AZ10

Digital Display and Control Unit

- **dimensions 96 x 48 mm**

- **versions for pulse input, standard signals and temperature sensors**

- **5 / 6 digit LED display, 14 mm high up to 4 limit switches**

- **optional analogue output**

- **interface RS-232 or RS-485 and programming software for Windows**

- **power supply 230 VAC or 24 VDC**

- **integrated sensor supply**

Description:

The digital display and control unit type AZ10 developed for robust industrial use. The device is available in 3 basic versions for pulse, analogue or temperature input signals. It is easily programmed via 5 keys on the front panel or via an optional Windows software. Up to 3 interface cards for limit switches, analogue output or serial interfaces can be inserted into the AZ10 – even retrospectively.

Typical applications:

The AZ10´s versatile input and output configurations, easy programmability and rugged design make it suitable for virtually any industrial or laboratory application.

Models:

AZ10.I: **Counters and tachometers**
display 6-digit, LED, 14 mm

Inputs:
2 independent counting inputs,
1 x tachometer, programmable for input
A or B,
1 x internal counter, programmable A+B, A-B or in connection with serial interface for alphanumeric display of short texts.
phase discriminator x 1, 2 or 4

Input signals:
NPN, PNP, TTL, potential-free contacts,
setting via DIP switches.
maximum input frequency depending on counting mode: up to 34 kHz
3 programmable control inputs, NPN- or PNP- switching

Output signals:
pulse output, NPN open collector, free scalable
sensor supply, 12 VDC, 100 mA max.,
short-circuit proof

Power supply:
85…250 VAC, 50/60 Hz, 18 VA or
11…36 VDC, 18 W / 24 VAC, 15 VA

AZ10.P: **Display for standard signals**
display 5-digit, LED, 14 mm,
free programmable
totalizer, free programmable
16-point linearization

Inputs:
1 input for analogue signals 0 (4)…20 mA
or 0…10 V,
3 programmable control inputs, NPN- or
PNP- switching

Output signals:
Sensor supply, 24 VDC, 50 mA max.

Power supply:
85…250 VAC, 50/60 Hz, 15 VA or
11…36 VDC, 11 W / 24 VAC, 15 VA

AZ10.T: **Display for temperature sensors**
display 5-digit, LED, 14 mm,
free programmable for thermocouples,
Pt100, resistance thermometer
16-point linearization

Inputs:
1 input for thermocouple or Pt100,
3 programmable control inputs, NPN- or
PNP- switching

Output signals:
Sensor supply, 24 VDC, 50 mA max.

Power supply:
85…250 VAC, 50/60 Hz, 15 VA or
11…36 VDC, 11 W / 24 VAC, 15 VA

Options:

The device series AZ10 can be equipped with up to 3 different output cards.
The cards are simply inserted into already prepared slots in the device and programmed via the front keyboard or the optional Windows software. This retrofitting can also be easily carried out by the customer at a later date.

Limit switches:
4 different output cards are available for programming limit switches:

K2R: 2 relay outputs, SPDT, max. 5 A at 230 VAC

K4R: 4 relay outputs, N/O, max. 3 A at 250 VAC

K4TN: 4 transistor switching outputs, NPN open collector, max. 100 mA

K4TP: 4 transistor switching outputs, PNP open collector, max. 100 mA with external supply
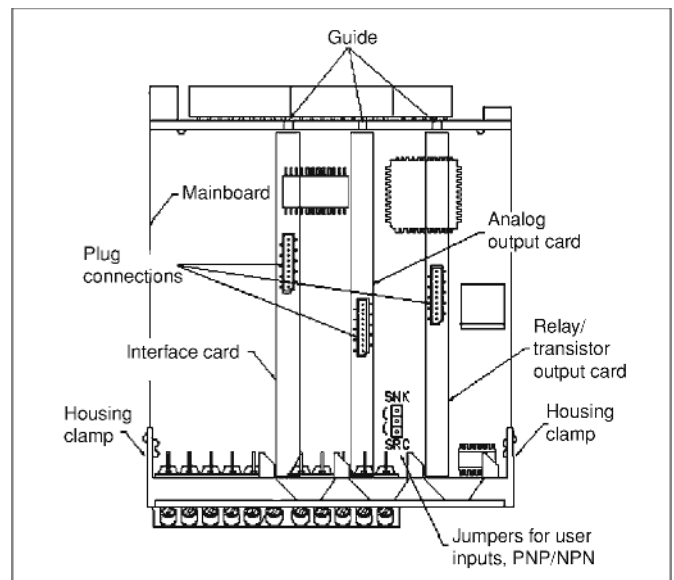
Analogue output:
A: analogue output, free programmable, 0(4)…20 mA, 0…10 V, scalable, max. load 500 Ohm

