

## Description

A6-PR process indicator has been designed with high accuracy measurement, 6 digit display, flexible I/O functions and communication port for process measuring application.

There are also build in 4x External Control Inputs, and can option 4x Relay outputs, 1x Analog output and 1x RS485 (Modbus RTU Mode) communication port with multi-functions such as control, alarm, re-transmission and communication for a wide range of industrial applications.

There was designed the zero tracking and stable tracking function in programming level. According to the application, user can set the function to get the suitable reading.



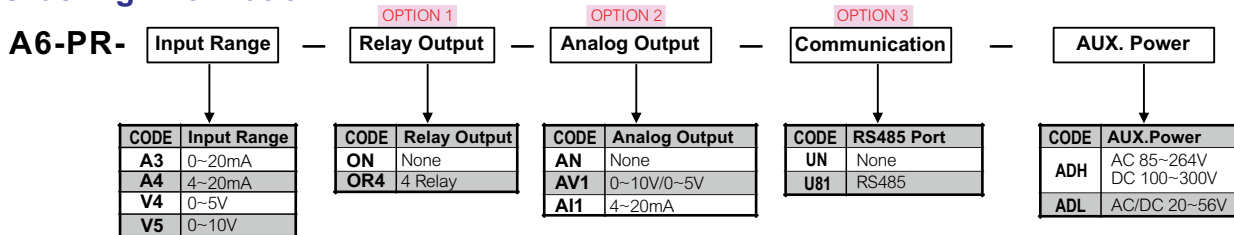
## Features

- Measuring range: DC 0~5V/0~10V/0(4)~20mA ; Display range: -199999~999999
- Programmable sampling rate: 6.25~100 times/second
- Can be site calibration, input signal and input display value to execute calibration.
- Relay output can be set to HI/OK/LO , compare in period time and compare by trigger modes.
- External Control Inputs and front key can be set to zero return, tare, gross, net, start / end measuring.
- Optional analog output and RS485 communication port.

## Applications

- Pressure measuring and control system
- High-speed response control system
- Flow measuring and control system
- Testing equipments and testing management system

## Ordering Information



## Technical Specification

### Input

Input Range	Input Resistance	Input Range	Input Resistance
0~20mA	≤ 250Ω	0~10V	≥ 1MΩ
4~20mA	≤ 250Ω	0~5V	≥ 1MΩ

Accuracy: ≤ ±0.01%.F.S.+1 count  
 Sampling rate: 6.25~100 times/sec  
 Non-Linearly: ≤ 0.01%  
 A/D Converter: 24 bits resolution  
 Calibration: site calibration

### Display & Function

LED: 6 digits 0.5"(12.5mm) High brightness display  
 Display range: -199999~999999  
 Decimal point: Programmable 0 / 0.0 / 0.00 / 0.000  
 Display resolution: Programmable 1, 2, 5, 10, 20, 50  
 Over range indicator: -OL- : When display is over the setting of 0.5P.OL

Zero tracking time (P L -L ): 0.0(off)/0.1~10.0 Sec  
 Zero tracking range(P L - r ): 0.0~10.0 digits  
 Tracking range=(P L - r ]S.V. x [d +u ]S.V.)  
 Unstabel tracking time(n d - L ): 0.0(off)/0.1~10.0 Sec  
 Unstabel tracking range(n d - r ): 0.1~10.0 digits  
 Tracking range=(n d - r ]S.V. x [d +u ]S.V.)

### Operating Key

Function setting:

The Up key and down key on front panel can be set individual function as below:  
 Zero return / Tare / Net & Gross / M+(Value accumulation) / M-(Subtract last value accumulation) / MC(Reset Accumulation) / CLR(Reset tare) / Start(Start measuring) / END(Stop measuring) / CH.DSP(Change display)

### External Control Input (ECI)

Input mode:

4 Channels input ; switch contact or open collector input, rise edge trigger  
 Can be set individual function as below:  
 Zero / Tare / Net & Gross / M+(Value accumulation) / M-(Subtract last value accumulation) / MC(Reset Accumulation) / CLR(Reset tare) / Start(Start measuring) / END(Stop measuring) / CH.DSP(Change display)

### Control function (Optional)

Relay contact form: 4 sets relay SPST (1a), 5A/250Vac;5A/30Vdc  
 Relay action mode: HI / OK / LO / DO(UART)  
 Relay contact status: Can be set to Normally open(NO) or close(NC)

## Analog Output(Optional)

Accuracy:	±0.1% of F.S.; 16 bits DA converter
Ripple:	±0.1% of F.S.
Response time:	200 mS. (10~90% Rated output)
Output range:	Voltage: 0~5V / 0~10V Current: 4~20mA
Output driver capability:	Voltage: 0~10V: ≥ 2000Ω Current: 4~20mA: ≤ 300Ω
Function setting:	[R 0 5 E L] Parameter select [R 0 5 P] Output phase Settable: Positive / Negative / Absolute [R 0 R C t] Output direction Settable: Equal / Opposite [R 0 L 5] AO range low: 0~999999 [R 0 H 5] AO range high: 0~999999
Digital fine adjust:	[R 0 7 r o] Adjust range : 0~99999 [R 0 5 P n] Adjust range : 0~99999

