

## Universal graphic display UA964801



- Universal display in 96 x 48 mm format
- Color switchable graphic LCD display
- Vertical or horizontal installation
- Universal input for process signals, thermocouples, resistance thermometers and potentiometers
- 2 alarm outputs and two analog outputs
- Serial communication via RS485 Modbus interface
- 2 programmable user inputs
- 5-fold language switching
- 16-step linearization

<https://www.wachendorff-prozesstechnik.de/en/UA964801>

### Description

The innovative UA964801 universal graphic display is an all-rounder. With a universal input for all commercially available temperature sensors, process signals and potentiometers, a 24 VDC sensor supply and a 16-step linearization function, this display can be used for almost all analogue sensors.

With the integrated summing function, 2 relay outputs and the galvanically isolated analog output, almost all measuring tasks can be easily solved. In addition to the very low installation depth, the IP54 front, the removable terminal blocks and the color-switchable, brilliant LCD display, this display impresses with its intuitive programming interface guided by a text menu. The RS485 Modbus interface leaves nothing to be desired.

### Product details

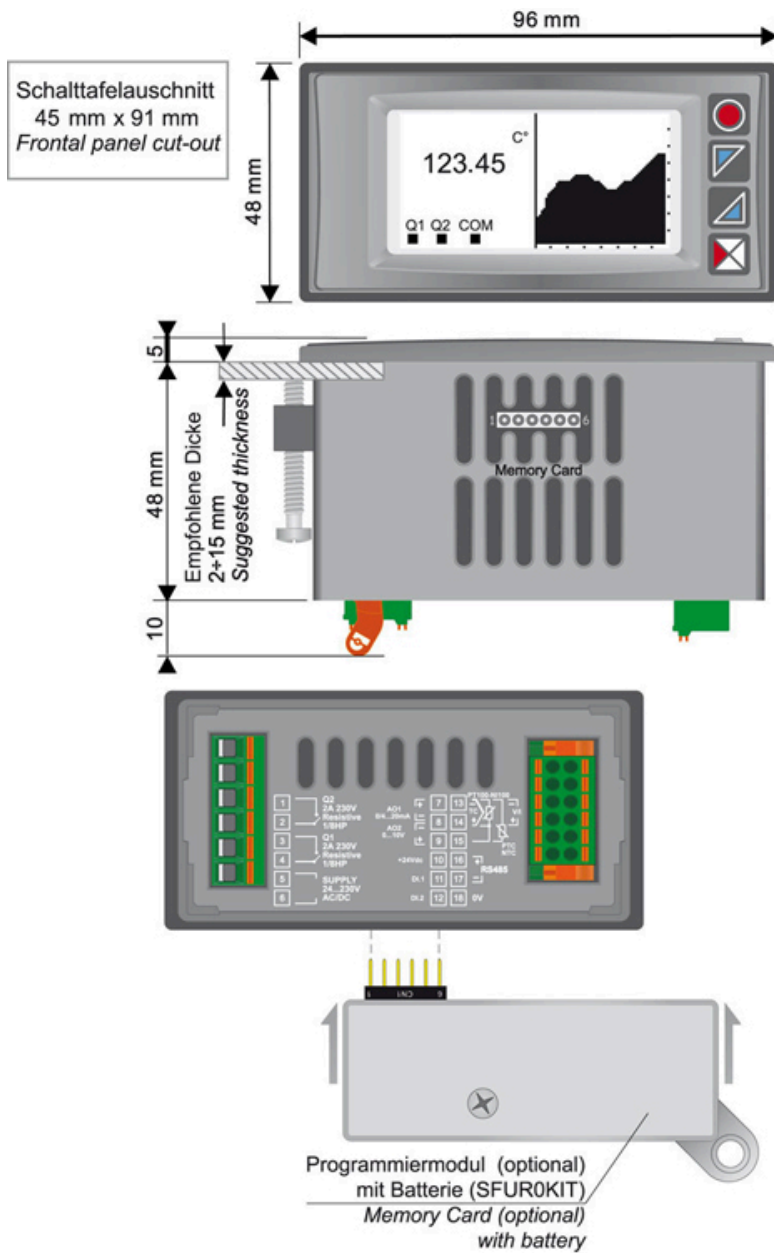
Display properties:	Graphic 2.7" LCD display Display diagonal: 61.46 mm Active display area: 55 mm x 27.5 mm; 128 x 64 pixels 7 different color displays (red, green, blue, orange, white, violet, light blue) in positive or negative display.
Display:	Display range measured value: -32,767 to +32,767 Display range total: 0 to 4,000,000,000 (32 bit) Horizontal and vertical display programmable, incl. bar graph and trend display.
Indicators:	Three indicators for alarm status and serial communication. Selectable unit of measurement (°C, °F, °K, V, mA, mBar, Bar, psi, mm, m, rpm, %rh, ph, g, Kg, q, t, m/s, l/h)
Selectable units 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, no unit
Keyboard:	4 buttons for programming and setting the setpoints.