Interfaces:
RS2: RS-232 interface, half-duplex, programmable
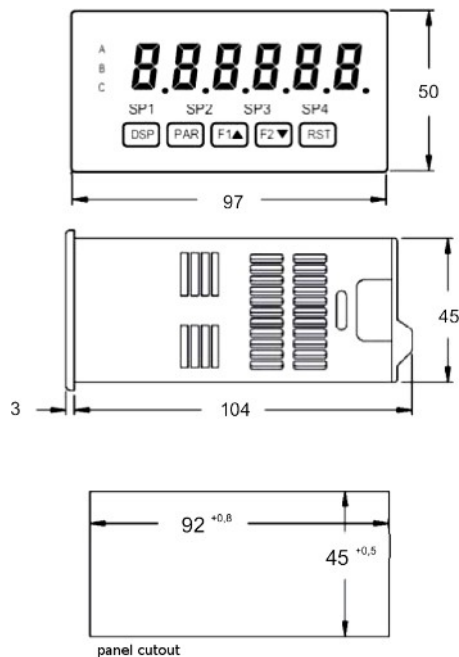max. 32 devices per loop

RS4: RS-485 interface, multipoint, programmable
max. 32 devices per loop
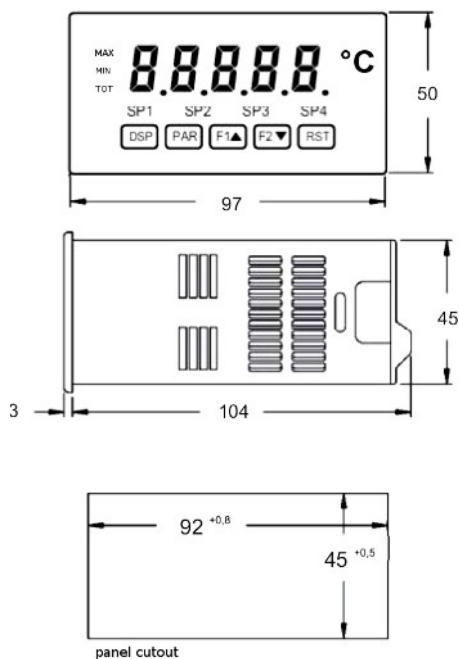
RPB: Profibus-DP interface

Dimensions:

AZ10.I: front view, dimensions and panel cut-out

panel cutout

AZ10.P/T: front view, dimensions and panel cut-out

panel cutout

Order Code:

Order number:	AZ10.	P.	1.	K2R.	RLC

Digital display and control unit

Models:
I = for pulse inputs
P = for analogue inputs
T = for temperature sensors

Power supply:
1 = 85…250 VAC
2 = 11…36 VDC / 24 VAC

Interface cards:
(Multiple selection of up to 3 different cards)
K2R   = 2 relay outputs, SPDT
K4R   = 4 relay outputs, N/O
K4TN = 4 transistor switching outputs, NPN OC
K4TP = 4 transistor switching outputs, PNP OC
A   = analogue outputs
RS2   = RS-232 interface
RS4   = RS-485 interface
RPB   = Profibus-DP interface

Options:
(multiple selection possible)
IP   = IP65 housing
E   = unit sheet for AZ10.P/T
RLC = programming software RLCPro
KIT = beginner kit, consisting of software RLCPro,
       RS-232 interface card and connecting cable

Options:

IP65 housing:

A robust sheet steel housing is available for the AZ10 series, which offers water- and dustproof protection to IP65.
The housing can be used both as a table version and for mounting.
The mounting brackets required for mounting are included in the scope of delivery.
The rear panel can be unscrewed for electrical connection. To ensure the degree of protection, the connecting cables must be routed via suitable cable glands (not included in the scope of delivery).
Dimension (WxHxD): 140 x 83 x 120 mm

Unit sheet for AZ10.P/T:

For the device version AZ10.P or AZ10.T, pre-printed sheets with the common units of measurement of the process technology are available for depositing behind the windscreen.

Programmable software Crimson:

With the Windows software Crimson all projects can be easily created, managed, copied and transferred to the AZ10.

The programming is menu-guided and clear.
The scaling assistant enables extremely fast and easy scaling for non-linear applications (e.g. filling height of spherical tank). Only the start and end values need to be defined. The further calculation takes place automatically.

Any user who frequently uses AZ10 devices can save individual projects and use existing knowledge for similar applications.
A starter package consisting of software, RS 232 interface and PC/PAX cable facilitates the decision for this programming.

Operating system: Microsoft Windows®

PKP Prozessmesstechnik GmbH
Borsigstr. 24 • D-65205 Wiesbaden

☎ +49 (0) 6122-7055-0 • 📠 +49 (0) 6122 7055-50
✉ info@pkp.de • 🌐 www.pkp.de