WACHENDORFF
Prozesstechnik GmbH & Co. KG

DMS display PAXS

- 5-digit, 14 mm high red LED, indicators, backlit unit
- Input signals: +/-24 mV, +/-240 mV
- 20 measurements/sec.
- Sensor supply: 5 or 10 VDC selectable
- plug-in options: 2/4 limit values, analog output, serial interface
- Easy programming on the device or via PC
- summation, tare, min/max value, 16-step linearization
- high protection class IP65, 48 x 96 x 104 mm
- Dimensions: 48 x 96 x 104 mm

https://www.wachendorff-prozesstechnik.de/PAXS

Description

The PAX S industrial digital display for strain gauges and pressure load cells can of course also be used as a very flexible and accurate laboratory device. However, with its robust plastic housing and high protection class IP 65, it has been designed for harsh industrial use. The device is configured quickly and safely either via the PC or directly using 5 keys. The operator is pleased with the clear user interface with which he can easily record all parameters at a glance and easily change values. Devices can also be retrofitted using the plug-in options.

Product details

Entrance areas:	±24 mVDC (resolution 1 µV), ±240 mVDC (resolution 10 µV).
Impedance:	100 MOhm
Maximum continuous load:	30 VDC
Accuracy:	**Input range ±24 mVDC:** at 18 °C to 28 °C: 0.02 % of the display + 3 µV, at 0 °C to 50 °C: 0.07 % of the display + 4 µV. **Input range ±240 mVDC:** at 18 °C to 28 °C: 0.02 % of the display + 30 µV, at 0 °C to 50 °C: 0.07 % of the display + 40 µV.
Display:	5-digit, 14 mm high red sunlight readable, dimmable via keypad or user inputs.
Backlit unit:	A physical unit can easily be attached behind the display. With the label sheet, which contains all the usual units, the user can easily realize his desired unit backlit.
Indicators:	- MAX: Maximum value is displayed - MIN: Minimum value is displayed - TOT: Total is displayed, flashes on overflow - SP1: Output 1 is active - SP2: Output 2 is active - SP3: Output 3 is active - SP4: Output 4 is active
Buttons:	The device is programmed and operated using the 5 push buttons on the front.
Operation:	The clear user interface with the display of all relevant values, the indicators and the unit enable quick operation. The device is operated via 5 front buttons. During programming, it is determined which displays and entries are possible or remain locked after activation of the programming lock. The PAR button is used to scroll through the individual setpoints, which can be changed using the F1 and F2 buttons. The F1 and F2 function keys can each be assigned 2 functions. The second function is activated by pressing the button for 3 seconds.
User inputs:	3 programmable inputs are available. They can be set to PNP or NPN switching via jumpers. Protection: max. 30 volts. - NPN: Active Vin < 0.7 VDC, Inactive Vin > 2.5 VDC - PNP: Active Vin > 2.5 VDC, Inactive Vin < 0.7 VDC.
Totalizer:	The totalizer can create a product from the input signal and time. It can either totalize automatically over a time or with a user input. A time base and a factor make the unit flexible. It has 9 digits and it is possible to change between the first 4 and the second 5 digits. The accuracy of the time base is typically 0.01%.
Power supply:	**PAXS000 0/B:** 85 to 250 VAC 50/60 Hz, 15 VA. **PAXS001 0/B:** 11 to 36 VDC, 11 W or 24 VAC +/-10 %, 15 VA.
Sensor supply:	5 or 10 VDC, regulated, selectable via jumper.
Bridge restoration:	Selectable via jumper. 5 VDC, max. 65 mA, ±2 %. 10 VDC, max. 125 mA, ±2 %. Temperature coefficient: 20 ppm/°C.
Measuring rate:	20 measurements/second. A/D converter with 16 bit resolution.
Response times:	200 ms for display of 99% of the final value, max. 700 ms (increases with increase in digital filtering).
Protection class:	Jet-proof and dust-tight to IP65 from the front.

