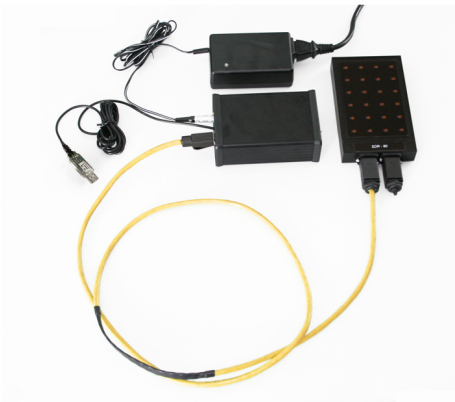
METERS



O_2 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.

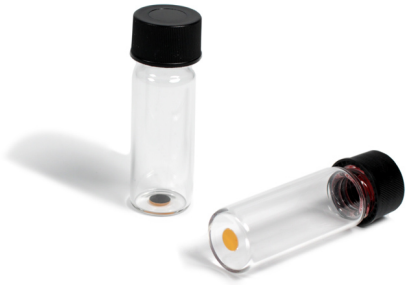
- Parallel online monitoring in disposable 24- or 6-well plates
- Non-invasive & non-destructive measurement
- Deep well plates (24-well format) & low well plates available
- Pre-calibrated
- For use in incubators and on shakers
- Optional extension for monitoring of up to 240 samples

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 °C to + 45 °C		
Response time (t_{90}) at 25 °C	< 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 °C

SENSORS



O_2 SensorVial SV-PSt5-4mL

These 4 mL glass vials have an optically isolated oxygen sensor type PSt5 integrated at the bottom. This sensor is read out with the SDR SensorDish® Reader. The SensorVials fit into a 24-well plate, which is placed on the reader for easy positioning. Due to the optical isolation, the sensor can be used at ambient light. SensorVials are ideally suited for respiration monitoring of small aquatic organisms. In combination with the Mask for SensorVials SDR-MSV24 they can also be applied for photosynthesis experiments (up to 50 % O_2). The mask shields the reader optics from artificial light so precise optical oxygen measurements can be recorded. The vials can be cleaned with ethanol and are re-usable.

- Contactless online oxygen monitoring
- Parallel measurements
- Re-usable
- Respiration monitoring

TECHNICAL

Specifications	
Measurement range	0 – 50 % O_2
Resolution*	± 0.4 % O_2
Accuracy*	± 1 % O_2
Drift*	< 0.2 % O_2 within one week (sampling interval 10 min.)
Measurement temperature range	from + 15 to + 45 °C
Response time* (t_{90})	< 30 sec.
Properties	
Compatibility	Aqueous solutions, ethanol (max. 10 % v/v), methanol (max. 10 % v/v), pH 2 - 10
Calibration	Pre-calibrated
Maximum filling volume	5 mL
*in H_2O dest. or oxygen-free water, + 37 °C	

ACCESSORIES

Mask for SensorVials SDR-MSV24

The SDR-MSV24 shields the reader optics from artificial light, so optical oxygen measurements are not disturbed. This allows the use of SensorVials during light exposure in photosynthesis experiments. Furthermore, the mask assures correct positioning of SensorVials on top of the SDR. Up to 24 vials in 2 mL or 4 mL format can be placed in the mask for read out with the SDR.

- Shielding from ambient light
- Correct positioning of SensorVials
- Precise sensor read-out

TECHNICAL

Specifications	
Dimensions	126 mm x 84 mm x 7 mm
Weight	71.2 g
Material	Polyoxymethylene (POM)

GET IN CONTACT

Request more info

Request a quote

Rent-a-meter

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