



## FlexMeasure-S

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

The measuring module serves to measure current and voltage in high-voltage cable sets in motor vehicles. Because of the measurement range and the option to connect two-core HV cable sets, Flex-Measure S is used in particular for auxiliary unit cable sets. Typical device models are designed for power ranges up to 25 A/50 A or 80 A and/or voltage ranges up to 400 V/800 V or 1,000 V. Because of the internal construction of the measuring board, special individual variations are also possible and can be quickly implemented. A galvanically separated measured value is provided as an analog voltage value of 0... +/- 10 V, where 10 V is the final value of the nominal measurement range. Beyond nominal measurement, an initial value which is 20% higher is possible to also permit coverage of maximum values. The measuring module can be shipped with an individual HV cable set for direct vehicle application. The HV measurement including protocol as well as calibration is then directly carried out using the HV cable set. Via a high-quality screw connection, the HV cable set is connected on both sides to the aluminum housing, and the screen is connected for HF.

### VORTEILE

- Current measurement: 25 A/50 A or 80 A
- Voltage measurement: 400 V/800 V or 1,000 V rated voltage
- Galvanic separation in the device, analog measuring port
- Cut-off frequency current measurement 200 kHz
- Can be directly shipped with HV cable set for auxiliary units
- Individual models and modifications of the measurement ranges are possible

# FlexMeasure-S

## FIELDS OF APPLICATION

- Current and voltage measurement for auxiliary units in the field of motor vehicle HV
- Test benches and trial vehicles
- EMC tests of HV cable sets

## PROPERTIES

- Nominal current measurement range depending on model 25 A/50 A/80 A (other special models possible)
- Nominal voltage measurement range depending on model 400 V/800 V/1,000 V (other special models possible)
- Measuring ports 0... +/- 10 V
- Cut-off frequency current measurement 200 kHz, cut-off frequency voltage measurement 100 kHz
- Galvanic separation of the sensed measured values from the HV range
- HV approval protocol and calibration protocol
- 2x TEDS chip for individual recording of data
- Blueglobe® cable screw connection for optimal HV cable and screen connection\*
- HV interfaces based on an individual, dual-side, two-core HV cable
- Grounding bolt M6

\*blueglobe® is a registered trademark of PFLITSCH GmbH & Co KG

## SCOPE OF SUPPLY

- HV measuring module as per the different models
- HV test protocol
- Calibration protocol for plant calibration

## ACCESSORIES (OPTIONAL)

- Connecting cable for measuring port voltage measurement
- Connecting cable for measuring port current measurement

## TECHNICAL DATA

### Model 1,000 V/50 A

Supply voltage	9...16 V
Current consumption	max. 100 mA
Housing	Aluminum housing, similar to RAL2003 orange
Dimensions	Approx. 125 x 80 x 60 mm
Ambient temperature operation	-40°C bis +85°C
Protection class	IP 65
Suitable cable diameters	5-14 mm

### Voltage Measurement (Output 1)

Nominal measurement range	0 ... ±1.000 V
Expanded measurement range	Approx. 20 % of the nominal measurement range (not calibrated)
Cut-off frequency	100 kHz
Accuracy	Better than ±1% @ rated voltage, 25°C
Outlet measurement signal	0 ... ±10 V @ 0 ... ±1.000 V
Measuring port	10-pole LEMO socket HGG.1B.310.CLNDV for voltage supply, measuring port signal "voltage", and TEDS

### Current Measurement (Output 2)

Nominal measurement range	0 ... ±50 A (Sensor ±150 A)
Expanded measurement range	Approx. 20 % of the nominal measurement range (not calibrated)
Cut-off frequency	200 kHz (+/-1 dB)
Accuracy	Better than ±1% @ rated voltage, 25°C
Outlet measurement signal	0 ... ±10 V @ 0 ... ±50 A
Measuring port	10-pole LEMO socket HGG.1B.310.CLNDV for voltage supply, measuring port signal "current", and TEDS