Entrance areas:	Setting the input signal in the software or via the keypad. Thermocouple type K, S, R, J, T, E, N; reference junction: internal (from 0 °C to 50 °C; reference junction accuracy 0.1 °C/°C) Temperature sensors: Pt100, Pt500, Pt1000, Ni100, PTC1K, NTC10K Linear inputs: 0 V to 10 V, 0/4 mA to 20 mA, 0 mV to 60 mV and thermocouple type B with 16-step linearization. Potentiometer: 1 kOhm to 6/160 kOhm
Impedance:	0 to 10 V: Ri > 110 kOhm 0 to 20 mA: Ri < 5 Ohm 4 to 20 mA: Ri < 5 Ohm 0 to 60 mV: Ri > 1 MOhm
Accuracy:	Tolerance at 25 °C +/-0.2 % ± 1 digit for thermocouple input, temperature sensor and analog signal.
Sampling frequency / measuring cycle:	Programmable up to 242 Hz (4.2 msec).
User inputs:	Switchable via PNP signal. Alternatively adjustable functions: Activate alarm output, tare, reset alarm/maximum value/minimum value/total value, totalization.
Sensor supply:	24 VDC @ 35 mA
Resolution:	Internal resolution with 65,353 steps (16 bit).
Relay outputs:	2 NO contacts with separate earth, 2 A at 250 VAC, resistive. Programmable as normally open or normally closed contact
Analog output:	2 programmable analog outputs (1x 0 VDC to 10 VDC and 1x 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. Not galvanically isolated from each other.
Serial interface:	RS485 with ModbusRTU in slave mode.
Power supply:	24 VAC/DC to 230 VAC/DC +/- 15%, 50/60 Hz, 6VA.
Protection class:	Jet-proof and dust-tight to IP54 from the front (with seal), rear protection class IP20.

Housing:	Plastic housing made of polycarbonate (PC) L94-V2. Back made of ABS + PC UI94 V-0.
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 +45 °C; Relative humidity 35% rH to 95% rH
Weight:	approx. 165 gram
Scope of delivery:	Device, mounting material, seal, operating instructions
Data logging:	The UA964801 display includes a simple data logger function. The data can be read out via the Modbus protocol. The sampling rate corresponds to the activation time of the trend display. Up to a maximum of 2,500 measured values can be logged.
Programming:	Programming and operation is menu-guided via the front buttons. With the programming kit, the controller can also be programmed using Windows™ software. This software is compatible with Windows 7 and Windows 10. The memory card has an internal battery. This makes it possible to program the devices without connecting the power supply (up to 1000 programs with one battery).
Certificates:	CE, RoHS
Customs tariff number:	8542 31 90

**Drawings**

Dimensions and STEP file:



**Downloads / FAQ**

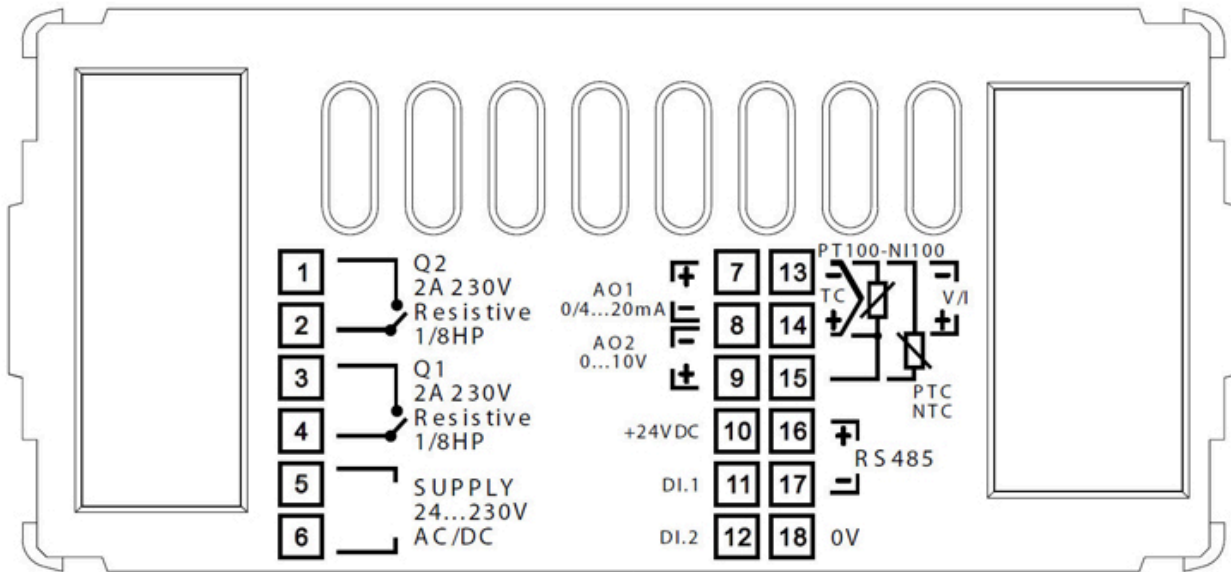
The following files could be downloaded from our website directly from this product under the tab "Drawings":

**Download STEP file:**

UA964801.stp

Drawings

Wiring diagram:



UA964801.stp



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