

# AZ10

## Digital Display and Control Unit

- Dimensions: 96x48 mm
- Models for pulse input, standardized signals and temperature sensors
- 5/6-place, 14 mm high LED display; up to 4 limit switches
- Optional analog output
- RS-232 or RS-485 interface and Windows-compatible programming software
- Power supply: 230 VAC or 24 VDC
- Integral sensor power supply



**Description:**

The Model AZ10 digital display and control unit was developed for use in tough, demanding industrial applications. It is available in three basic models designed for pulse, analog or temperature input signals. It can be easily programmed with the five buttons on the front keypad or by means of optional Windows software. The AZ10 accepts up to three interface cards for limit contacts, analog output or serial interfaces. If necessary, these cards can be added later.

**Typical Applications:**

Its great variety of input and output configurations, easy programmability and heavy-duty design make the AZ10 suitable for a vast range of industrial or laboratory applications.



## Models:

### AZ10.I: Counter and Tachometer

LED display: 6-place, 14 mm high

#### Inputs:

2 independent counter inputs; 1 tachometer, programmable for input A or B  
1 internal counter, programmable A+B, A-B or along with serial interface for alphanumeric display of short texts  
1, 2 or 4 phase discriminator(s)

#### Input signals:

NPN, PNP, TTL, floating contacts, setting by means of DIP switch Maximum input frequency dependent on counting mode: up to 34 kHz  
3 programmable control inputs, NPN or PNP switching

#### Output signals:

Pulse output, NPN open collector, freely 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

LED display: 5-place, 14 mm high

Freely programmable

Counter, freely programmable

16-point linearization

#### Inputs:

1 input for analog 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

LED display: 5-place, 14 mm high

Freely programmable for thermocouples

PT-100, resistance thermometer

16-point linearization

#### Inputs:

1 input for a thermocouple or PT-100  
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

Model series AZ10 devices can be fitted with up three different output cards.

The cards can be simply inserted into the available slots and programmed by means of the front keypad or the optional Windows software. If necessary, these cards can be added later by the customer.

#### Limit switches:

4 different output cards are available for programming limit switches:

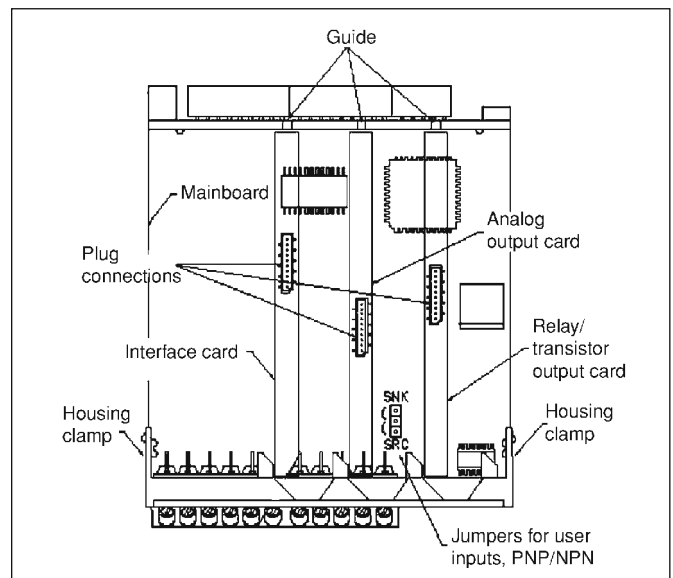
K2R:	2 relay outputs, changeover contact, max. 5 A at 230 VAC
K4R:	4 relay outputs, NO contact, max. 3 A at 250 VAC
K4TN:	4 transistor switching outputs, NPN open collector, max. 100 mA
K4TP:	4 transistor switching outputs, PNP open collector, max. 100 mA with external power supply

#### Analog output:

A: Analog output, freely programmable, 0(4)...20 mA, 0...10 V, scalable, max. load 500 ohm

