

Measuring Amplifier with Data Logger

Typ GM 80-TG

- 3 Trigger Inputs for External Control
- Bus-Capable and Adressable RS232
- Data Logger up to 3000 Meas. Values
- Fast Measurement up to 1000/s
- Active or Passive Sensors
- Display of Physical Unit
- 10 Sensor Parameter Sets
- Current Input 4...20 mA
- Fast Limit Values
- Min.-Max. Memory



DESCRIPTION:

The GM 80-TG processes strain gauge signals from sensors of 0.35...3.3 mV/V and active signals of 0...±1 V...0...±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 datalogger 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 opto couplers 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
Art. No.		107541
Supply (Plug-In Power Supply)		90...264 V AC
Output (Plug-In Power Supply)		24 V DC 250 mA
Power Supply GM 80-TG		16...30 V DC
Current Consumption		max. 250 mA (bei 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 / by hand
Sensor Parameter Sets		10
Logger Mode		Window, Graph, Hand, Auto
Memory Values		max. 3000
Switching Current / Switching Voltage		400 mA / 60 V
Limit Values		
Switching Time		max. 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	0.35...3.3
Input Sensitivity Active	V	0...±1...0...±5
Input Sensitivity Current	mA	0/4...20 on 75 Ω Burden
Current Connection		2 or 3 Conductor Technique
Excitation Voltage Passive / Active		5V 20mA/12V 100mA
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 Colour		White
Level of Protection (DIN VDE 0470)		IP 40

Accessories	Art. No.	Function
GM 80/KIT	106986	Complete Set of Mating Connectors
GM 80/NEUT	106983	Neutral Design
GM 80/TG/VS	109016	Measuring- and Evaluation Software

Tested USB-Adapter:
- KEYSpan USA-19HS
- QUATECH SSU-100/DSU-100