



CUSTOMER STORIES

SENSORS PERFORMING MULTIPLE FUNCTIONS HELP OEM'S OPTIMIZE THEIR BATTERY MANAGEMENT SYSTEMS



More functionality in smaller spaces with help from our IVT Series

CHALLENGE

CHALLENGE 1 / *Customers need to monitor multiple parameters in modern BMS to track the active or passive balancing of the individual lithium-ion cells and the calculation of the battery diagnostics parameters of the traction batteries state of charge, state of health and state of function. Determining the state of charge requires a particularly precise and high-resolution total current measurement.*

CHALLENGE 2 / *The development of higher energy densities in lithium-ion technology is leading to ever-increasing system voltages which require higher isolation voltage ratings of components with a low side interface.*

SOLUTION

SOLUTION 1 / *Isabellenhütte's IVT Series are highly integrated sensors that not only capture the raw data for current, voltage and temperature measurement, but also meter the power, energy and ampere-hours on the software side as integrated values. These values are conveniently transmitted via a CAN interface to the battery management system.*

SOLUTION 2 / *Our IVT Series provides permanent galvanic isolation of 1,000 V DC to cover these requirements*