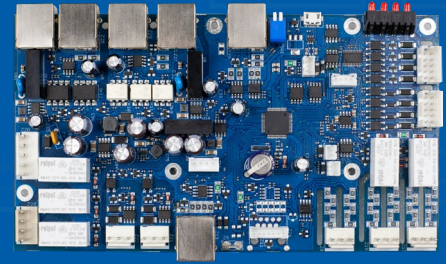


TECHNICAL SPECIFICATION

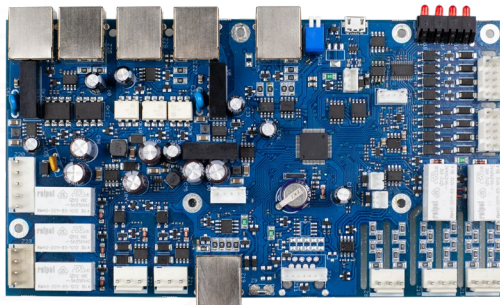
BMS (BATTERY MANAGEMENT SYSTEM)



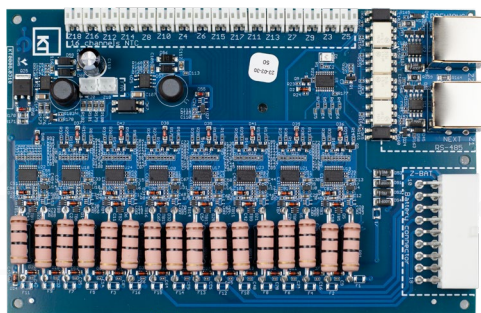
FEATURES

The system consists of Master and Slave modules. The Master module manages the entire energy storage system and communicates with other Slave modules through an optically isolated communication bus. The system communicates with any external supervisory system (management/control/monitoring/SCADA systems). It provides various communication interfaces, including Modbus RTU (RS232/485) and CAN. The SLAVE module is equipped with cell voltage and temperature measurement capabilities. It also features an active or passive balancing system based on a DC/DC converter.

PHOTOS

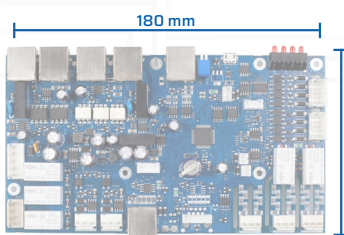


MASTER

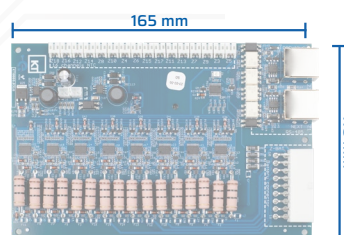


SLAVE

DIMENSIONS



MASTER



SLAVE

BMS SYSTEM TECHNICAL SPECIFICATION

MASTER

Supply voltage range:	11-36 VDC
Maximum battery voltage:	980VDC
Maximum number of cells: (series system):	196
Voltage measurement accuracy:	+/- 1V
Current measurement range:	- 200 to 200 A
Working mode power consumption:	+/- 0,1 A
Working mode power consumption:	7,2W
Standby mode power consumption:	0,2 W
Operating temperature:	- 40°C to 85°C
Communication interfaces:	CAN & RS485
Communication protocols:	CAN, MODBUS RTU

SLAVE

Single cell voltage range:	1,00 - 4,95 V
Balancing current:	< 500 mA
Single cell voltage measurement accuracy:	+/- 0,05 V
Standby mode current consumption:	100 uA
Working mode current consumption:	12mA
Operating temperature:	- 20°C to 85°C
Cell voltage sampling time:	0,1s

The user access application enables full self-configuration of the BMS system by the user, for the used battery/cell type.