Lucid Scientific

Resipher

turns a 96-well plate into a precise dynamic oxygen consumption reader



Lucid Scientific's **Resipher** empowers researchers to precisely measure oxygen consumption directly in standard well plates. The system's patented dynamic optical oxygen sensors provide the highest sensitivity without disturbing cells. **Resipher's** supercompact profile sits directly in your incubator, eliminating the need to change current workflows and eliminating the need to constantly move plates to larger analytical instruments.

Resipher's web-based, real-time logging and analysis software provides fast and easy data visualization for each well being monitored. Scientists can now watch their cellular experiments real-time from their computer or remotely via smartphone or tablet.

- Real-time continuous data analysis
- Plug and play USB-C connection
- Non-invasive measurements
- Scalable sensor configurations



Characterize real-time metabolic response with sensitive dynamic probes that minimize error.



Individually sterilized disposable lids attach between the RESIPHER and the well plate.



Resipher's compact size occupies no extra incubator space.

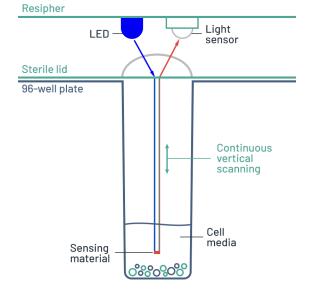
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Resipher is compatible with standard 96 well plates, and currently has 32 well probes per device.

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RESIPHER devices utilize proprietary high-resolution optical oxygen sensors to characterize oxygen consumption and the oxygen environment in cell culture. The RESIPHER is a handheld device that rests on top of a 96-well plate in the incubator. The device interfaces with a sterile/disposable lid with probes that extend into the media directly above the cells.

Micro probes (500µm diameter) are non-invasive to the cell culture.



An oxygen concentration gradient forms in the media as a direct result of cellular oxygen consumption. The readout is attained by dynamically scanning above the cells to measure the gradient, then using sophisticated signal processing algorithms to convert concentration readings to cellular oxygen consumption.



Resipher streams real-time data to a web-based analysis and visualization software by the way of a hub which resides outside the incubator and supports up to 8 devices simultaneously.

In addition to oxygen consumption, the user also has access to a characterization of oxygen concentration, incubator temperature, relative humidity, atmospheric pressure, device motion and several other environmental factors.

- Consumption resolution 5 fmol/mm²/sec
 Concentration sensitivity < 1µM
 Time resolution < 30 mins
 - Lid shelf life > 12 weeks

For all inquiries: info@lucidsci.com