Housing:	Dark red, impact-resistant plastic housing. The electronic insert can be pulled out to the rear. One unit can be inserted. The plug-in cards can be installed very easily.
Dimensions:	W 97 mm x H 50 mm x D 104 mm. Panel cut-out according to DIN: 92 mm x 45 mm.
Fastening:	via mounting frame with clamping screws.
Connection:	Fixed terminal strips
Relative humidity:	max. 85%. rH, non-condensing.
Ambient temperature:	Operation: 0 °C to +50 °C. With all 3 cards fitted: 0 °C to 45 °C. Storage: -40 °C to +60 °C
Approvals:	UL approval (Underwriters Laboratories) for the USA and Canada.
Weight:	approx. 300 g (without plug-in options).
Scope of delivery:	Device, fixing material, seal, operating instructions.
Customs tariff number:	9030 33 70
Manufacturer:	Red Lion Controls, USA.
Output cards:	The device can be very easily upgraded with different output cards. Each device can be equipped with a maximum of one interface card, one relay or transistor output card and one analog output card. You can easily install the cards yourself.
Pluggable interface card:	1. half-duplex RS232, programmable 2. multipoint RS485, programmable 3. DeviceNet, programmable 4. PROFIBUS-DP, programmable 5. ModBus, programmable (via RS485 or RS232 interface)
Pluggable relay output cards:	**1.** 2x relay changeover contact 5 A at 120/240 VAC or 28 VDC (ohmic load), at 120 VAC (90 VA inductive load). Service life of the relays is 100,000 cycles at max. load. The service life increases with lower loads. **2.** 4x NO relay 3 A at 240 VAC or 30 VDC (resistive load), at 120 VAC (70 VA inductive load). The service life of the relays is 100,000 cycles at max. load. The service life increases with lower loads.
Pluggable transistor output cards:	**1.** 4x NPN-OC transistors: max. 100mA at Vsat = 0.7 V, Vmax 30 V, galvanic isolation of 500 V against the signal input. **2.** 4x PNP-OC transistors: Internal supply: 24 VDC +/-10 %, max. 30 mA all 4 transistors. External supply: max. 30 VDC, 100 mA for each individual transistor.
Pluggable analog output card:	Selectable output signal: 0 to 20 mA, 4 to 20 mA, 0 to 10 VDC. Digitally scalable, offset. Accuracy: 0.17 % of range at 18 °C to 28 °C operating temperature; 0.4 % of range at 0 °C to 50 °C operating temperature. Resolution: 1/3,500 Load: 0 VDC to 10 VDC at min. 10 kOhm; 0/4 to 20 mA at max. 500 Ohm. Galvanically isolated from the signal input up to 500 V.
Programming on the device:	Programming is possible if the programming lock input is not activated. All the necessary parameters can then be set using the 5 front buttons. This possibility of quick project planning is one of the main advantages of all PAX devices.
Programming with PC software:	With the free Windows software Crimson 2, all project data can be easily created, managed, copied and transferred to the PAX device on the PC. Every user who frequently uses PAX devices can save the individual projects here and use existing knowledge for similar tasks. A starter package consisting of software, USB interface card and PC/PAX connection cable makes it easy to decide in favor of this programming.

