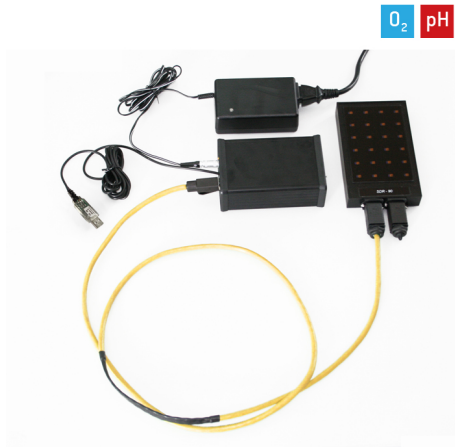


## METERS



O<sub>2</sub> 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 <sub>2</sub>	
Resolution*	± 0.05 pH at = 7	± 0.4 % O <sub>2</sub> at 20.9 % O <sub>2</sub>	
Precision*	± 0.2 pH at pH = 7 (sensor batch calibration) ± 0.1 pH at pH = 7 (sensor spot calibration)	± 1 % O <sub>2</sub> at 20.9 % O <sub>2</sub>	
Drift*	< 0.1 pH within one week (sampling interval 10 min.)	< 0.2 % O <sub>2</sub> within one week (sampling interval 10 min.)	
Measurement temperature range	from + 15 °C to + 45 °C		
Response time (t <sub>90</sub> ) 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

### Oxygen Sensor Spot SP-PSt5



This oxygen sensor spot can be integrated in the customer's transparent vessel, which can then be read out contactless with the SDR SensorDish® Reader. The SP-PSt5 comes pre-calibrated. It has an optical isolation layer shielding the oxygen sensitive dye, so this sensor can be used in ambient light or even at illumination, e. g. when measuring photosynthesis. The sensor spot can be cleaned with ethanol and is therefore reusable.

- Non-invasive oxygen measurements
- For use of user-specified vessels with the SDR
- Pre-calibrated
- Re-usable
- Optical isolation

## TECHNICAL

Specifications	
Measurement range	0 – 50 % O <sub>2</sub>
Resolution*	± 0.4 % O <sub>2</sub>
Accuracy*	± 1 % O <sub>2</sub>
Drift*	< 0.2 % O <sub>2</sub> within one week (sampling interval 10 min.)
Measurement temperature range	from + 15 to + 45 °C
Response time* (t <sub>90</sub> )	< 30 sec.
Properties	
Compatibility	Aqueous solutions, ethanol (max. 10 % v/v), methanol (max. 10 % v/v), pH 2 - 10
Calibration	Pre-calibrated
*in physiological solution, + 37 °C	



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## 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**

