AC-TRUE-RMS display PAXH

- 5-digit, 14 mm high LED, indicators, backlit unit
- 200 mV, 2 V, 20 V, 300 V, 200 µA, 2 mA, 20 mA, 200 mA, 5 A (AC)
- 20 measurements/sec.
- pluggable options: 2 or 4 limit values,
  Analog output: 0/4-20 mA,
- easy programming on the device or via PC
- Summation, min/max value, 16-step linearization
- High protection class IP65, 48 x 96 x 104 mm

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

Description

The PAXH industrial digital display for AC voltage/current can of course also be used as a very flexible and accurate laboratory device. However, with its robust plastic housing and high IP65 protection rating, it has been designed for use in harsh industrial environments. 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.
A wide range of AC voltage and AC current signals are accepted. The range is set via jumpers and in the programming. As a high-quality digital display, the PAXH has 2 measurement evaluations. On the one hand the pure measurement of the effective value (of the alternating quantity) (AC coupled), on the other hand the measurement of the input quantity including the DC component (DC coupled).

Product details

Entrance areas	200 mV, 2 V, 20 V, 300 V, 200 µA, 2 mA, 20 mA, 200 mA, 5 A (all alternating variables)
Display	5-digit, 14 mm high red LED that can be read in sunlight.
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
Keys	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, Inaktiv 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	PAXH000 0/B: 85 to 250 VAC 50/60 Hz, 15 VA.
Measuring rate:	20 measurements/second. A/D converter with 16 bit resolution.
Response times:	1 second for display of 99 % of the final value.
Protection class	Jet-proof and dust-tight to IP 65 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. 100 mA at Vsat = 0.7 V, Vmax 30 V, galvanic isolation of 500 V for 1 minute 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 for 1 minute.
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 Crimson2, all project data can be easily created, managed, copied and transferred to the PAX device on the PC. Any 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.	
PAXH0000	PAX H display for alternating current/ voltage with 85 to 250 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
PAXCDC10	Plug-in RS485 interface card (terminal strip)
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

Signals table

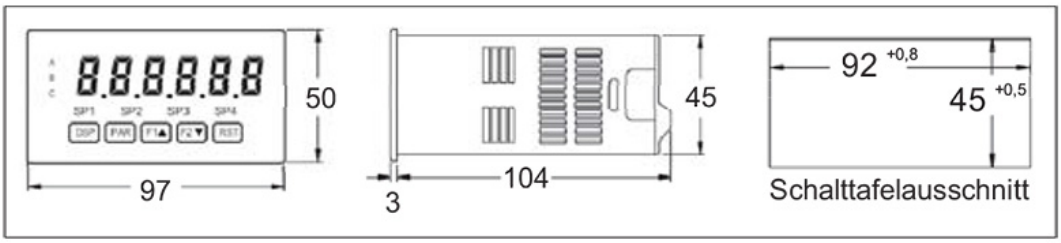
Die Genauigkeit in der folgenden Bereichstabelle ist in Prozent des Anzeigewertes angegeben. Der Schutz entspricht dem max. zulässigen Eingangssignal.

Bereich	Genauigkeit bei 18°C bis 28°C	Impedanz (60 Hz)	Schutz	max Gleichtaktunterdr.	Auflösung
200 mV	0,1% + 0,4mV	686 kΩ	30 V	±10V	0,01mV
2 V	0,1% +2mV	686 kΩ	30 V	±50V	0,1mV
20 V	0,1% + 20mV	686 kΩ	300 V	±300V	1mV
300 V	0,2% + 0,3mV	686 kΩ	300 V	±300V	0,1V
200 µA	0,1% + 0,4µA	1,11kΩ	15 mA	±15 mA	0,01 µA
2 mA	0,1% + 2µA	111 Ω	50 mA	±50mA	0,1µA
20 mA	0,1% + 20µA	11,1 Ω	150 mA	±150mA	1µA
200 mA	0,1% + 0,2mA	1,1 Ω	500 mA	±500mA	10 µA
5 A	0,5% + 5mA	0,02 Ω	7 A	±7A	1 mA