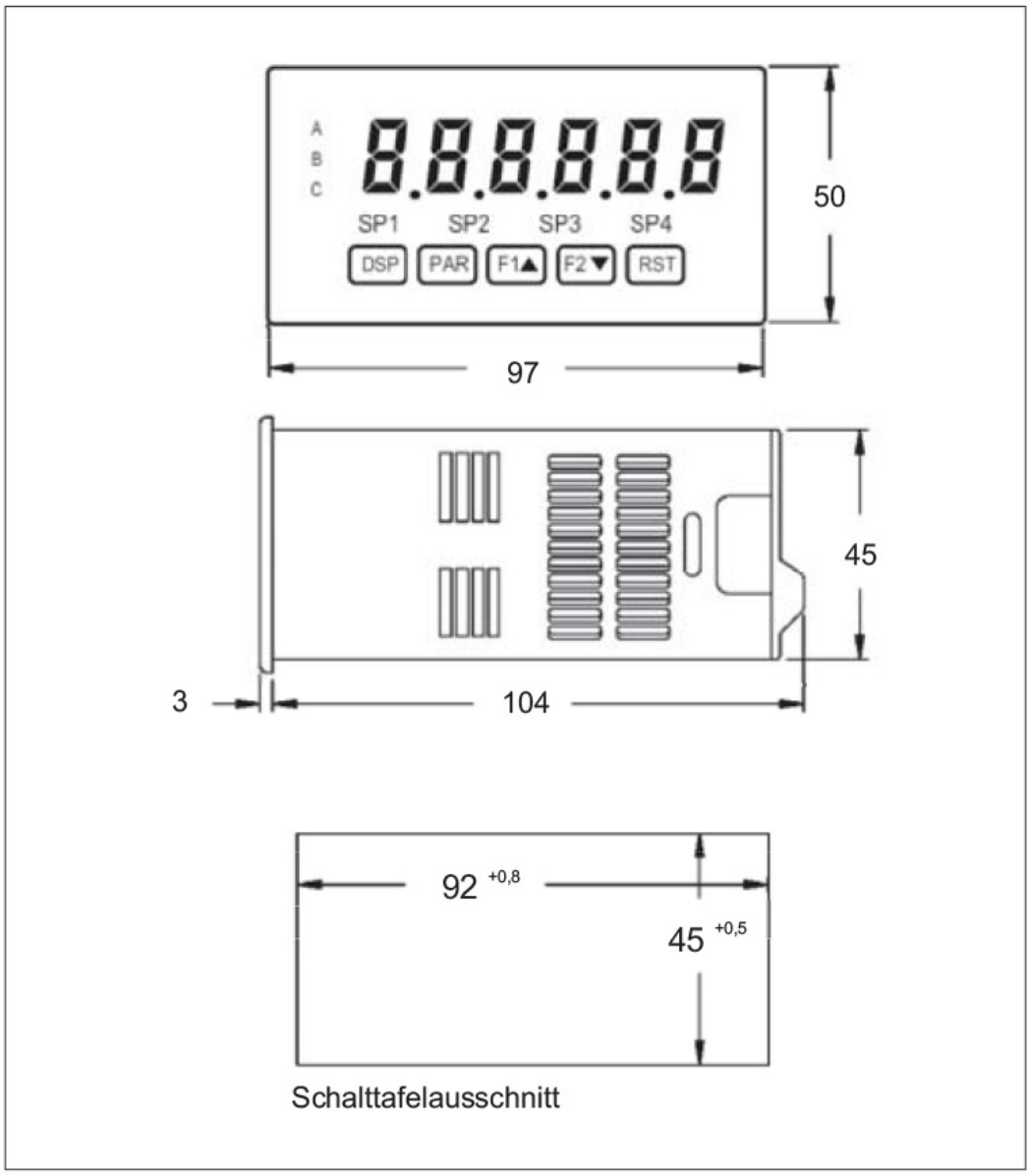
Products Order no.	
PAXS0000	PAX S industrial digital display with 85 - 250 VAC supply
PAXS0010	PAX S industrial digital display with 11 to 36 VDC/24 VAC supply

Accessories Order no.	
BMK90000	Top-hat rail adapter for mounting the PAX series on a top-hat rail (WxHxD) 114 mm x 63.5 mm 133 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
GEH0IP65	All-round IP65 aluminum housing for one device, finished with black powder coating, (WxHxD) 168 mm x 83 mm x 220 mm
PAXCDC1C	Plug-in RS 485 interface card with 2 x RJ11 plugs
PAXCDC2C	Plug-in RS 232 interface card with 9-pin SUB-D connector
PAXCDC20	Plug-in interface card RS232
PAXCDC30	Plug-in DeviceNet interface card with terminal strip

