

WATERPROOF PORTABLE INSTRUMENT FOR MEASURING PRESSURE WITH EXTERNAL INTERCHANGEABLE SENSORS



WATERPROOF – DEVICE AND PLUG CONNECTIONS



GMH 5130/50



GMH 5155

HIGHLIGHTS:

- Peak value acquisition (1000 measurements / s)
- Large double backlit display
- Pressure sensors already calibrated and fully interchangeable
- Incl. test protocol

ADDITIONAL FUNCTIONS OF GMH 5150 AND 5155:



WITH THE GMH 5155 ADDITIONALLY:

- 2 GMSD/MSD sensors can be attached.
- Differential pressure measurement of two sensors

GMH 5130

Item No. 600027

Waterproof Portable instrument for measuring pressure with 1 sensor connection, without sensor

GMH 5150

Item No. 600031

Waterproof Portable instrument for measuring pressure with 1 sensor connection, analog output and data logger, without sensor

GMH 5155

Item No. 600033

Waterproof portable pressure instrument with 2 sensor connections, analog output and data logger, without sensor

GENERAL:

The portable instrument for interchangeable sensors supports you in demanding pressure measuring tasks. Extremely robust plug connections, the silicone protective cover, background lighting and the waterproof construction also allow use in harsh industrial and field conditions.

APPLICATION:

- Industry and trade, HVAC: heating, ventilation, air conditioning
- Leak tests / pressure tests
- Chimney draft measurement: negative pressure, tightness tests on buildings (e.g.: 4 pascal test)
- Measurements on gas and oil firing
- Automotive trade, hydraulic analysis (pressure surges)

TECHNICAL SPECIFICATIONS: GMH 5130

Sensor connections:	1
Usable sensors:	GMSD / MSD sensors, available measuring ranges (resolution) from -1.999..2.500 mbar (0.001 mbar) to 0..1000 bar (1 bar)
max. display range:	-19999 .. + 19999 digit
Display units: *	depending on the measuring range selection (sensor-dependent): mbar, bar, Pa, kPa, MPa, mmHg, inHg, PSI, mH ₂ O
Measuring frequency:	4 measurements / s or 1000 measurements / s with peak value memory
Average filter:	adjustable: 1..120 s
Accuracy:	± 0.1 % FS ± 1 digit
connections	
Sensor:	1 x 7-pole bayonet connection
Output / ext. Care:	4-pole bayonet connection for serial interface, supply (with accessories: USB adapter USB 5100)
Display:	4½-digit 7-segment, illuminated (white)
Working conditions:	-25 .. + 50 °C, 0.95 % r. F. (not condensing)
Storage temperature:	-25 .. + 70 °C
Power supply:	2 x AAA batteries, battery life 500 h (without lighting, 4 measurements / s)
Housing:	impact-resistant ABS, with stand-up / hanging bracket
Protection class:	IP65 / IP67
Dimensions:	160 x 86 x 37 mm (H x W x D) including silicone protective cover (red)
Weight:	approx. 250 g including battery and protective cover
Scope of delivery:	Device, battery, test report, operating instructions

TECHNICAL SPECIFICATIONS: GMH 5150 AND GMH 5155

Sensor connections:	1, GMH 5155: 2
Usable sensors:	GMSD / MSD sensors, available measuring ranges (resolution) from -1.999..2.500 mbar (0.001 mbar) to 0..1000 bar (1 bar)
max. display range:	-19999 .. + 19999 digit
Display units:	depending on the measuring range selection (sensor-dependent): mbar, bar, Pa, kPa, MPa, mmHg, inHg, PSI, mH ₂ O, user
Measuring frequency:	4 measurements / s or 1000 measurements / s with peak value memory
Average filter:	adjustable: 1..120 s
Accuracy:	± 0.1 % FS ± 1 digit
connections	
Sensor:	1 x 7-pole bayonet connection only GMH 5155: 2 x 7-pole bayonet connection
Output / ext. Care:	4-pole bayonet connection for serial interface, supply (with accessories: USB adapter USB 5100)
Analog output:	0..1 V, freely scalable, connection via 4-pole bayonet socket, resolution 12 bit
Display:	4½-digit 7-segment, illuminated (white)
Working conditions:	-25 .. + 50 °C, 0.95 % r. F. (not condensing)
Storage temperature:	-25 .. + 70 °C
Power supply:	2 x AAA batteries, battery life 500 h (without lighting, 4 measurements / s)
Housing:	impact-resistant ABS, with stand-up / hanging bracket
Protection class:	IP65 / IP67
Dimensions:	160 x 86 x 37 mm (H x W x D) including silicone protective cover (red)
Weight:	approx. 250 g including battery and protective cover
Scope of delivery:	Device, battery, test report, operating instructions

ADDITIONAL FUNCTIONS:

Status display for battery: bar graph
Background lighting: duration adjustable (off, 5 s..2 min.)
Adjustment: Zero point / slope adjustable via menu
User-defined display unit: (user, GMH 5150/55) conversion into any units using a linear factor
Leak test / tightness test (GMH 5150/55): Display of the rate of pressure change (V / s, / min, / h) with alarm function
Air velocity/volume flow (GMH 5150/55): measurement with a pitot tube (accessory)
peak-detect (peak value memory): Unfiltered pressure peaks ≥ 1 ms are recorded in the min / max value memory.
Data logger: with measuring point input, recording interval: 1 s..1 h Recording duration: 416 days with an interval of 1 h, measured value memory: Cyclical: 10,000 data records (GMH 5150), 8,000 data records (GMH 5155), single: 1,000 data records (40 adjustable measuring point texts or measuring point numbers)
 * = Note on setting the pressure units: different pressure units can only be selected if the entire measuring range of this unit can also be shown on the display and the sensor also supports this resolution.

