Digital Pressure Gauge with Data Logger Digi-Log

Class 0.5% / 0.2% / 0.1% / 0.05%
Ø 85 mm
Battery-powered or USB-C
1.200 hours battery life
Measurement rate 10 ms -10 sec.
Display 330° axially rotatable
Includes case and G1/2" adapter

Digi-Log Digital Manometer:
Precision and Innovation in a Robust Design

Discover the Digi-Log, our advanced digital manometer that sets itself apart with unique features. Featuring integrated **Bluetooth** (still in beta) and a modern USB-C connection, it simplifies data transfer. The battery is conveniently USB rechargeable, and when connected, the manometer acts as a **USB drive**, automatically saving data in CSV **- format without additional software.**

Its robust **metal housing** and **stainless steel** connection ensure durability, while the bright LCD display with green backlighting offers clear readability even in tough conditions. With **IP65 protection**, it's splash-proof, making it ideal for demanding environments.

The Digi-Log offers a wide range of measurement areas from **50 mbar to 1000 bar** and includes features like a bar graph, MIN/MAX display, and a temperature display in °F/°C. The 330° rotatable connection and adjustable measurement storage rate (100 ms to 10 sec), plus the ability to create data records with a button press, make it a versatile, user-friendly tool for professionals.

Switching between the most common units of measurement worldwide is straightforward:
bar, mH²O, mbar, Torr, atm, inH²O, inWC, inHg, kPa, MPa, psi, kgf = kg/cm *(depending on the measurement range).*

Power Supply and Data Transmission:

Power Supply: Integrated Li-Po battery 1000mA with up to 1,200 hours runtime
Charging/Data Cable: USB-C
Data Storage: Internal, CSV format compatible with spreadsheet and database software (e.g., Microsoft Excel, Apple Numbers, LibreOffice, etc.)
Bluetooth: App available for Android and IOS qrco.de/seca

Included Items:

Manometer: Digi-Log Digital Manometer
Adapter: G1/4" to G1/2", including sealing
Cable: USB-C
Accessories: USB stick with Bluetooth app
Packaging: Delivered in a plastic case, packed in a cardboard box.

SECA Bluetooth App

Additional Options:

Customization: Front foil with company logo, choice of color for the rubber protective cap
Connection variants and additional measuring ranges: Available upon request
Acceptance certificate 3.1 according to EN 10204 for accuracy,
DAkkS calibration with certificate

Button Functions:

Button		Short Press Function	Long Press Function
1. Button	ON/OFF	Activate backlight	Turn the device on or off
2. Button	MIN/MAX	Display FS range, Min/Max values, or temperature	Set date and time
3. Button	ZERO/MENU	Zero-point correction (ZERO)	Access system settings (MENU)
4. Button	SET/REC	-	Start/stop recording function, save data

Changing Device Parameters

Press and hold the **3. Button** until "PO" appears.
If you continue to press this button, the following table code will appear;
a short press on the **2. Button** allows you to set the function parameters;
a short press on the **4. Button** saves the settings and returns to the main pressure display.

Code	Function	Description
PO	Automatic On/Off	Default is off. Activating this feature will automatically turn off the device if no button is pressed for 5 minutes.
BLE	Bluetooth Function	Default is off. Can be used once activated. Can be deactivated, and then Bluetooth will not be available.
RATE	Acquisition Rate	Default is 0.3 seconds, can be changed from 0.1 to 10 seconds.
UNIT	Pressure Unit	Various pressure units are available for selection.
FLTR	Filter Coefficient	Default is 5, can be changed from 1 to 7.
DEL	Clear Memory	Pressing the SET button clears all recorded data.

Setting the Date and Time

For accurate records, setting the date and time correctly is essential. Follow these steps to set the time:

1. **Press and hold the 2. Button** to activate the setting mode.
2. **1. Button (Minus):** Decreases the currently selected value.
3. **2. Button:** Switches between the time values (year, month, day, hour, minute, second).
4. **3. Button:** Selects the next time value.
5. **4. Button:** Saves the settings and ends the process.

Automatic time update: When connected to Bluetooth, the device automatically synchronizes and saves the time, so no manual setting is required.

This functionality allows for quick and uncomplicated transfer of recorded data to your mobile phone or other devices like PCs, laptops, or tablets.

Data Logger Capacities with Intelligent Measurement Interval Automation

Our device's advanced data logger features intelligent automatic measurement interval control, enabling an optimal balance between storage duration and the depth of detail in the measurement data.

Recording Duration (h)	Auto. Storage Rate (s)	Max. Records
Up to 0,5	0,1	18000
0,5 to 1	0,2	18000
1 to 2	0,4	18000
2 to 4	0,8	18000
4 to 8	1,6	18000
8 to 16	3,2	18000
16 to 48	6,4	27000

Data Logger Functions:

