

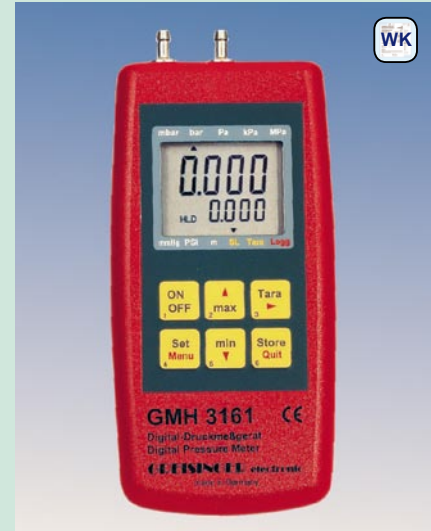
**DIGITAL-FINE MANOMETER / MANOMETER** for over/under pressure and pressure difference.



**GMH 3161-01**  
**GMH 3181-01**  
 (± 2500 Pa \*1)



**GMH 3161-07**  
**GMH 3181-07**  
 -10,0 ... 350,0 mbar (± 350,0 mbar \*1)



**GMH 3161-13**  
**GMH 3181-13**  
 -100 ... 2000 mbar (± 2000 mbar \*1)

**GMH 3161-07H**  
 -1,00 ... 70,00 mbar (± 70,00 mbar \*1)

**GMH 3161-07B**  
 -10,0 ... 420,0 mbar (-7,5 ... 315,0 mmHg)

Option, upcharge:  
**MB -1...2 BAR**  
 measuring range: -1000 ... 2000 mbar \*2

Version specific data:	... - 01	... - 07H	... - 07	... - 07B	... - 13
<b>Measuring range:</b>	-100 ... 2500 Pa (-1,00 ... 25,00 mbar)	-1,00 ... +70,00 mbar	-10,0 ... +350,0 mbar	-10,0 ... +420,0 mbar (-7,5 ... 315,0 mmHg)	-100 ... 2000 mbar (optional: -1000 ... 2000 mbar)
<b>Overload:</b>	max. 100 mbar	max. 1000 mbar	max. 1 bar	max. 1 bar	max. 4 bar
<b>Resolution:</b>	1 Pa (0,01 mbar)	0,01 mbar	0,1 mbar	0,1 mbar (0,1 mmHg)	1 mbar
<b>additional pressure units:</b>	bar, kPa, PSI, mmHg, m	bar, Pa, kPa, PSI, mmHg, m	bar, kPa, MPa, PSI, mmHg, m	bar, kPa, MPa, PSI, m	bar, kPa, MPa, PSI, mmHg, m
<b>Accuracy:</b> (typ. values)					
hysteresis and linearity	± 0,3 % FS	± 0,1 % FS	± 0,2 % FS	± 0,1 % FS	± 0,2 % FS
temperature-influence from 0-50°C	± 0,4 % FS	± 0,4 % FS	± 0,4 % FS	± 0,4 % FS	± 0,4 % FS
Option higher accuracy available	no	already integrated	yes	already integrated	yes
<b>Sensor:</b>	integrated piezo-resistive absolute pressure sensor. Suitable for air and non-corrosive, non-ionising gases. (Note: sensor is not suitable for water!)				
<b>Pressure connection:</b>	2 metal connection pin, made of brass, nickel plated, pressure tubes 6x1 mm (4 mm inside-Ø) can be connected				

\*1 measuring range possible by changing the pressure connection ports

\*2 without changing the pressure connection ports

Type specific data:	GMH 3161 - ...	GMH 3181 - ...	GMH 3160 - ... - ex	GMH 3180 - ... - ex
<b>Display:</b>	2 x 4½-digit LCD	2 x 4½-digit LCD	2 x 4-digit LCD	2 x 4-digit LCD
<b>Output:</b>	interface	interface or AAG	interface	interface
<b>- serial interface:</b>	<b>X</b>	<b>X</b>	<b>X</b> (refer to note at page 20)	<b>X</b> (refer to note at page 20)
<b>- analog output:</b>	--	0 - 1V, freely adjustable (resolution 12 bit)	--	--
<b>Power supply:</b>	9V-battery, d.c. connector suitable 9V-battery (type IEC 6F22) in scope of supply, d.c. connector for external 10.5-12V direct voltage supply. (suitable power supply: GNG10/3000)	9V-battery, d.c. connector	9V-battery	9V-battery
<b>Sensor adjustment:</b>	digital offset and scale input	digital offset and scale input	zero point adjustment at keypress	zero point adjustment at keypress
<b>Tare, hold, min/max value:</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Peak value memory:</b>	--	≥1 ms	--	≥10 ms
<b>Measuring cycle: "slow"</b>	4 measurements / s	4 measurements / s	4 measurements / s	4 measurements / s
"fast" (with filter)	--	≥ 1000 meas. / s	--	≥ 100 meas. / s
"peak-detect"	--	≥ 1000 meas. / s	--	≥ 100 meas. / s
<b>Logger functions:</b>	--	<b>X</b>	--	<b>X</b>
<b>-manually:</b>		99 data sets		99 data sets
<b>-cycle:</b>		10000 data sets (max. 64 recording sequences)		9999 data sets (max. 1 recording sequences)
<b>-adjustable cycle time:</b>		1 ... 3600 seconds		1 ... 3600 seconds
<b>Averaging function:</b>	--	<b>X</b>	--	<b>X</b>
<b>Min-/max-alarm:</b>	--	<b>X</b>	--	<b>X</b>
<b>Real-time clock:</b>	--	<b>X</b>	--	<b>X</b>
<b>Power consumption:</b>	approx. 0.6 mA	approx. 0.6 mA (slow mode) max. 2.5 mA (fast = 1000Hz)	max. 1 mA	max. 1 mA (slow mode) max. 3 mA (fast = 100Hz)
<b>Working condition:</b>	-25 to +50 °C, 0 to +95 %RH (non-condensing)			
<b>Housing dimensions:</b>	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.			
<b>Weight:</b>	approx. 165 g	approx. 170 g	approx. 205 g (incl. case)	approx. 210 g (incl. case)

Handheld instrument

Display / Controller

Logger / EASYBus

Transmitter

Temperature probe

Alarm / Protection