Max. Verhältnis Scheitelwert/Effektivwert: 5 (bei max. Signaleingang).
Gleichtaktunterdrückung (DC bis 60Hz): 100 dB.
Eingangskapazität: 10 pF

Drawings

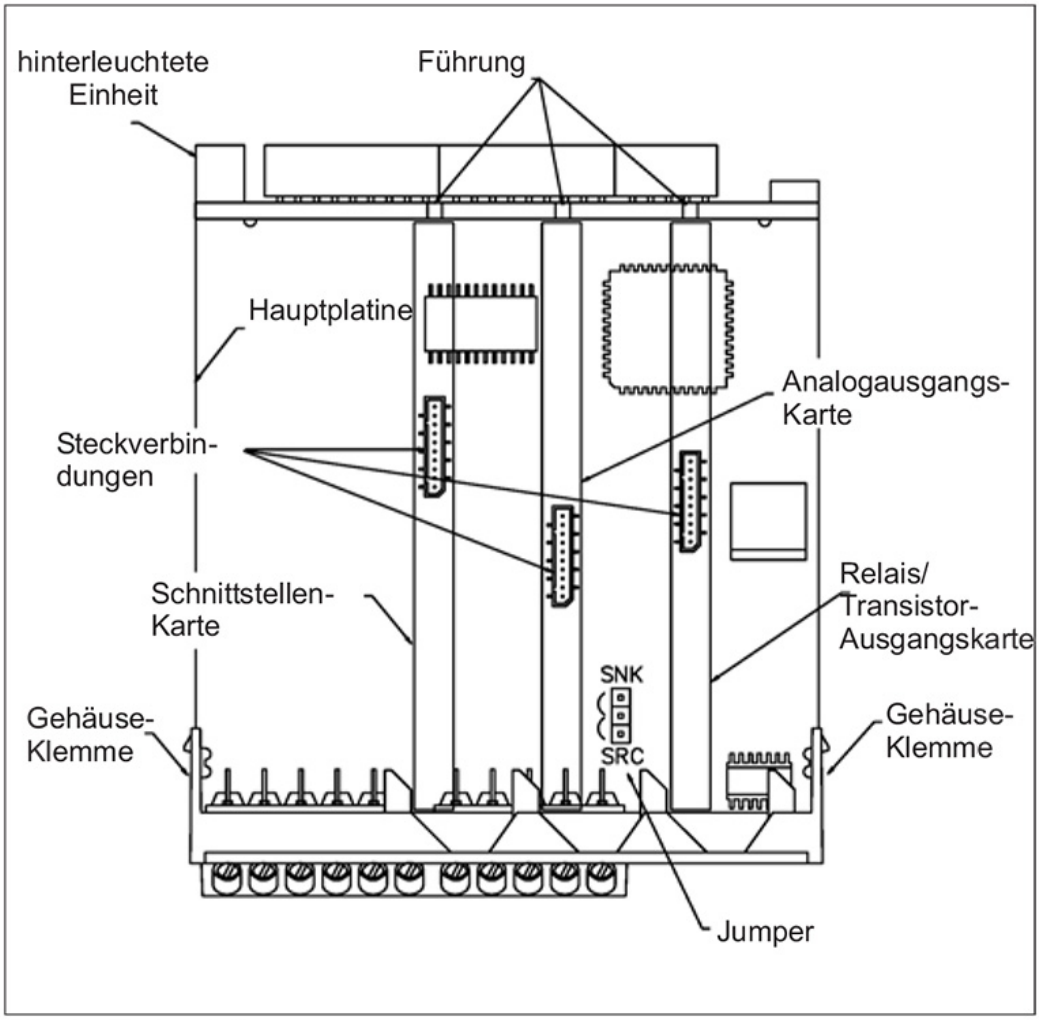
Dimensions (mm)



Abmessungen (in mm)

Drawings

Mechanical structure



Mechanischer Aufbau

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