



## When Your Culture System is Unique

Everything you need for real-time, non-invasive monitoring in one kit: optical sensors for pH and dissolved oxygen (DO), readers and software. The 3mm diameter sensors attach inside the culture vessel wall while a reader, positioned on the outside of the vessel, collects and sends data to the software.

When bulky sensor probes, that tend to drift in long-term cultures and lack accuracy at low dissolved oxygen levels, are not a good fit for your culture system, the ID-Developer's Kit excels.

Whether you're working with tissue culture flasks, petri dishes, tissue-on-a-chip microfluidic devices, or custom bioreactors for tissue-engineered constructs, the ID-Developer's Kit is versatile and compatible with most setups. And if the coaster-shaped reader might not fit under your vessel, make sure you inquire about our fiber-optic reader that works with challenging geometries.

### Includes

ID-Sensor pH  
ID-Sensor DO  
ID-Reader  
ID-Converter  
ID-Data Hub

### For

Cell Culture  
Tissue and Organ Culture  
Tissue/Organ-On-A-Chip

### Use with



## How can I incorporate optical sensors in my custom cell/tissue/organ culture system?

The ID-Developer's Kit is well-suited for a wide range of custom microbial and mammalian cell culture systems.

- ID-Sensor pH and ID-Sensor DO can be as small as 4mm in diameter to fit even the smallest culture systems. Attach the sensor to the bottom inner surface of your culture vessel.
- ID-Reader is placed below a flat glass or plastic surface within 1cm from smallest sensor and can be further away for larger sensors. Sensor placement is parallel to ID-Reader.
- ID-Data Hub software loaded onto your laptop collects data through the ID-Converter.

### ✓ Advantages

- Real-time monitoring of pH and dissolved oxygen
- Non-invasive and biocompatible
- Single use, disposable
- State-of-the-art fluorescence technology
- High resolution and unmatched accuracy
- Fast response time
- Quick and easy setup
- Durable reader design resistant to spills and harsh environments
- Long sensor life
- Up to 2 ID-Sensors per ID-Reader
- Up to 4 ID-Readers per ID-Converter

### + ID-Data Hub Features

- Automatic sensor type detection
- Real-time monitoring of up to 8 sensors
- pH and DO graphical display
- Data acquisition
- Review, save and export data
- Programmable scan intervals

## Sensor Specifications

|                          | pH   | DO                          |
|--------------------------|--|-----------------------------|
| <b>MEASUREMENT RANGE</b> | 6-8  | 0-100%                      |
| <b>ACCURACY</b>          | 1.5% at pH 7   | 0.2% at full scale          |
| <b>RESOLUTION</b>        | ±0.01 at pH 7  | ±0.1% at 21% O <sub>2</sub> |
| <b>RESPONSE TIME</b>     | <15 sec  |                             |
| <b>TEMPERATURE RANGE</b> | +5 to +60°C  |                             |
| <b>DRIFT</b>             | < or = 0.005 pH per day at 1 minute scan interval  |                             |
| <b>CALIBRATION</b>       | Pre-calibrated; recalibration is possible  |                             |
| <b>STERILIZATION</b>     | Autoclave, gamma irradiation; inquire about other methods  |                             |
| <b>SENSOR LIFE</b>       | 45 days (continuous monitoring), several months (intermittent monitoring)  |                             |
| <b>SHELF LIFE</b>        | 12 months  |                             |
| <b>SENSOR DIMENSIONS</b> | ID-Sensors pH: 7mm diameter x 0.3mm height sensors, non-sterile, pre-calibrated<br>ID-Sensors DO: 5mm diameter x 0.3mm height sensors, non-sterile, pre-calibrated |                             |
| <b>SCAN INTERVAL</b>     | 10 seconds or greater  |                             |
| <b>OPERATING SYSTEM</b>  | Windows 7/8/10   |                             |
| <b>WARRANTY</b>          | 24 months  |                             |

## Pricing

|  |                       |
|--|-----------------------|
| <b>ID-Developer's Kit - pH and DO includes:</b> <ul style="list-style-type: none"> <li>■ ID-Sensor pH - 7mm diameter x 0.3mm height sensors, non-sterile, pre-calibrated, pack of 10</li> <li>■ ID-Sensor DO - 5mm diameter x 0.3mm height sensors, non-sterile, pre-calibrated, pack of 10</li> <li>■ ID-Reader</li> <li>■ ID-Converter</li> <li>■ ID-Data Hub</li> </ul> | <b>\$3,000</b>        |
| Additional ID-Reader (can add up to 3 additional ID-Readers for a total of 4 per ID-Converter)   | <b>\$1,600</b>        |
| Additional ID-Sensors pH - 7mm diameter x 0.3mm height sensors, non-sterile, pre-calibrated, pack of 10  | <b>\$250</b>          |
| Additional ID-Sensors DO - 5mm diameter x 0.3mm height sensors, non-sterile, pre-calibrated, pack of 10  | <b>\$250</b>          |
| Flow through cell  | <b>Please inquire</b> |

Note: All prices are in USD and FOB.