



## FlexMeasure-M

[www.star-cooperation.com](http://www.star-cooperation.com)

### BENEFITS

- Current and voltage measurement up to 1000A and 800V
- Measuring value output via CAN, PWM and analog outputs
- Direct measuring value display and value output on CAN

### MEASURING OF VOLTAGE AND CURRENT IN HIGH-VOLTAGE RANGE

The FlexMeasure-M was designed especially for use in high-voltage test benches. Due to a high-performance shunt, it is enabled to permanently measure currents of 500A.

Within the device, Rosenberger HVR200 box headers are installed as the standard for connecting the high-voltage lines. These limit the maximum continuous current to 230A via the patch plugs. However, higher currents are possible for a short period of time (<10 sec).

Device-relatedly, currents of up to 1000A are possible for a maximum of 5 minutes due to corresponding contacting or patch plug dimensioning.

The measured current and voltage values are shown on a display on the device's top face. Furthermore, the measuring values are exported via a CAN and PWM interface as well as via analog outputs.

The standard dbc file for configuration is included. The CAN's default Baud rate amounts to 500kbit/s.

# FlexMeasure-M

## APPLICATIONS

- Measuring of current and voltage by flexible integration in existing high-voltage networks in test benches
- Measuring in hybrid and electric vehicles
- Long-term monitoring of fuel cells and charge columns
- Typical fields of application are e.g. air-conditioning compressor, on-board charger, high-voltage batteries

## CHARACTERISTICS

- Measuring value output: -10 V to +10 V analog/CAN/PWM
- Analog outputs for current and voltage measuring values: 1x BNC and LEMO 2-pole each
- CAN interface on D SUB-9 patch plug
- PWM interface on LEMO 4-pole
- Station supply 5W max
- Transmission up to 100kHz
- Varying high-voltage hitches can be fitted to the FlexMeasure-M on demand.

## ORDER NUMBER

- 70006522 (with HVR200 patch plugs)

## SCOPE OF DELIVERY

The following components are supplied with the FlexMeasure-M:

- Connector cable voltage supply
- Connector cable PWM output/current/supply
- Connector cable CAN bus
- Test record

Optional:

- Adapter cable set; individual software functions; high-voltage patch plugs

Please include your individual demands in your query.

## TECHNICAL DATA

	FlexMeasure-M
Supply voltage	9 V...27 V (DC)
Measuring output voltage	-10 V... 0 V... 10 V
Voltage measuring range	-800 V ... +800 V (DC)
Maximum permissible voltage standard patch plug	600 V (DC)
Continuous current with standard patch plug	max. 230 A
Maximum permissible continuous current measuring shunt	500 A
Maximum permissible current (t<5min) measuring shunt	1000 A
Precision at 25°C	< ±1 %
Linearity error	< ±0,5 %
Ambient temperature	-20°C...+60°C (*)
Cutoff frequency	100 kHz
Metal casing dimensions (L x W x H) in mm	227 x 267 x 110
Interfaces:	analog
Outputs	CAN PWM

The output PWM signal has a voltage lift of 5 V. In this, 50 % duty cycle corresponds to a measuring value of 0A. For negative measuring values, the duty cycle is <50%; for positive measuring values, the duty cycle is >50%.

The analog interfaces has a 10 V output lift:

- 0 V output voltage corresponds to 0 V measuring value.
- - +10 V output voltage corresponds to +800 V measuring value.