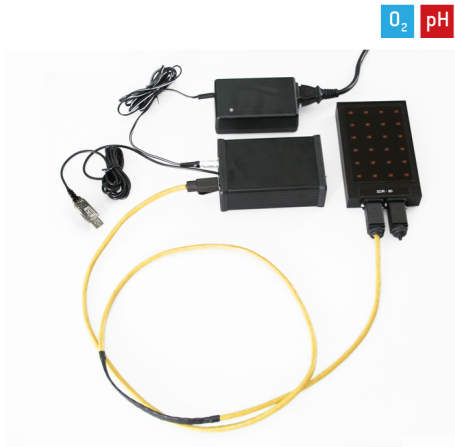# METERS

O₂ pH

SDR SensorDish® Reader Basic Set

The SDR SensorDish® Reader is a small 24-channel reader for non-invasive detection of oxygen and pH in multidishes (SensorDishes®). These contain a sensor spot at the bottom of each well. They are read out non-invasively through the transparent bottom. SensorDishes® for oxygen (OxoDish®) and pH (HydroDish®) are available in 24-well and 6-well format. 24-well deep well plates with integrated oxygen (OxoDish®-DW) and pH sensor (HydroDish®-DW) allow measurements in shaken cultures. Read out of oxygen sensors integrated in glass vessels for respiration monitoring is also possible. The SensorDish® Reader can be used in incubators and on shakers and is thus the ideal tool for cell and bacteria cultivation.

- Parallel online monitoring in disposable 24- or 6-well plates
- Non-invasive & non-destructive measurement
- Deep well plates (24-well format) & low well plates available
- Pre-calibrated
- For use in incubators and on shakers
- Optional extension for monitoring of up to 240 samples

TECHNICAL

Specifications	pH*	Oxygen
Measuring range	6.0 - 8.5 pH	0 - 50 % O_2
Resolution*	± 0.05 pH at = 7	± 0.4 % O_2 at 20.9 % O_2
Precision*	± 0.2 pH at pH = 7 (sensor batch calibration) ± 0.1 pH at pH = 7 (sensor spot calibration)	± 1 % O_2 at 20.9 % O_2
Drift*	< 0.1 pH within one week (sampling interval 10 min.)	< 0.2 % O_2 within one week (sampling interval 10 min.)
Measurement temperature range		from + 15 ℃ to + 45 ℃
Response time (t_{90}) at 25 ℃	< 120 sec.	< 30 sec.

Properties		
Compatibility	Aqueous solutions, ethanol (max. 10 % v/v), methanol (max. 10 % v/v), pH 2 - 10	
Cross-sensitivity	Reduced to ionic strength (salinity); high concentration of small fluorescent molecules in the visible range can interfere	
Calibration	Beta- irradiated, HydroDishes® and OxoDishes® are pre-calibrated	

Device	SensorDish® Reader	Splitter	Power adapter
Type	SDR v3 or higher	SP1.1 or higher	Mascot 9920
Cleaning	Ethanol		
Input	18 - 24 V DC 150 mA	18 - 24 V DC 1.5 A	100 - 240 V AC 50 - 60 Hz. max. 0.9 A
Weight	380 g	240 g	
Dimensions	16.3 cm x 8.9 cm x 2.2 cm	12.4 cm x 8.0 cm x 4.5 cm	

* In physiological solutions at 37 ℃

ACCESSORIES

Optical Shielding Mask SDR-OSM24

The optical shielding mask is designed for use with the SDR SensorDish® Reader and Deep Well SensorDishes®. It should be used in case fluorescent media or products interfere with the optical sensor reading. The shielding mask has 24 holes, which exactly match the sensor positions inside the Deep Well SensorDishes®, so the sensor can be read out while the medium is shielded from the SDR optics.

- Ensures precise measurements
- Easy use

TECHNICAL

Specifications	
Dimensions (D x W x H)	125 mm x 80 mm x 3 mm
Weight	30 g
Material	Black anodized aluminum
Compatibility	Deep Well Dishes on SDR

www.PreSens.de/product-finder/4000002-203

SENSORS

O₂ ## Deep Well OxoDish® OD24-DW

The Deep Well OxoDish® OD24-DW is a disposable polystyrene multidish and used for shaken applications. Pre-calibrated oxygen sensors are integrated at the flat bottom of each square well and are read out with the SDR SensorDish® Reader. They are delivered beta-irradiated.

- Ready-to-use
- For shaken cultures
- Pre-calibrated
- Manual calibration possible
- For microbes & cell cultures

TECHNICAL

Specifications	
Measurement range	0 - 50 % O_2
Resolution*	± 0.4 % O_2
Precision*	± 1 % O_2
Drift*	< 0.2 % O_2 within one week (sampling interval 10 min.)
Measurement temperature range	from + 15 °C to + 45 °C
Response time* (t_{90})	at + 25 °C: < 30 sec.
Properties	
Compatibility	Aqueous solutions, ethanol (max. 10 % v/v), methanol (max. 10 % v/v), pH 2 - 10
Calibration	Pre-calibrated Disposables are delivered beta-irradiated
Maximum filling volume	10 mL

* in H_2O dest. or oxygen-free water

PRODUCT FINDER

PreSens
PRECISION SENSING

GET IN CONTACT

- ⊙ **Request more info**
- ⊙ **Request a quote**
- ⊙ **Rent-a-meter**

PreSens Precision Sensing GmbH
Am Biopark 11, D-93053 Regensburg
Phone +49 941 942 72 100
Fax +49 941 942 72 111
info@PreSens.de

⊙ **www.PreSens.de/product-finder/4000002-203**