

INCEPTION BATTERY MODULE

HIGH POWER IN A SMALL PACKAGE

Inception is a cutting-edge battery module that provides reliable high power charge and discharge whilst meeting the highest safety levels, thanks to immersion cooled technology. Developed by Ricardo and our partner organisations, applications include aerospace, maritime and high performance and energy systems requiring a lightweight high-power source or mobile recharging unit.



Member of WSP



FEATURES

- Immersion cooling technology and battery module capable of **discharging at 12C** and **charging at 5C**.
- Modules can be arranged in series and in parallel to suit platform requirements.
- High integrity (ASIL C) BMS
- ISOSPI communication between module and BMS Battery Control Module
- Active cell balancing
- Fluid leak detection

PROTECTION FUNCTIONS

- Over- and under-voltage for every cell array in parallel
- Over- and under-temperature across cell rows
- Dedicated venting valve



[RICARDO.COM/INCEPTION](https://ricardo.com/inception)

END-TO-END DESIGN, DEVELOPMENT AND MANUFACTURE OF BATTERY SYSTEMS

Our experts can support you with bespoke design and development capabilities for a wide range of applications, including:

- Bespoke battery module and pack design
- Cost and supply chain optimisation
- Battery Management Systems
- Traction inverters and electric motors
- Fuel Cell Systems
- DC/DC Power Converters
- Charging Systems and On-Board Chargers

INFO@RICARDO.COM