WATERPROOF PORTABLE INSTRUMENT FOR MEASURING PRESSURE WITH EXTERNAL INTERCHANGEABLE SENSORS

ISO
AUTO OFF
HOLD
MIN MAX
TARA
O/S-CORR

GMH 5130/50

GMH 5155

WATERPROOF – DEVICE AND PLUG CONNECTIONS

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:

ALARM   LOGG

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 potable 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 (/ 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.

for further information p.r.t. www.gsg-industrietechnik.com | Phone no.: 0049 931 / 30 40 8-0

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
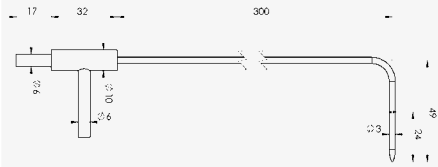relative pressure measurement

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 4½-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: ⟨Ex⟩ 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.so" 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.*

PORTABLE INSTRUMENTS

SOFTWARE

ACCESSORIES

ALARM / PROTECTION / LEVEL