



EMISSIONS



ELECTRIFICATION



CAV



DATA

EVALUATOR B

Solutions for Battery Development, Testing and Validation

In response to the growing need for precise development and validation of high-performance batteries and hybrid systems, HORIBA offers the Battery Evaluator, a solution tailored to meet the demanding requirements of battery development and testing with high accuracy and adaptability.

The Battery Evaluator B series is optimized for testing batteries of various technologies and can be tailored to suit your specific testing needs and applications, thanks to its modular design and advanced safety features.

Our comprehensive solutions integrate a diverse array of equipment and technologies, facilitating centralized, user-friendly preparation, execution, and evaluation of complex tests. Whether analyzing durability and capacity under diverse environmental conditions or assessing battery degradation and driving cycles, our Battery Evaluator ensures precise and reliable results.

FEATURES

- Customized charge-discharge units up to 1,500 A / 1,500 V / 1,000 kW
- Integration of climate chambers, chillers and other customer devices
- Full flexibility with powerful STARS software
- Outstanding accuracy and resolution for R&D application

GENERAL FACTS	
INTEGRATION	Overall safety concept with event handling Fail safe PLC control
SOFTWARE & AUTOMATION	STARS Automation Unattended 24/7 operation Real time system Remote interface
DATA LOGGING	Central data handling with sampling rates up to 1 ms Flexible data log configurations Flexible data export

ELECTRICAL SPECIFICATIONS	
CURRENT	Up to 1,500 A High dynamic current slew rates
VOLTAGE	Up to 1,500 V 4 quadrants operation with 0 V option
POWER	Up to 1,000 kW & overload of 30 to 50% Grid feedback, up to 95% efficiency Multi-Channel configuration with load management
IMPEDANCE	Integrated measurement under load up to 500 A/100 kHz

INTERFACES / DATA ACQUISITION	
EXECUTION	Mobile, measure gallow, control cabinet
CONNECTIVITY	Measuring of temperature, voltage, current Different accuracy, measuring range and measurement data acquisition rates with EtherCAT support Control functions via analog and digital in- and output
CAN GATEWAY	Test item interface with real time CAN interface and terminal control

TESTING CABINET	
ENVIRONMENTAL SIMULATION	Thermal or climate chamber according to EUCAR Hazard levels Out/Indoor container installations
SAFETY FEATURES	High Voltage protection concept and touch proof design Door monitoring and close mechanism Exhaust gas handling and monitoring Inerting systems and fire fighting systems
CHILLER	Battery cooling systems in different configurations for multiple channels and medias

TESTING	
PERFORMANCE TESTS	Capacity test Internal resistance and pulse power test Adjusting the SOC Lifecycle and endurance test for accelerated aging Driving cycle test
ENVIRONMENTAL SIMULATION	Temperature shock test Humidity and corrosion test Dust test Vibration and shock test

SAFETY	
CE CONFORMITY MARKING (ACCORDING TO)	EMC directive 2014/30/EU Low voltage directive 2014/35/EU ATEX directive 2014/34/EC General product safety directive 2001/95/EC Machinery directive 2006/42/EC Pressure equipment directive 2014/68/EU
RISK ASSESSMENT	DIN EN ISO 13849 DIN EN ISO 12100

HORIBA provides advanced mobility leadership and comprehensive engineering and measurement expertise to support the gradual shift from traditional propulsion, to fully electrified solutions.

horiba.com

THE HORIBA GLOBAL NETWORK

ASIA

HORIBA Ltd.
2 Miyanohigashi
Kisshoin Minami-ku
Kyoto, Japan
info@horiba.co.jp

EUROPE

HORIBA Europe GmbH
Hans-Mess-Straße 6
61440 Oberursel
Germany
info.he@horiba.com

THE AMERICAS

HORIBA Instruments Inc.
5900 Hines Drive
Ann Arbor, MI 48108
USA
sales-ats.us@horiba.com