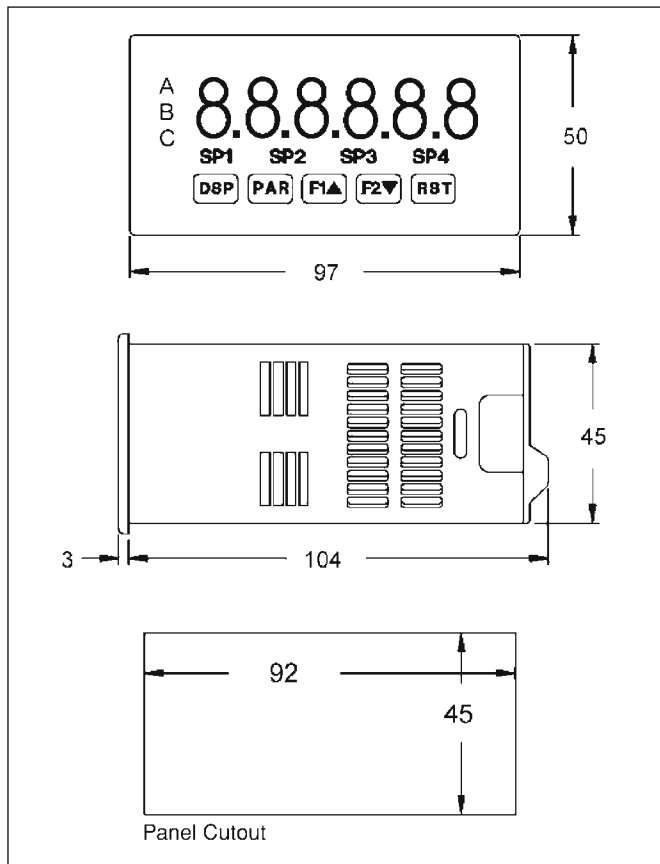
#### Interfaces:

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

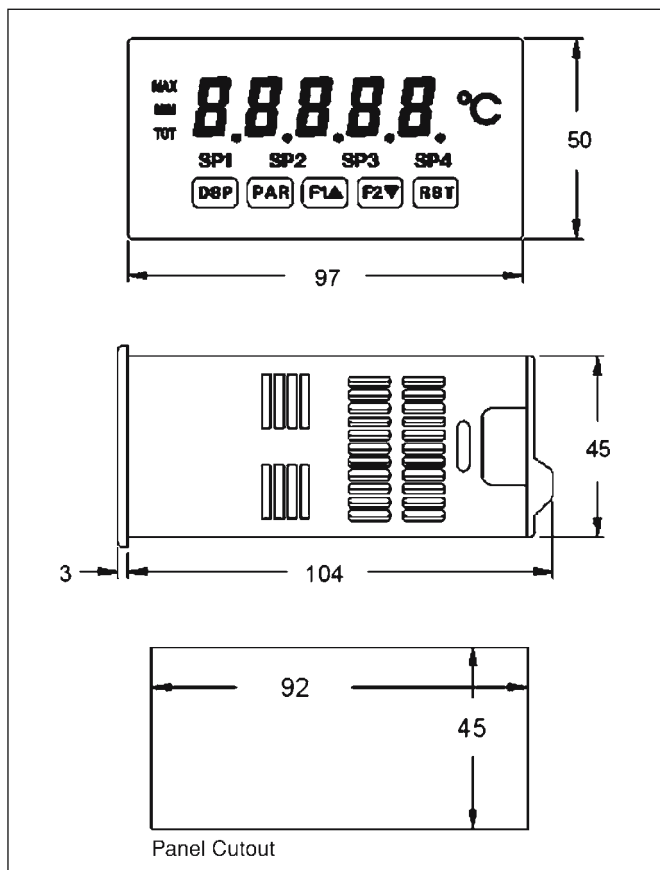


## Dimensions:

### AZ10.I: Front View, Dimensions and Panel Cutout



### AZ10.P / T: Front View, Dimensions and Panel Cutout



## Model Coding:

Order Number      AZ10. P. 1. K2R. RLC

Digital Display and Control Unit

### Model:

I = for pulse inputs  
P = for analog outputs  
T = for temperature sensors

### Power supply:

1 = 85 to 250 VAC  
2 = 11 to 36 VDC / 24 VAC

### Interface cards:

(up to three different cards may be selected)  
K2R = 2 relay outputs, changeover contact  
K4R = 4 relay outputs, NO contact  
K4TN = 4 transistor switching outputs, NPN OC  
K4TP = 4 transistor switching outputs, PNP OC  
A = Analog output  
RS2 = RS-232 interface  
RS4 = RS-485 interface  
RPB = Profibus DP interface

### Options:

(more than one may be selected)  
IP = IP-65 housing  
E = Reference sheets for AZ10.P/T  
RLC = RLCPro programming software  
KIT = Starter kit consisting of RLCPro software, RS-232 interface card and connection cable

## Options

### IP-65 housing:

A rugged sheet metal housing is available for model series AZ10. This housing provides protection against intrusion of water and dust (protection type IP 65). The housing can be used on a table top or be installed alongside other equipment. The mounting bracket required is supplied with the housing.

The rear panel of the housing can be removed to gain access to electrical connections. To ensure that the stated protection type is maintained, any leads installed must be routed through appropriate cable fittings (not included).  
Dimensions (WxHxD): 140 x 83 120 mm

### Reference sheets for AZ10.P/T:

Printed reference sheets listing common units used in process technology, intended to be stored behind the front cover, are available for the AZ10.P or AZ10.T.