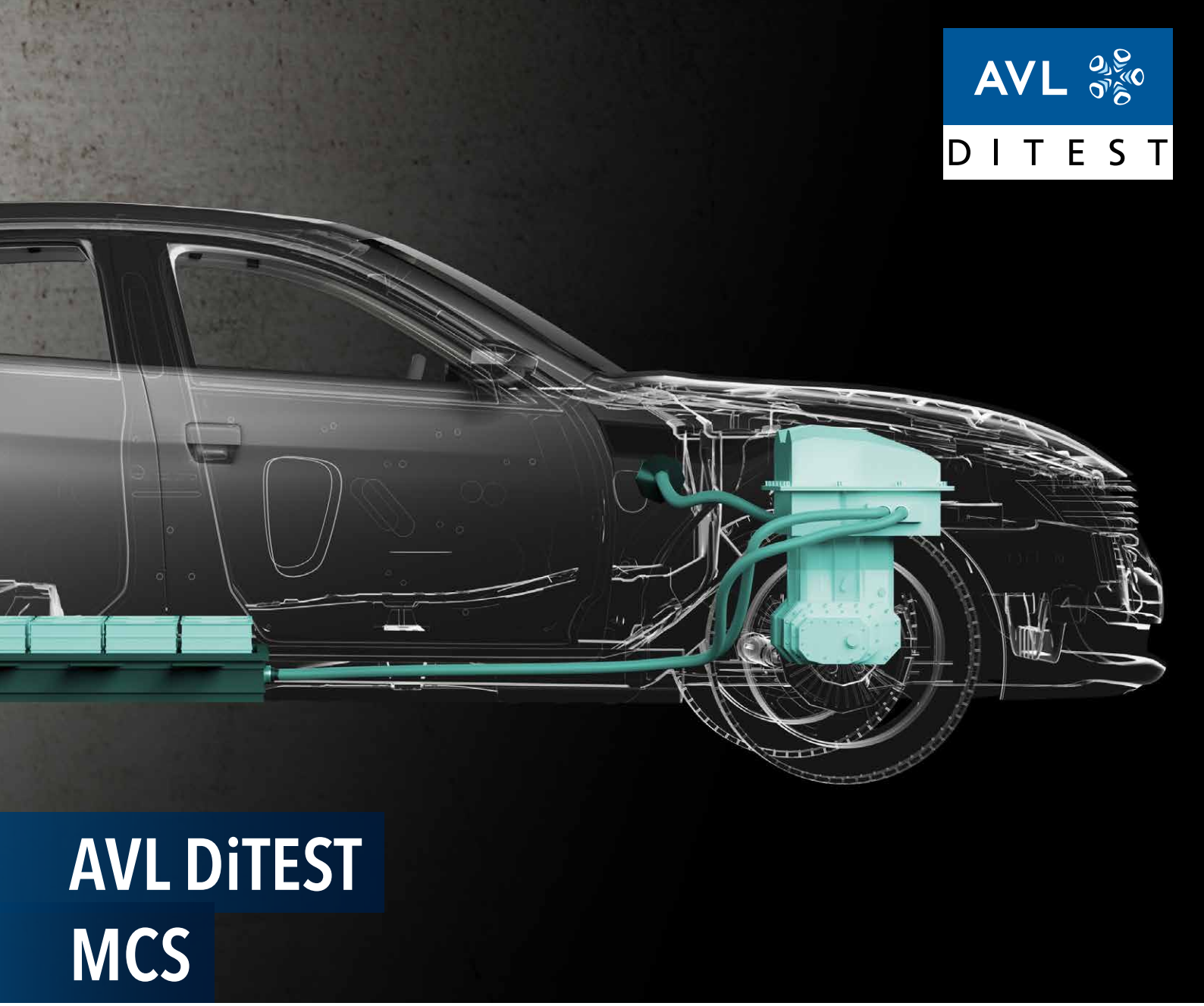


AVL DiTEST MCS

AVL DiTEST Module Conditioning System – MCS – is a service equipment for conditioning individual modules of the traction battery. You can use it locally in your workshop. When the module in a Lithium-Ion traction battery gets defective and needs to be replaced, it is first necessary that you identify it and then remove it. Before you install a new module in the battery pack, you have to adapt the SOC (State Of Charge) of the new module according to the SOC of the remaining, healthy modules in the battery. This process of conditioning the new module is important for the proper functioning of your traction battery pack. If the SOC level of the new module is significantly different to the remaining modules, the BMS (Battery Management System) will not activate the battery.

AVL DiTEST MCS

Workshop-optimized tool for charging and discharging battery modules

YOUR BENEFITS

- Safe operation
- Process-controlled charging function
- Intuitive operator guidance
- Free adjustable target voltage
- Intelligent contact detection
- Reverse polarity protection
- Module types parametrizable with extensive protection functions
  - Voltage limits
  - Temperature-dependent power limits
  - Module-specific cable recognition

MODULES USING ANALOG INTERFACE

- Single cell voltage measurement (maximum 13 cells)
- Temperature measurement using the temperature sensors in the module
- Cell balancing

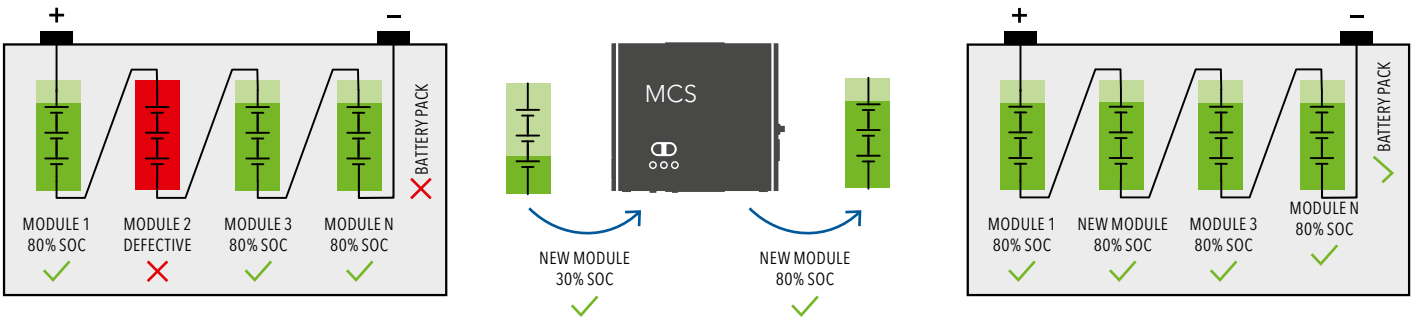
MODULES USING DIGITAL INTERFACE

- CAN or SPI interface
- Module control
- Configuring module parameters
- Supply of the module controller
- Reading parameters such as voltage, current and temperature

SOFTWARE AND USER INTERFACE

- Fully integrated and controlled via pathfinder
- Reconnect-enabled, charging/discharging continues autonomously

STEP 1
Identify defective module using AVL DiTEST DCIR probe tool and remove it

STEP 2
Bring new module from warehouse and condition it to same SOC as other modules using MCS

STEP 3
Install new module in the battery pack