DC Voltage Measuring Amplifier with Data Logger   GM80-PA

- ❍ Data Logger up to 3000 Meas. Values
- ❍ Bus-Capable and Addressable RS232
- ❍ 3 Trigger Inputs for External Control
- ❍ Fast Measurement up to 1000/s
- ❍ 10 Sensor Parameter Sets
- ❍ Active or Passive Sensors
- ❍ Display of Physical Unit
- ❍ Min.-Max. Memory
- ❍ Fast Limit Values
- ❍ Time and Date

Description

The GM80-PA processes strain gauge signals from sensors of ±3.3 mV/V and active signals of ±5V and 0/4 .. 20 mA.

A high measuring accuracy combined with fast measuring rates is ensured by the employment of highly precise amplifiers and components, 16 Bit A/D converter and a fast µ-controller.

A versatile configurable data logger stores a series of measurements with date and up to 3000 measured values.

Measured values or logging values can be expelled to a computer by the RS232 interface.

10 parameter sets are available for sensors. Therein, in each case, the calibration data, the sensor designation and physical unit are deposited.

Functions such as tare, fetch Min.-Max., and delete Min.-Max. are available during the measurement.

By 3 optocouplers control inputs functions such as data logging, issue of interface, delete buffer, tare or second limit value set can be addressed externally.

By most modern Photo MOS relays, fast switching times and high life spans at the limit values are ensured.

Specifications

		GM80-PA
Art.-No.		107542
Supply voltage	VDC	16 .. 30
Current consumption	mA	≤250 (at 16V)
Measuring accuracy	% f. s.	0.1 ±1 digit
Measuring rate adjustable	/s	1 / 10 / 100 / 1000
Display rate	/s	5
Display scope		±9999 +3 digits for unit
Zero point adjustment		Automatic / by hand
Sensor parameter sets		10
Logger mode		Window, Graph., Hand, Auto
Memory values		Max. 3000
Switching current / voltage limit values		400 mA / 60V
Switching time	ms	≤3
Transfer RS232	Baud	2400, 4800, 9600, 19200, 38400, 115200
Addressable devices		1 .. 16
Bridge resistance of strain gauge	Ω	350 .. 2000
Input sensitivity passive	mV/V	±3.3
Input sensitivity active	V	±5
Input sensitivity current	mA	0/4 .. 20 on 75 Ω burden
Current connection		2 or 3 conductor technique
Excitation voltage passive / active		5V, 20 mA / 12V, 100 mA
Nominal temperature range	°C	15 .. 35
Service temperature range	°C	5 .. 45
Storage temperature range	°C	-10 .. 70
Dimensions (L x W x H)	mm	144 x 72 x 120
Weight	g	500
Housing color		Black
Level of protection (DIN VDE 0470)		IP40

Option/ Accessory

Art.-No.	Type	Description
115134	mV/V/±10V/0/4...20mA	Adjustment amplifier with simulator
113259	GM80/D-SUB	RS232 D-SUB extension, 1:1, 1.8 m, with 9-pin connector and female connector
109629	GM80/USA-19HS	RS232 - USB serial interface, 1 m
106986	GM80/KIT	Complete set of mating connectors

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Configuration and Evaluation Software | GM80-VS2 |

○ Comfortable Configuration and Evaluation Software

○ Graphical Presentation

○ Automatic Scaling of Y-axis

○ Reading of the Data logger

○ Automatic Storage of the Measured Values as CSV or BMP-File
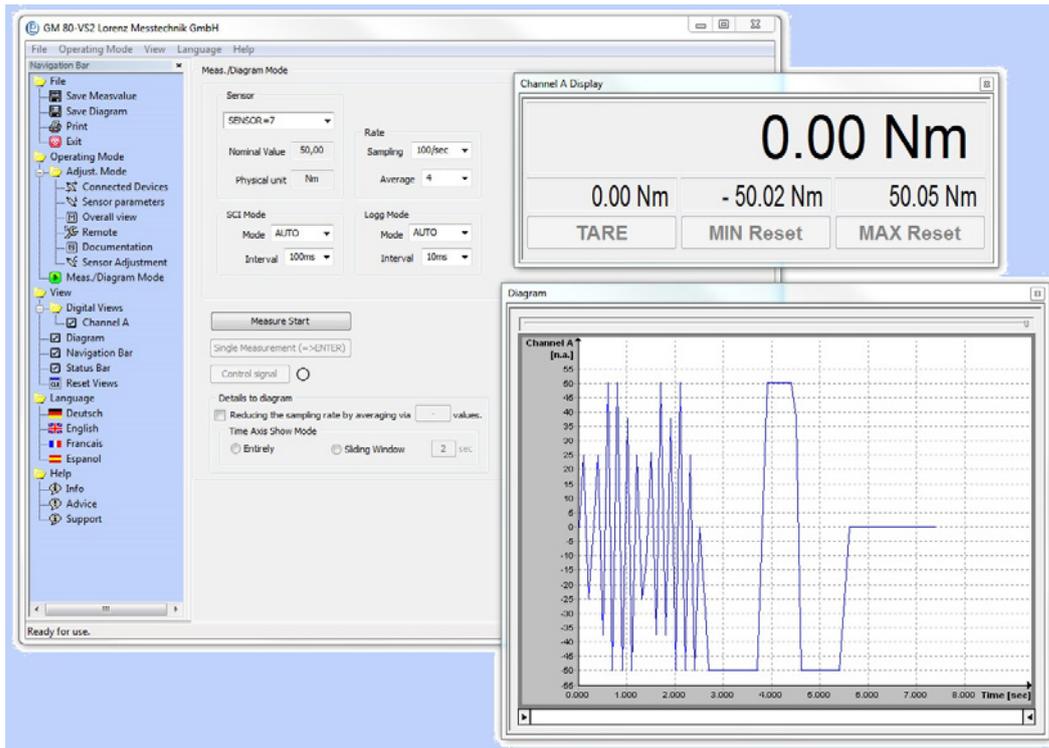
Description

Configuration and evaluation software for analysis and graphical presentation on a PC.

The software allows direct read-in of measured data into a text file in CSV-Format through the serial port of a PC. This enables further analyses with a commercially available spreadsheet program at any time.

Specifications

	GM80-VS2[1]
Interface	RS232 / USB
Protocol	ASCII based
System requirements	Windows® '03/ '08/ Vista/ 7/ 8/ 10 32/64 Bit[2] Dual-Core ab 1.8 GHz (with diagram) RS232 interface

Conversion in physical variables	Supported in the device
Graphical presentation of the measured variables	✓
Automatic or manual storage in a CSV or BMP-file	✓
Print-out of the diagram with date and definable headline	✓
Scaling function of the input variable to any display value with unit	✓
Resettable minimum value memory for any measured variable	✓
Resettable maximum value memory for any measured variable	✓
Variable average determination	Supported in the device
Tare for each measured value	✓

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[1] Software/driver download: www.lorenz-sensors.com.

[2] Windows® is either a registered brand or brand of the Microsoft Corporation in the USA and/or other countries.

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