

DC Voltage Measuring Amplifier with Data Logger

GM 80-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 GM 80-PA processes strain gauge signals from sensors of ± 3.3 mV/V and active signals of ± 5 V 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.

TECHNICAL DATA

Type	GM 80-PA	
Art.-No.	107542	
Supply Voltage	16...30 V DC	
Current Consumption	≤ 250 mA (at 16 V)	
Measuring Accuracy	% f. s.	0.1 \pm 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	400 mA / 60 V	
Values		
Switching Time	≤ 3 ms	
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	5 V 20 mA / 12 V 100 mA	
Nominal Temperature Range	$^{\circ}\text{C}$	+15...+35
Service Temperature Range	$^{\circ}\text{C}$	+5...+45
Storage Temperature Range	$^{\circ}\text{C}$	-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
110564	mV/V	mV/V adjusted sensitivity
113259	GM 80/D-SUB	RS232 D-SUB extension, 1:1, 9-pin, connector/female connector, 1.8 m
109629	GM 80/USA-19HS	RS232 - USB serial interface, 1 m
106986	GM 80/KIT	Complete Set of Mating Connectors
109016	GM 80-TG/-PA-VS	Measuring- and Evaluation Software