## RS485 Communication

Protocol:	Modbus RTU mode
Baud rate:	9600/19200/38400/57600
Data bit:	8bits
Parity:	None
Stop bit:	1 or 2
Address:	1 ~ 247
Distance:	1200M max
Terminate resistor:	120~300Ω/0.25W(typical: 150Ω)

## Power

Power supply:	ADH: AC 85~264V/DC 100~300V ADL: AC/DC 20~56V
Power consumption:	AC < 10VA; DC < 4W
Memory storage:	EEPROM

## Safety

Isolation:	AC 2.0 KV , for 1 min, Between Power / Input / Output / Case
Insulation resistance:	≥ 100M Ω @ 500Vdc, Between Power / Input / Output

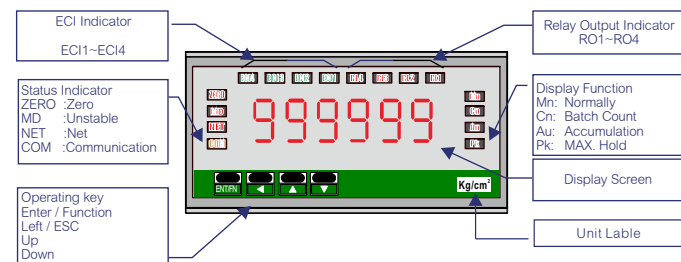
## Environmental Characteristics

Operating Temp.:	0~60 °C
Humidity rating(%RH):	20~95 %RH, Non-condensing
Temp. coefficient:	≤ 50 PPM/°C
Storage Temp.:	-10~70 °C
IP Enclosure:	Front panel: IEC 529 (Ip52) ; Housing: IP20

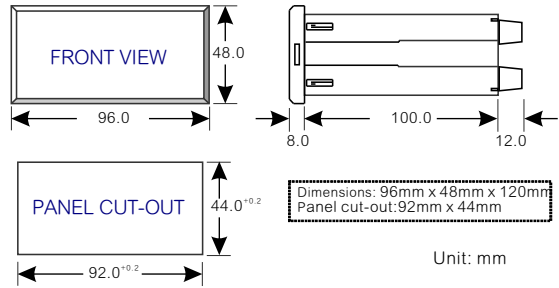
## Mechanical Characteristics

Dimensions:	96mm(W) x 48mm(H) x 120mm(L)
Panel cutout:	92mm(W) x 44mm(H)
Material:	ABS With fire-retardant (UL 94V-0)
Mounting:	Panel mounting
Wire terminal:	Plastic NYLON 66 (UL 94V-0); 10A 300Vac AWG: 22~16/ 0.3~1.2mm <sup>2</sup> Screw Torque Value: M2.5 / 5kgf.cm (Max)
Weight:	About 350g

## Front Panel

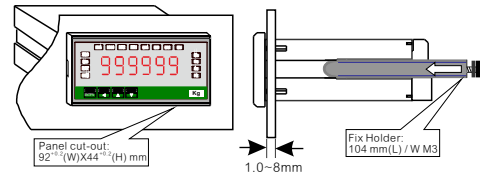


## Dimensions

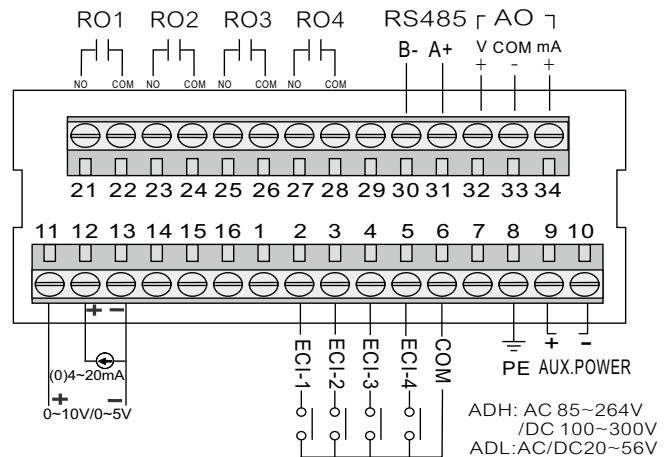


## Installation

**⚠** The meter should be installed in a location that does not over the maximum operating temperature and humidity and provides good air circulation

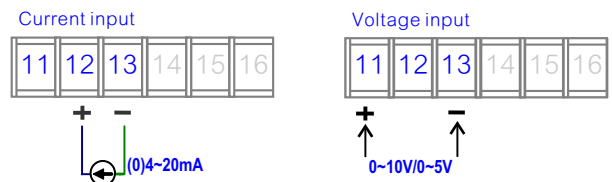


## Connection Diagram



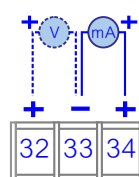
**⚠** Please check the voltage of power supplied first, and then connect to the specified terminals. It is recommended that power supplied to the meter be protected by a fuse or circuit breaker.

## Input Signal



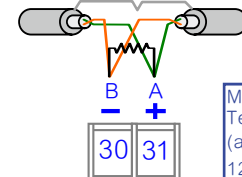
## Analog Output

**⚠** Caution of voltage and current output pin assignment



## RS485 Port connection

**⚠** Cable shielding must be grounding



Max. Distance: 1200M  
Terminal Resistor  
(at latest unit)  
120~300 Ω/0.25W  
(typical: 150Ω)