DMS display with OLED display

Wachendorff EMG-App

- Monochrome yellow OLED display
- DMS display in 96 mm x 48 mm format
- Sampling frequency up to 1.2 kHz (0.83 msec)
- For strain gauges 4-wire (optional +2 calibration wires)
- Vertical or horizontal installation
- 2 alarm outputs
- 1 analog output from 0/4 mA to 20 mA
- Serial communication via RS485 Modbus interface
- 2 programmable user inputs
- Programming via text menu in 5 languages

https://www.wachendorff-prozesstechnik.de/en/DMS9648O

Description

The new OLED strain gauge display DMS9648O is ideal for visualizing your signal from strain gauges or pressure load cells easily and directly. The DMS9648O can also be used as a very flexible and accurate laboratory device. Using the 4 buttons, the DMS9648O display can be easily, quickly and ideally parameterized and set to the existing task area. The display has a sampling frequency of up to 1.2 kHz for the dynamic measurement and weighing of your weight. Various options are available for calibrating the analog input. Various settings for the tare function, the totalizer and the sum function, as well as data logging with programmable sampling time are just some of the many firmware features. The operator is pleased with the clear user interface, which allows all parameters to be viewed at a glance and values to be changed easily. The monochrome yellow OLED display enables optimum readability even from an extremely wide reading angle in difficult industrial environments, even in direct sunlight.

Product details

Display properties:	Monochrome yellow 2.42" OLED display, Display diagonal: 61.46 mm, Active display area: 55 mm x 27.5 mm, 128 x 64 pixels. Service life: 150,000 hours* *Note: The end of the service life is indicated when 50% of the initial brightness is reached. The average service life is stated at room temperature; the service life is reduced when used in higher temperature ranges.
Display:	Display range measured value: -999999 to +999999 Display range total horizontal installation: - 2147483647 to + 2147483647 Display range total vertical installation: - 999999999 to + 2147483647 Horizontal and vertical display programmable, incl. bar graph and trend display. Positive or negative display possible.
Indicators:	Three indicators for alarm statuses and serial communication.
Selectable unit of measurement:	°C, °F, K, V, mV, A, mA, bar, mBar, psi, Pa, mm, cm, dm, m, km, in, g, kg, q, t, oz, lb, m/s, m/m, m/h, l/s, l/m, l/h, m³/s, m³/m, m³/ h, rpm, %rh, ph,Stk, kg/h, mmHg, atm, mH2O, N, kN, Nm, kNm, kgf, kgp, kip, lbf, ozf, no unit
Keyboard:	4 buttons for programming and setting the setpoints.
Entrance areas:	Strain gauge 4-wire (optional +2 calibration wires) Maximum strain gauge resistance of 720 Ohm Maximum 7.5 mV/V at 5 VDC bridge supply (max. 4 measuring cells of 350 Ohm in parallel) Potentiometer input minimum 200 Ohm, maximum 100 kOhm at 5 V supply. Input signal setting via keypad.
Bridge restoration:	5 VDC max. 35 mA
Impedance:	Ri>1 MOhm
Sampling frequency/ measuring cycle:	Programmable up to 1.2 kHz (0.83 msec)
Digital inputs:	Switchable via PNP signal. Alternatively adjustable functions: Run, Hold, Tare (pulse function), Reset alarm, Reset totalizer, Reset maximum, Grand total, Reset total, Config. Lock, Gross/Net.
Resolution:	Internal resolution from 1 Hz; 8,000,000 steps 23 bit up to 1.2 kHz; 30,000 steps 15 bit.
Relay output:	2 NO contacts with separate earth, 2 A at 250 VAC, Programmable as normally open or normally closed contact.
Analog output:	1 programmable analog output 0/4 mA to 20 mA with a resolution of 16 bits and an accuracy of +/-0.2 % of the maximum range. Programmable as transmission of the alarm value or the process signal.
Serial interface:	RS485 with Modbus RTU in slave mode.

Power supply:	24 VAC/DC to 230 VAC/DC +/-15 %, 50/60 Hz, 6 VA.
Protection class:	Protected from the front against dust in damaging quantities and protection against splashing water on all sides to IP54 (with seal), rear protection class IP20.
Housing:	Plastic housing made of polycarbonate V0.
Dimensions (WxHxD):	96 mm x 48 mm x 53 mm (without connection terminals). Panel cut-out according to DIN: 91 mm x 45 mm. Fastening via lockable plastic clamping bracket with screw.
Connection:	Via plug-in, lockable screw terminals.
Ambient conditions:	Operating temperature: 0 °C to +40 ° C, relative humidity: 35 %rH to 95 %rH.
Programming:	Programming and operation is menu-driven via the front buttons. It is done via text and can be switched between 5 languages. (English, Italian, German, French, Spanish). All settings are protected by a 4-digit password (cannot be changed). Programming is also possible via the Wachendorff EMG APP (via NFC/RFiD*) for Android smartphones. For programming via APP, the strain gauge display can also be in a de-energized state. The Wachendorff EMG app is currently only suitable for Android operating systems. A Wachendorff EMG app that supports iOs operating systems will follow soon. *: When interrogated by a reader that supports the NFC-V protocol, the device is to be considered a VICC (Vicinity Inductively Coupled Card) in accordance with the ISO/IEC 15693 standard. The DMS display operates at a frequency of 13.56 MHz. The device itself does not emit any radio waves.
Note on programming:	The NFC sensor is located on the right-hand side of the display, behind the buttons. Protective covers for smartphones can interfere with the connection and should therefore be removed from the smartphone for the programming period.
Weight:	approx. 165 gram
Scope of delivery:	Device, fixing material, seal, operating instructions.
Certificates & approvals:	CE
Data logging:	The DMS9648O display includes a simple data logger function. The data can be read out via the Modbus protocol. The sampling rate corresponds to the update time of the trend display. 1016 data points (32-bit) can be logged.

