## DC Voltage Measuring Amplifier with Data Logger

**GM 80-TG** 

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



## **DESCRIPTION**

The GM 80-TG 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 converters 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-TG			
<b>ArtNo.</b> 107541			
Supply Power Supply <sup>1</sup>		100240 V AC	
Output Power Supply		24 V DC 1.25 mA	
Supply voltage GM 80-TG		1630 V DC	
Current Consumption		≤250 mA (at 16 V)	
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 / 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		116	
Bridge Resistance of Strain Gauge	Ω	3502000	
Input Sensitivity Passive	mV/V	±3.3	
Input Sensitivity Active	V	±5	
Input Sensitivity Current	mA	0/420 on 75 Ω Burden	
Current Connection		2 or 3 Conductor Technique	
Excitation Voltage Passive / Active		5V 20mA / 12V 100mA	
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	White		
Level of Protection		IP40	

## **Option/ Accessory**

ArtNo.	Туре	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	

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Power Supply in scope of delivery