

**Programmable Industry-Digital Built-In Measuring Device****Type PAX**

- Display Freely Scaleable
- Extendable by up to  
3 Output Cards
- 20 Measurements/s
- Min.-Max. Value Display
- Short Length Design  
(Depth 104 mm)
- Level of Protection IP 65  
on Front Side

**DESCRIPTION:**

PAX is a very flexible and accurate laboratory device which is also excellently qualified for rough industrial applications due to its very robust synthetic housing and the high IP 65 level of protection.

The device is programmed either by PC or by 5 keys, directly. Additional functions e.g. Minimum-Maximum memory, tare, delete memory....., can be performed by keys or 3 programmable inputs. The programmable inputs can be adjusted by jumpers PNP- or NPN.

For **PAXD** and **PAXS** a linearization of up to 16 steps is possible. In addition, PAXD and PAXS include a summation counter. Both device have an easy to be changed backlit physical unit display.

**PAXD** processes a wide range of DC voltage-, DC current- and resistance signals. The range is being adjusted by jumpers and in the programming. Thus, the unit is especially applicable for sensors with active output signals.

**PAXS** processes input signals in the range of  $\pm 24$  mV DC (dissolution 1  $\mu$ V) or  $\pm 240$  mV DC (dissolution 10  $\mu$ V) and is mainly used with passive sensors.

**PAXI** is a counter-tachometer unit. It processes impulses in the range of 0.01 Hz up to 34 kHz. Input signals of NPN-, PNP-sensors, CMOS, TTL, potential-free contacts and permanent magnetic sensors can be processed. The device has 3 counters and a tachometer which are scaleable independently from each other.

The decimal point can be selected freely. By a rounding factor and digital filtration the display is being soothed if necessary.

The device can be equipped, or at a later time upgraded, with various output cards. At the Max., the device can be provided with each one limit value-, an analog output- and an interface slot.

Each PAX unit is also available as a LPAX-model. LPAX has a large display (38 mm height LED-unit) which is legible from a distance of 20 m. LPAX can be delivered either as an assembly kit or already mounted in a 28 TE-table housing. (See PAX-TG data sheet).


**TECHNICAL DATA:**

Type	PAXD0000	PAXD0010	PAXS0000	PAXS0010	PAXI0000	PAXI0010
Art. No.	100859	100860	100857	100858	104884	105422
Supply	85...250 V AC 50/60 Hz 15 VA	11...36 V DC 11 W or 24 V AC $\pm 10\%$ 50/60 Hz 15 VA	85...250 V AC 50/60 Hz 15 VA	11...36 V DC 11 W or 24 V AC $\pm 10\%$ 50/60 Hz 15 VA	85...250 V AC 50/60 Hz 15 VA	11...36 V DC 11 W or 24 V AC $\pm 10\%$ 50/60 Hz 15 VA
Measuring Rate	20 Measurements/s					
Reaction time	0.2 s for display of 99% of final value, max. 0.7 s (prolongs at increase of digital filtration)				Max. 0.6 s; at reset, gate and cache memory, the device reacts 25 $\mu$ s after the next active flank of the assigned counter. After max. 100 ms a new flank will be detected at the user input.	
Display	5-digit, height 14 mm (LPAX: 38 mm), red LED, unit free definable				6-digit, height 14 mm (LPAX: 38 mm), red LED	

**Sensor Side**

Excitation	24 V DC 50 mA	10 V DC 125 mA (5 V 65 mA)	12 V DC 100 mA
Signal Input / Impedance	$\pm 2$ V / 1.066 M $\Omega$ $\pm 20$ V / 1.066 M $\Omega$ $\pm 20$ mA / 11.1 $\Omega$ $\pm 200$ mA / 1.1 $\Omega$	$\pm 24$ mV / 100 M $\Omega$ $\pm 240$ mV / 100 M $\Omega$	0...34 kHz 5 V TTL
Disturbance Rejection NMR	>60 dB at 50/60 Hz $\pm 1\%$ (can be increased by digital filtration)		-
Common Mode Suppression CMR	>100 dB, DC to 120 Hz		-

**Miscellaneous**

Service Temperature Range	0...+45 °C
Storage Temperature Range	-40...+85 °C
Operating and Storage Humidity	max. 85%, non-condensing
Electromagnetic Compatibility	Emission: EN 50081-2, Immunity: EN 50082-2, CE conform
Dimensions (W x H x D)	97 x 50 x 104 mm (LPAX: 254 x 121 x 118 mm)
Switch-Board Segment	92 x 45 mm (LPAX: 186 x 92 mm)
Weight	approx. 0.3 kg (LPAX approx. 1.5 kg)
Level of Protect. Front Side	IP 65

Options	Art. No.	Function
CDC10	100861	Interface Module RS485
CDC20	100862	Interface Module RS232
CDL10	100863	Analog Output 0...10 V or 0...20 V, 4...20 mA
CDS10	100864	2 Limit Value Relay Change-Over Contacts
CDS20	100865	4 Limit Value Relay Closing Contacts
CDS30	100866	4 Limit Value Transistor Outputs NPN
CDS40	100867	4 Limit Value Transistor Outputs PNP
EVK	101014	Mounting, Wiring and Calibration
SFPAX100	on request	Programming Software for WINDOWS
LPAX	on request	PAX-Unit with Large Display (38 mm Height LED-Display)
PAX-XLS	106872	Measuring and Evaluation Software for EXCEL, only applicable with option RS232