PAXCDC40	Programmable plug-in Modbus interface card
PAXCDL10	Pluggable analog output card
PAXCDS10	Pluggable relay output card 2 x changeover contact
PAXCDS20	Pluggable relay output card 4 x NO contact
PAXCDS30	Pluggable transistor output card 4 x NPN
PAXCDS40	Pluggable transistor output card 4 x PNP
PAXLBK10	Label sheet with all standard units
PAXUSB00	Pluggable interface card USB
KABUSB11	USB programming cable, 1.5 m

Drawings

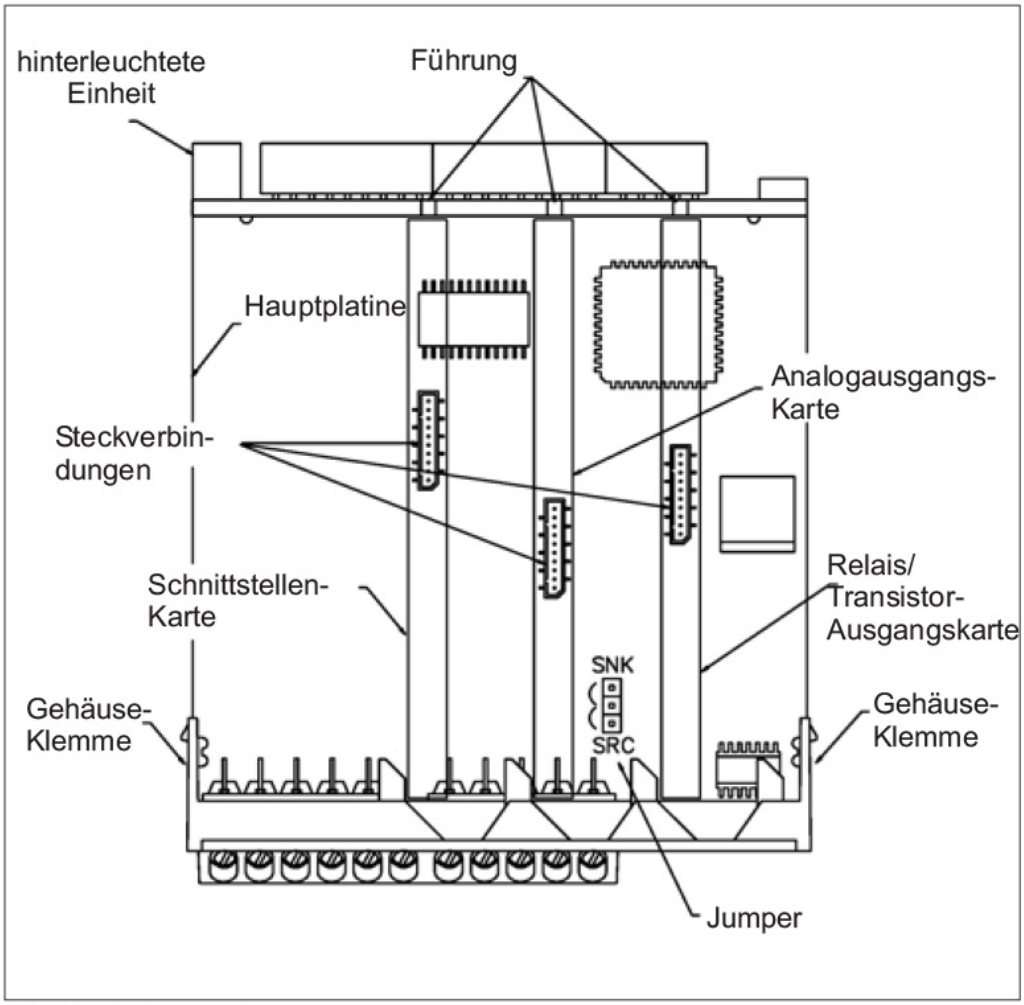
Dimensions (mm)



Abmessungen (in mm)

Drawings

Mechanical structure



Mechanischer Aufbau

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