Programmable Industry-Digital Built-In Measuring Device 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 IP65 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 IP65 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 ±24 mVDC (dissolution 1 μV) or ±240 mVDC (dissolution 10 μV) 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.

Specifications

Type	PAXD000B	PAXD001B	PAXS000B	PAXS001B	PAXI002B	PAXI003B
Art.-No.	100859	100860	100857	100858	104884	105422
Supply	85 .. 250VAC 50 .. 60 Hz 15 VA	11 .. 36VDC 11 W or 24VAC ±10% 50 .. 60 Hz 15 VA	85 .. 250VAC 50 .. 60 Hz 15 VA	11 .. 36VDC 11 W or 24VAC ±10% 50 .. 60 Hz 15 VA	85 .. 250VAC 50 .. 60 Hz 15 VA	11 .. 36VDC 11 W or 24VAC ±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 µs 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	24VDC, 50 mA		10VDC, 125 mA (5V, 65 mA)		12VDC, 100 mA	
Signal input / impedance	±2V / 1.066 MΩ ±20V / 1.066 MΩ ±20 mA / 11.1 Ω ±200 mA / 1.1 Ω		±24 mV / 100 MΩ ±240 mV / 100 MΩ		0 .. 34 kHz 5V TTL	
Disturbance rejection NMR	>60 dB at 50 .. 60 Hz ±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, CE conform	Emission and immunity: EN 61326:2006
Dimensions (W x H x D)	97 x 50 x 104 mm (LPAX: 254 x 121 x 118 mm)
Switch-board segment (W x H)	92 x 45 mm (LPAX: 186 x 92 mm)
Weight	approx. 0.3 kg (LPAX approx. 1.5 kg)
Level of protection front side	IP65

Options/ Accessories

Art.-No.	Type	Description
115134	mV/V/±10V/0/4...20mA	Adjustment amplifier with simulator
100861	PAX-CDC10	Plug-in interface card RS485
100862	PAX-CDC20	Plug-in interface card RS232
115091	PAX-CDC30	Plug-in interface card DeviceNet with clamping strip
111287	PAX-CDC50	Plug-in interface card Profibus-DP
113258	PAX-USB00	Plug-in interface card USB
100863	PAX-CDL10	Plug-in analog output card 0 .. 10V or 0/4 .. 20 mA
100864	PAX-CDS10	Plug-in relay output card, 2 x changer
100865	PAX-CDS20	Plug-in relay output card, 4 x closer
100866	PAX-CDS30	Plug-in transistor output card, 4 x NPN
100867	PAX-CDS40	Plug-in transistor output card, 4 x PNP