



GMH 3161-002

Product-ID: 600469
Device -500.0 ... +500.0 Pa (± 500.0 Pa *)

GMH 3181-002

Product-ID: 600470
Device -500.0 ... +500.0 Pa (± 500.0 Pa *), Logger

Specifications:	
Measuring range:	-500.0 ... +500.0 Pa (-5.000 ... +5.000 mbar)
Overload:	max. 250 hPa (mbar)
Resolution:	0.1 Pa (0.001 mbar)
additional pressure units:	kPa, PSI, mmHg, mH ₂ O
Accuracy: (typ. values)	
hysteresis and linearity:	0.3 %
temperature-influence from 0-50 °C:	0.4 %
Option higher accuracy available:	no
Pressure connection:	2

For type specific data please refer to page 65.
*1 measuring range possible by changing the pressure connection ports
*2 without changing the pressure connection ports



GMH 3161-01

Product-ID: 600397
Device -100 ... 2500 Pa (± 2500 Pa *)

GMH 3181-01

Product-ID: 600411
Device -100 ... 2500 Pa (± 2500 Pa *), Logger

Specifications:		
	... - 01	... - 07H
Measuring range:	-100 ... 2500 Pa (-1.00 ... 25.00 mbar)	-1.00 ... +70.00 mbar
Overload:	max. 100 mbar	max. 1000 mbar
Resolution:	1 Pa (0.01 mbar)	0.01 mbar
additional pressure units:	bar, kPa, PSI, mmHg, mH ₂ O	bar, Pa, kPa, PSI, mmHg, mH ₂ O
Accuracy: (typ. values)		
hysteresis and linearity:	± 0.3 % FS	± 0.1 % FS
temperature-influence from 0-50 °C:	± 0.4 % FS	± 0.4 % FS
Option higher accuracy available:	no	already integrated
Pressure connection:	2	

For type specific data please refer to page 65.
*1 measuring range possible by changing the pressure connection ports



GMH 3161-07

Product-ID: 600400
Device -10.0 ... +350.0 mbar (± 350.0 mbar *)

GMH 3181-07

Product-ID: 600413
Device -10.0 ... +350.0 mbar (± 350.0 mbar *), Logger

Specifications:		
	... - 07	... - 07B
Measuring range:	-10.0 ... +350.0 mbar	-10.0 ... +420.0 mbar (-7.5 ... 315.0 mmHg)
Overload:	max. 1 bar	max. 1 bar
Resolution:	0.1 mbar	0.1 mbar (0.1 mmHg)
additional pressure units:	bar, kPa, MPa, PSI, mmHg, mH ₂ O	bar, kPa, MPa, PSI, mH ₂ O
Accuracy: (typ. values)		
hysteresis and linearity:	± 0.2 % FS	± 0.1 % FS
temperature-influence from 0-50 °C:	± 0.4 % FS	± 0.4 % FS
Option higher accuracy available:	yes	already integrated
Pressure connection:	2	

For type specific data please refer to page 65.
*1 measuring range possible by changing the pressure connection ports
*2 without changing the pressure connection ports

Special design type: Ex-protection (Ex II 2 G Ex ib IIC T4 Gb) device type with Ex-protection

Handheld instrument
Display/Controller
Logger/EASyBus
Transmitter
Temperature probe
Simulator
Alarm/Protection, Level


A SERIES OF HAND-HELD MEASURING DEVICES WITH INTEGRATED SENSOR



FUNCTIONS:



HIGHLIGHTS:

- integrated pressure sensor
- sturdy metal connection pin
- tare function / zero point offset
- model with  protection available

ADDITIONAL FEATURES FOR GMH 3181-...:



Type specific data:	GMH 3161 - ...	GMH 3181 - ...	GMH 3161 - ... - ex	GMH 3181 - ... - ex
Display:	2 x 4½-digit LCD	2 x 4½-digit LCD	2 x 4½-digit LCD	2 x 4½-digit LCD
Sensor:	piezoresistive differential pressure sensor internally built into the instrument. Suitable for air and non-aggressive gases. (Note: Not suited for water!)			
Pressure connection:	2 pressure port for universal 6 x 1 mm (4 mm hose inside diameter) or 8 x 1 mm (6 mm hose inside diameter) plastic tubing			
Output:	interface	interface or AAG	interface *	interface or AAG*
- serial interface:	x	x	x	x
- analog output:	--	0 - 1 V, freely adjustable (resolution 12 bit)	--	0 - 1 V, freely adjustable (resolution 12 bit)
Power supply:	9 V-battery, d.c. connector suitable 9 V-battery, d.c. connector for external 10.5-12 V	9 V-battery, d.c. connector suitable 9 V-battery, d.c. connector for external 10.5-12 V	9 V-battery, d.c. connector * direct voltage supply. (suitable power supply: GNG10/3000)	9 V-battery, d.c. connector *
Sensor adjustment:	digital offset and scale input	digital offset and scale input	digital offset and scale input	digital offset and scale input
Peak value memory:	--	≥1 ms	--	≥1 ms
Measuring cycle: „slow“	4 measurements / s	4 measurements / s	4 measurements / s	4 measurements / s
„fast“ (with filter)	--	≥ 1000 measurements / s	--	≥ 1000 measurements / s
„peak-detect“	--	≥ 1000 measurements / s	--	≥ 1000 measurements / s
Averaging function:	--	x	--	x
Power consumption:	approx. 0.6 mA	approx. 0.6 mA (slow mode) max. 2.5 mA (fast = 1000 Hz)	approx. 0.6 mA	approx. 0.6 mA (slow mode) max. 2.5 mA (fast = 1000 Hz)
Working condition:	-25 ... +50 °C, 0 ... +95 % RH (non-condensing)		-10 ... +50 °C, 0 ... 95 % RH (non-condensing)	
Housing:	142 x 71 x 26 mm (without pressure connection pin - pin approx. 11 mm protruding at front side of device), impact-resistant ABS plastic housing. Front side IP65 integrated pop-up clip for table top or suspended use.			
Weight:	approx. 165 g	approx. 170 g	approx. 205 g (incl. leather case)	approx. 210 g (incl. leather case)
Scope of supply:	Device, battery, manual		Device, battery, manual	

* Please refer to note to Ex-design types (p. 61)

Additional functions:

Serial interface: direct connection to RS232 or USB interface of a PC via electrically isolated interface adapter GRS 3100, GRS 3105 or USB 3100 N.

GMH 3181:

Low power logger mode: (only in measuring cycle „slow“) Only one measurement carried out at the end of the respective logger cycle. The battery life is considerably prolonged. For long-term recordings (e.g. leaktest).

Averaging function: integrates the meas. values during a selectable period of time and then calculates the average display value.

Controlling function: with the help of the switching module GAM3000 (optionally) electric equipment can be switched on/off or alarm monitored (see accessories)

LoggerFunctions:

- manual: 99 data sets

- cyclic: 10000 data sets (max. 64 recording sequences),

adjustable cycle time: 1 ... 3600 s

Note to the pressure unit selection: (information for all GMH31xx)

The choice of a specific pressure unit is possible, if its whole measuring range is displayable within the display of the device and the sensor is supporting these resolution.