- **Recording Capacity:** Up to 99 series with a total memory limit of 12MB, each capable of storing up to 27,000 records.
- **Visualization:** The storage number of each recording series is displayed as "REC" followed by the number during recording (e.g., "REC4" for the fourth series).
- **Adaptive Interval Control:** Storage rate automatically adjusts based on selected recording duration to ensure optimal data points.
- **Enhanced MIN/MAX Recording:** Continuous measurements within the chosen storage rate (e.g., every 10 ms for a 6.4 s rate) capture all pressure variations as MIN/MAX values.
- **Consolidation:** Summarizes all MIN/MAX values for each series.
- **Plug & Play Analysis:** Direct data reading without needing additional drivers or software.
- **Record Content:** Each record includes a timestamp, current pressure value, and MIN/MAX pressure values.
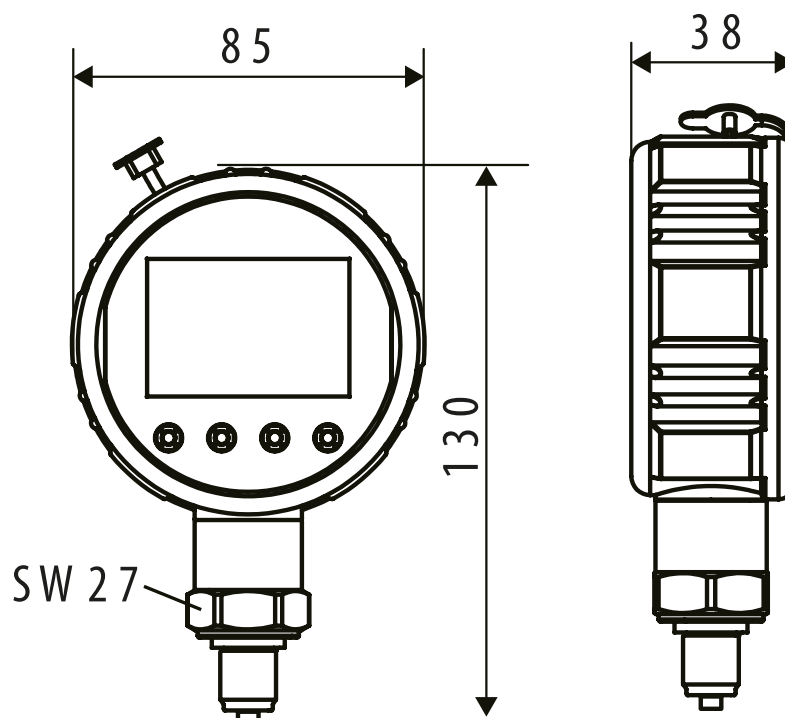
Data Export and Storage

Data Storage: Recorded data is saved internally in CSV format, allowing for easy processing in various spreadsheet and database programs like Microsoft Excel, Apple Numbers, or LibreOffice.
The file name matches what was displayed on the device, e.g., "REC4" corresponds to CSV file 4.

Data Export: Data can be directly exported via a USB-C cable. The device is recognized as a data storage unit, which is compatible with most modern devices such as Android or Apple smartphones. This functionality enables quick and straightforward transfer of recorded data to your mobile phone or other devices.

Technical Drawing:

Standard Measurement Ranges	0-1 bar, 0-1,6 bar, 0-2,5 bar, 0-4 bar, 0-6 bar, 0-10 bar, 0-16 bar, 0-25 bar, 0-40 bar, 0-60 bar, 0-100 bar, 0-160 bar, 0-250 bar, 0-400 bar, 0-600 bar, 0-1.000 bar
Vacuum and Combined Measurement Ranges	-1-0 bar Vacuum, -1-0-1 bar, -1-0-2,5 bar, -1-0-4 bar, -1-0-6 bar, -1-0-10 bar, -1-0-16 bar, -1-0-25 bar, -1-0-40 bar
Micro Measurement Ranges	0-50 mbar, 0-100 mbar, 0-160 mbar, 0-250 mbar, 0-400 mbar 0-600 mbar -50-0-50 mbar, -100-0-100 mbar, -250-0-250 mbar, -500-0-500 mbar
ABSOLUTE Measurement Ranges	0-1 bar, 0-1,6 bar, 0-2,5 bar, 0-4 bar, 0-6 bar ABSOLUT
Overload Limit	< 100bar 150%; ≥ 100bar 200%
Background Light	Green
Diameter	85 mm
Accuracy	0,5%FS; 0,1%FS; 0,05%FS *(on request: 0,2%FS)*
Long-term Stability	Typically: ±0.05%FS/Year
Operating Temperature	-10 - 60 ℃
Compensation Temperature	5 ~ 40 ℃
Electrical Protection	Integrated electrical protection for improved electromagnetic compatibility (EMC)
Max. Records	27000 per recording series
Recording Series	1...99
Storage Rate	0,1…6,4 s - automatically based on recording duration
Max. Recording Duration	48 h
Data Record Information	Time / Actual Pressure / MIN-/MAX-Value
Measuring Medium	Gas, water, oil that do not attack stainless steel alloys and are not highly viscous
Connection	Standard G1/4" according to EN 837-1, SW27, 330° rotatable on request: 1/2", NPT, M20x1.5
Connection Material	Stainless steel 304SS (equivalent to 1.4301, V2A)
Case	Zinc cast
Protection Class	IP65 *(on request:IP67)*
Measuring Cell	Stainless steel 304SS (equivalent to 1.4301, V2A)
Seal	NBR
Power Supply	Integrated Li-Po battery, usable and rechargeable via USB-C
Battery Life	~ 1200 hours
Weight	0.40 Kg

Display Resolution

The display is designed to ensure optimal readability across the entire range of pressure measurements. Depending on the measured pressure range, whether in bar or kPa, the 5-digit display provides the following resolutions:

Measuring range in bar or KPa	Resolution 0,1% and 0,05%
1 - 4	0,0001
6 - 40	0,001
60 - 400	0,01
600 - 1.600	0,1

Measuring range in bar or KPa	Resolution 0,2% and 0,5%
1 - 10	0,001
16 - 100	0,01
160 – 1.000	0,1
1600	0

The warranty is voided in case of improper handling, storage, or alteration of the product, especially due to any interventions by the buyer or third parties, damages from the intrusion of dust, sand, liquids, battery acid, forceful operation, impacts, or falls.