



MSB-1

BATTERY MONITORING INTERFACE



APPLICATION

- » battery string voltage measurement, up to 24 single 2 V chain links or 4 V, 6 V, 12 V monoblocks

FEATURES

- » co-operation with remote monitoring systems
- » galvanic separation
- » accuracy and reliability

COMMUNICATION

- » RS-485 communication with MSU2 or MRS monitoring controller

CONSTRUCTION

The construction of module allows easy installation in device with DIN35 bus.

DESCRIPTION

The MSB-1 interface is adapted for co-operation with MSU2 or MRS controller.

It is used for battery string voltage measurement, up to 24 single 2 V chain links or 4 V, 6 V, 12 V monoblocks.

The choice between monitored batteries type (voltage) is made at the configuration stage.

The MSB-1 module has 2 additional universal analogue inputs that can be used for:

- » measuring current value and direction using external Current Transformer - CT,
- » measuring voltage value in 0...5 VDC range,
- » measuring temperature value (using 1-Wire temperature sensor connected to input, configured as digital).

Nominal supply voltage	48 VDC
Voltage supply range	38 ÷ 58 V
Max power consumption	3 W
Number of measuring channels	27
Battery voltage measurement range (1 channel)	0 ÷ 18 V
Universal inputs voltage range	0 ÷ 5 V
Voltage measurement accuracy	1%
Current measurement range (external transformer)	dependant on transformer used
Current measurement accuracy	1%
Communication bus	RS-485 (full duplex)
Maximum transmission speed	115,2 kb
RS-485 impedance	120Ω
Max RS-485 length	100 m
RS-485 bus connector	2 x RJ45
Temperature measurment range	-55 ÷ +125°C
Temperature measurement accuracy	±0,5°C (in range -10 ÷ +85°C)
1-Wire temperature sensor bus	2-wire (parasite)
Ambient temperature	-20 ÷ +50°C
Permissible relative humidity	90%
International Protection Rating	IP20
Connector type	3,81 mm connector
Dimensions (L x H x D)	95 x 87 x 58 mm
Weight	100 g