

## Amplifier with data logger

**Type GM 80 - PA**

- 3 trigger inputs for external control
- Fast measurement up to 1000/s
- Data logger up to 3000 values
- 10 sensor parameter sets
- Active or passive sensors
- Addressable RS 232 bus
- Min.,- Max. memory unit
- Current input 4 ...20mA
- Display of physic. unit
- 2 fast setpoints



### DESCRIPTION:

The GM80-PA is able to process strain gauge signals with 0,35-3,3mV/V and active signals from 0-1V to 0-5V and 0/4-20mA from sensors.

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

A versatile configurable data logger can store up to 3000 measurement values.

Measured values or logging values can be expelled by the RS-232 interface to a computer.

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

Functions such as tare, call up 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 span are ensured at the setpoints.

### TECHNICAL DATA:

<b>Type</b>	<b>GM 80 - PA</b>
<b>Art. no.</b>	107542

Excitation voltage		16 -30V DC
Current consumption		max. 250mA (at 16V)
Measuring accuracy	v.E.%	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
Current on contact/ tension setpoints		400mA / 60V
Switching time		Max. 3ms
Transmittal RS 232	Baud	2400, 4800, 9600, 19200, 38400, 115200
Addressable devices		1 - 16
Bridge resistance of the strain gauge	$\Omega$	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	0/4 ..20 on 75Ohm burden
Current connection		2 or 3 conductor technique
Excitation voltage passive / active		5V 20mA / 12V 100mA
Nominal temperature range	$^{\circ}$ C	+15... +35
Service temperature range	$^{\circ}$ C	+5... +45
Storage temperature range	$^{\circ}$ C	-10... +70
Dimensions (L x W x H)	mm	144 x 72 x 120
Weight	g	500
box colour		white
Level of protection (DIN VDE 0470)		IP 40

Accessories	Art. no.	Function
E-GM80/KIT	106986	Complete set of mating connectors
E-GM80/NEUT	106983	Neutral design