



Insplorion

Insplorion M8

8-Channel Analyser

Product and Technology Information



Operando sensing capabilities

Optical operando sensing of physicochemical as well as temperature changes inside battery cells, using Insplorion's fibre optic sensors.

Measure on up to 8 battery cells

Connect up to 8 cells simultaneously for data acquisition or equip a few cells with multiple sensors for spatially resolved measurements.

Nanoscale optical monitoring

Obtain information on battery processes and learn more about electrode surfaces and electrolytes with nanoscale resolution.

Complete stand-alone package

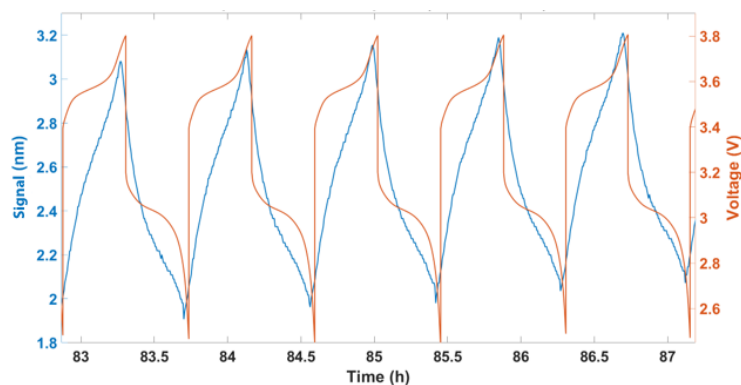
The Insplorion M8: 8-Channel Analyser system comprises software and rack-mountable hardware in one complete package, ready for implementation.

Versatile compatibility

Insplorion's sensors are compatible with various cell types, as well as various battery chemistries.

Insplorion

Arvid Wallgrens backe 20
413 46 Göteborg
Sweden
www.insplorion.com



Sensor signal (blue) and voltage (orange) during a constant current (CC) measurement in an LFP/graphite coin cell. The sensor was placed at the cathode-separator interface. A non-linear correlation between the signal and the accumulated charge is observed.

Specifications

Sensors

Size	115 μm
Substrate	Optical fibre
Wavelength range	400-1100 nm

Measurement characteristics

Sample rate	1Hz (faster if fewer channels are active)
Multiplexing capabilities	Up to 8 channels* sequential acquisition

*Choose freely which channels are connected to cells, and add or remove cells as desired.

Size

Width x Depth x Height	450 x 360 x 110 mm
Weight	8 kg
Form factor	Tabletop or 19-inch rack

Software

Control software	Insplorion M8 Control and Acquisition Software
Operating system	Microsoft Windows 10 or later
Output data format	.csv compatible

Insplorion

Arvid Wallgrens backe 20
 413 46 Göteborg
 Sweden
www.insplorion.com