Customs tariff number:	8542 31 90
Manufacturer:	Wachendorff Prozesstechnik GmbH & Co. KG

Products Order no.	
DMS9648O	DMS display with OLED display

Accessories Order no.	
SFUR0USB	USB programming module (optional for series commissioning)
URDR9648	DIN rail adapter for UA96480X, DMS9648O, MA964802, ZTA9648O
GEH0IP65	All-round IP65 aluminum housing for one device, finished with black powder coating, (WxHxD) 168 mm x 83 mm x 220 mm
ENC5A000	All-round IP65 steel housing for one device (WxHxD) 140 mm x 83 mm x 120 mm
ENC5B000	All-round IP65 plastic housing for one device (WxHxD) 188 mm x 188 mm x 130 mm
ENC5C000	All-round IP65 plastic housing for two devices (WxHxD) 188 mm x 188 mm x 130 mm

Drawings

Display example horizontal installation

Drawings

Display example vertical installation bar graph

Drawings

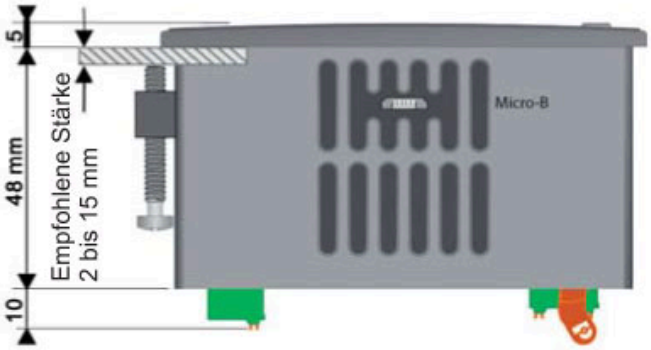
Display example vertical installation Process

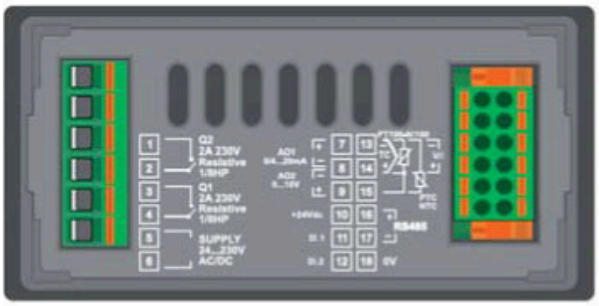
Drawings

Display example language switching

Drawings

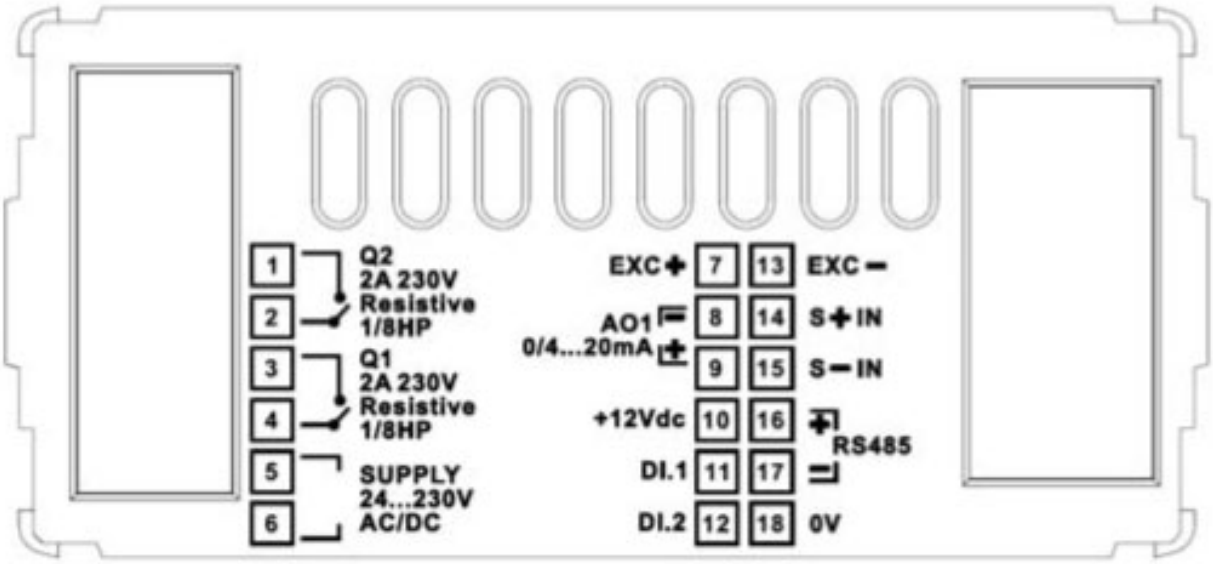
Dimensions and installation





Drawings

Connections



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