ACCESSORIES

ACCESSORIES OR SPARE PARTS:

GMSD ..- K51

Pressure sensors
Application: non-aggressive gases for over/ under and differential pressure measurement or absolute pressure measurement



MSD ...

Stainless steel pressure sensors
Application: air, aggressive gases for over/ under and relative pressure measurement



MSD-K51

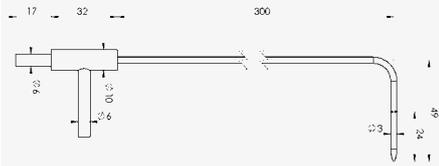
Item No. 603809

Connection cable for MSD sensor to GMH 51xx, 1 m

Prandtl pitot tube

Item No. 604150

stainless steel, for measuring the air speed/ volume flow, Ø = 3 mm, NL = 300 mm, max. +600 °C
GMSD 2,5 MR-K51 or GMSD 25 MR-K51 is required



GDZ-01

Item No. 601541

PVC tube 6/4 (6 mm outer Ø, 4 mm inner Ø, 5 bar at 23 °C)



GDZ-31

Item No. 606070

Silicone tube 8/5 (8 mm outer Ø, 5 mm inner Ø, 2 bar at 23 °C, max. 200 °C), very flexible

GDZ-30

Item No. 601601

Adapter G ½ inside to tube 6/4

EBS 20M

Item No. 601158

Measurement data acquisition software for EASYBus & GMH

GSOFT 3050

Item No. 601336

Windows software for GMH 3000 and GMH 5000 with logger for operating logger devices

USB 5100

Item No. 601095

Interface converter GMH 5xxx <=> PC

GNG 5/5000

Item No. 602287

Plug in power supply for GMH 5XXX series

GKK 3500

Item No. 601052

Device case with soft cutouts e.g. 2x GMH 3000 or 5000, 395 x 295 x 106 mm (W x H x D)

PORTABLE PRESSURE MEASURING DEVICES



HIGHLIGHTS:

- One device for any pressure measuring range (2.500 mbar..1000 bar)
- Pressure sensors already calibrated and fully interchangeable



GMH 3111

Item No. 600374

Portable pressure instrument with 1 sensor connection, without sensor

GMH 3111-EX

Item No. 600380

Portable pressure instrument with 1 sensor connection, without sensor, Ex

TECHNICAL SPECIFICATIONS:

max. display range:	-19999 .. + 19999 digit
Measuring range:	depending on the sensor used
Overload:	depending on the sensor used
Resolution:	depending on the sensor used
Accuracy: (device)	± 0.1 % FS ± 1 digit (at nominal temperature = 25 °C)
Pressure units: *	mbar, bar, Pa, kPa, MPa, mmHg, PSI, mH ₂ O, switchable by pressing a button.
Sensor connection:	1 sensor socket 6-pole shielded mini-DIN socket with locking for GMSD / MSD sensors. Automatic sensor recognition and corresponding measuring range setting.
Display:	2 x 4 1/2-digit LCD
Output:	interface
serial interface:	Can be connected directly to the RS232 or USB interface of a PC via the galvanically isolated interface converter GRS 3100, GRS 3105, USB 3100 N
Power supply:	9 V battery, power supply socket for external 10.5..12 V DC voltage supply (suitable power supply unit: GNG10 / 3000)
Sensor adjustment:	digital offset and slope input
Measuring cycle:	4 measurements / s
Battery life:	approx. 120 h
Working conditions:	-25 .. + 50 °C, 0.95 % RH, with GMH 3111-EX: -10 .. + 50 °C, 0.95 % RH
Housing:	Made of impact-resistant ABS, membrane keyboard, transparent panel only with GMH 3111: Integrated stand-up / hanging bracket
Dimensions:	142 x 71 x 26 mm (H x W x D)
Weight:	approx. 150 g, with GMH3111-EX: approx. 190 g (including bag)
Scope of delivery:	Device, battery, test report, operating instructions

NOTES ON EX VERSIONS:

Technical changes compared to the standard device (applies to all GMH31xx-EX)

Ex approval: II 2 G Ex ib IIC T4 Gb

Certificate: EPS 09 ATEX 1 227 X

Standards:

The device fulfills the standards for electrical equipment for potentially explosive areas according to EN 60079-0: 2012, EN 60079-11: 2012

Sensor:

(GMH 3111-EX, GMH 3151-EX, GMH 3156-EX) All GMSD / MSD sensors with the "Ex version" option can be used.

Interface:

usable interface converters are USB 3100 N, GRS 3100 and GRS 3105

Note: Operation of the interface and the analog output is not permitted in the Ex area!

Working temperature: -10 .. + 50 °C

Power supply:

9 V battery, mains socket

Note: The use of the power supply socket is not permitted in the Ex area! Only power supply units of the type GNG10 / 3000 may be used!

Alarm function:

(GMH 3151-EX, GMH 3156-EX, GMH 3181-EX)

The device has no sounder, in the alarm setting only the setting "no.sos" and "off" are available

Scope of delivery:

The device is delivered with a leather case.



* Note on setting the pressure units: (applies to all GMH 31xx). The selection of different pressure units is only possible if the entire measuring range of this unit can also be shown on the display and the sensor also supports this resolution.