

# Pressure measuring device with logger

## GMH 3151



### Special features:

- 4½-digit display  
*probes with higher resolution up on request*
- logger functions
- peak value memory
- analog output 0-1V
- 1000 measurements / second
- digital sensor adjustment possible
- min- / max-alarm
- integrated horn

### Additional function of the GMH3156:


- 2 GMSD/MSD-probes connectable
- difference measurement of two probes

## GMH 3156



**GMH 3151** (probe not included)

**GMH 3156** (probes not included)

**GMH 3150 - ex**  device without probe)

**GMH 3156 - ex**  device without probes)

*suitable  
pressure probes  
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Specification:	GMH3151	GMH3156	GMH3151-ex	GMH3156-ex
<b>max. display range:</b>	-19999 ... +9999 digit		-19999 ... +19999 digit	
<b>Measuring range:</b>	corresponding to used probe		corresponding to used probe	
<b>Overload:</b>	corresponding to used probe		corresponding to used probe	
<b>Resolution:</b>	corresponding to used probe		corresponding to used probe	
<b>Accuracy: (device)</b>	±0,1%FS ±1Digit (at nominal temperature = 25°C)			
<b>Pressure units:</b>	mbar, bar, Pa, kPa, MPa, mmHg, PSI, mH <sub>2</sub> O, can be selected.			
<b>Probe connection:</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>
	6-pin screened lockable Mini-DIN-socket(s) for GMSD/MSD-sensors. Automatic probe detection and setting of meas. range upon plugging in of probe.			
<b>Display:</b>	2 x 4½-digit LCD		2 x 4½-digit LCD	
<b>Output:</b>	serial interface o. AAG		serial interface o. AAG*	
<b>- serial interface:</b>	direct connection to RS232 or USB interface of a PC via interface converter GRS 3100, GRS 3105 or USB 3100 N (accessories)		direct connection to RS232 or USB interface of a PC via interface converter GRS 3100, GRS 3105 or USB 3100 N (accessories)	
<b>- analog output:</b>	0-1V, freely adjustable (res. 12bit)		0-1V, freely adjustable (res. 12bit)	
<b>Power supply:</b>	9V-battery, d.c. connector <i>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)</i>		9V-battery, d.c. connector*	
<b>Sensor adjustment:</b>	digital offset and scale input		digital offset and scale input	
<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		≥1 ms	
<b>Measuring cycle: "slow"</b>	4 measurements / s		4 measurements / s	
<b>"fast" (with filter)</b>	≥ 1000 meas. / s		1000 meas. / s	
<b>"peak-detect"</b>	≥ 1000 meas. / s		1000 meas. / s	
<b>Logger functions:</b>				
<b>manually data sets:</b>	99		99	
<b>-cycle data sets:</b>	<b>10000</b>	<b>4000</b>	<b>10000</b>	<b>4000</b>
	(max. 64 recording sequences)		(max. 64 recording sequences)	
<b>-adjustable cycle time:</b>	1 ... 3600 seconds		1 ... 3600 seconds	
<b>Averaging function:</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Min-/max- alarm:</b>	<b>X</b>	<b>X</b>	<b>X*</b>	<b>X*</b>
<b>Real-time clock:</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Power consumption:</b>	max. 1.6mA (4 measurements / s) max. 7mA (1000 measurements / s)		max. 1.6mA (4 measurements / s) max. 7mA (1000 measurements / s)	
<b>Working condition:</b>	<b>-25 to +50°C, 0 to +95%r.F.</b> (non-condensing)		<b>-10 ... 50°C, 0 ... 95 %RH</b> (non-condensing)	
<b>Power-Off-function:</b>	1...120 min (can also be deactivated).			
<b>Housing dimensions:</b>	142 x 71 x 26 mm, impact-resistant ABS plastic housing. Front side IP65			
<b>--</b>	pop-up clip for table top or suspended use.			
<b>Weight:</b>	approx. 150 g		approx. 190 g (incl. case)	

\* refer to note to EX-design types at page 48

### General functional description:

**Tare function:** display value and the min./max values memorized can be set to zero.

**Hold function:** by pressing a button the current meas. value will be memorized.

**Min./Max. value memory:** memorizing of max. and min. values.

**Peak value memory (peak-detect):** In the min-/max-value memory will be detected not filtered pressure peaks ≥1msec.

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

**Logger operation:** Logger start and stop via the keyboard or interface. Comfortable read-out and display software (GSOFT3050) available as additional equipment.

**Low power logger mode:** (only in meas. 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 (eg. tightness).

**Min-/Max-alarm:** the measuring value is constantly monitored if they remain within the min./max. limits set (deaktivatable)

**- Alarm:** 3 different alarm settings  
"off" - alarm function deactivated  
"on" - visual alarm via display, interface alarm, alarm sounded via integrated horn.

"no.So." - visual alarm via display and interface alarm

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

**SeaLevel-correction:** when connecting an abs. pressure probe the barom. air press. can also be displayed corrected to sea level "zero".

(Air pressure comp. achieved by entering the meters above sea level "zero")