



## Measuring Amplifier-Display-Logger-Device

**Type GM 80**

- Mains-, Battery-, Accumulator Operation
- Trigger Input for external Controlling
- Fast Measurement up to 1000/s
- Current Input 4...20 mA
- Data Logger up to 3000 Values
- Display of the Physical Unit
- 10 Sensor Parameter Sets
- Time and Date
- Active or Passive Sensors
- Min.-Max. Memory
- RS232 Interface



### DESCRIPTION:

The GM 80 is mobile applicable by battery or accumulator operation, but it can also be supplied with an external power pack.

A high measuring accuracy, combined with fast measuring rate, is ensured by utilization of highly precise amplifiers and components, 16 Bit A/D converter and a fast  $\mu$ -controller.

A versatile configurable datalogger can store a series of measurements with date and up to 3000 measured values, as well.

By the RS232 interface, measured values or logging values can be expelled to a computer or a printer.

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, call up min./max. and delete Min.-Max. are available during the measurement.

By an additional trigger input, the data logger or the interface can be controlled externally.

If the GM 80 is not operating in the measuring mode, it will automatically switch-off after 5 min. Also the SG-supply at slow measuring rates is clocked current-saving.

### TECHNICAL DATA:

Type	GM 80	
Art. No.	106781	
Measuring Accuracy	f.s.%	0.1 $\pm$ 1 digit
Meas. Rate adjustable	/s	1 / 10 / 100 / 1000
Display Rate	/s	5
Display Scope		$\pm$ 9999 +3 digits for unit
Zero Point Adjustment		Automatic / by hand
Sensor Parameter Sets		10
Logger Mode		Window, diag., hand, auto
Memory Values		max. 3000
Bridge resistance of the SG	$\Omega$	350...2000
Input sensitivity passive	mV/V	0.35...3.3
Input sensitivity active	V	0... $\pm$ 1...0... $\pm$ 5
Input sensitivity current	mA	4...20 on 75 $\Omega$ Burden
Sensor connection		2 or 3 wire
Excitation voltage sensor		5 V 20 mA / 12 V 100 mA
Operation Time at 50% ED		
With Accus (4 x Mignon >2000 mAh)	h	>20
With Batteries	h	>30
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	200 x 100 x 40
Weight	g	500
Level of Protection (DIN VDE 0470)	IP 40	

Accessories	Art. No.	Function
GM 80/AK	106782	Accu Set: 4 x Mignon 1.2 V >2000 mAh
GM 80/NT	106864	Plug-In Power Supply for Mains Operation and Accu Charging
GM 80/DR	106982	Printer, directly connectable to the GM 80 RS232
GM 80/TR	106984	Trigger Cable 3 m free soldered ends
GM 80/SCI	106985	RS232 Interface Cable to SUB-D 9-pin
GM 80/KIT	106986	Complete Set of Mating Plugs
GM 80/NEUT	106983	Neutral Design
GM 80/VS	109017	Measuring- and Evaluation Software

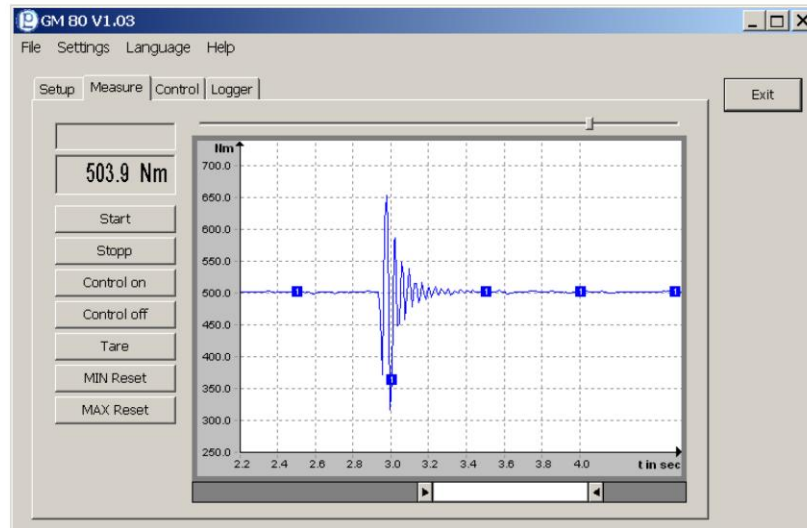
Tested USB-Adapter:  
 - KEYSpan USA-19HS  
 - QUATECH SSU-100/DSU-100



## Measuring- and Evaluation Software

### Type GM 80-VS

- Graphical Presentation
- Adjust and Control GM 80
- Automatic Scaling of Y-Axis
- Data Logger



#### DESCRIPTION:

Measuring- and evaluation-software for easy evaluation and graphical representation on a PC.

The GM 80-Software enables the direct input of measured data into a text file in CSV-format via a serial interface. Files in the CSV-format can be read-in directly into Excel®.

With the GM 80-Software the data logger of the GM 80 can be read and saved in a text file in CSV-format.

The configuration and reading of system parameters of the GM 80 can be effected by the evaluation-software.

#### TECHNICAL DATA:

Type	GM 80-VS
Art. No.	109017
Interface	Serial Interface on USB Adapter
Protocol	GM 80
Meas. Rate 1-Channel	max. 100 Meas./s (Instant graphical presentation, PC-depending)
Long Term Measurement	(With instant graphical presentation)
Channels	1-Channel
System Requirements	Win2000® and higher Serial Interface P3 500 MHz USB for extended version

	Standard Version	Extended Version
Send PC Time to GM 80		✓
Write Measurement Data into a File		✓
Write Logger Data into a File		✓
Graphical Presentation	✓	✓

Tested USB-Adapter:

- KEYSPAN USA-19HS
- QUATECH SSU-100/DSU-100

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