



# IN-uP4 Universal Input Indicator



## Features

- Universal Input.
- Programmable via USB Port using uP Configure software and XU-USB (Rev 1) key.
- Simple setup and calibration.
- 4-digit LED Display.
- Option to add Two Relay outputs (with two setpoint indicator LEDs), and One 4~20mA Analogue Output.
- Wide Range of Power Supply options.
- Sensor Power Supply for powering external Transmitter.
- IP65.
- Low Cost.

The IN-uP4 is a universal input indicator which makes interface with a wide range of sensors easy. The IN-uP4 has a 4-digit LED display. An option to add two relay outputs (with two setpoint indicator LEDs), and one 4~20mA analogue output is available. Setup and calibration is simple, using 'uP Configure' software, with step-by-step instructions.

## Programming the IN-uP4 is Easy



## Ordering Information

ITEM	CODE	DESCRIPTION
SERIES	IN-	Universal Input Indicator.
Outputs.	uP4-	No Outputs.
	uP4X-	One 4~20mA Analogue Output plus Two Relay Outputs.
Power Supply.	HV	85~265Vac / 100~300Vdc.
	LV	24Vac / 19~40Vdc.

Ordering Example: **IN-uP4-LV** Universal Input Indicator with No Outputs and 24Vac or 19~40Vdc Input Power Supply.

Note: The IN-uP4 Universal Input Indicator is pre-programmed for RTD Pt100 input as standard.

To program the IN-uP4 requires the XU-USB (Rev 1) Programming Key:

<b>XU-USB (Rev 1)</b>	USB Programming Key for programming IN-uP4 using uP Configure Programming software. (Same Key as used for programming XU Series transmitters, 2400-A16 / 2400-M-R and Z-2400-Sleeper.) Note: XU-USB must be (Rev 1) or later! <b>Older versions will NOT connect with the IN-uP4.</b>
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# IN-uP4 Specifications

## Input Specifications:

Accuracy/Repeatability	0.05% of FSO.
Temperature Drift	30ppm/°C typical.

### Voltage Input Specifications:

mV Range	-200mV~200mV.
V Range	0~1V, 0~10V, -10~30V, 0~300V.

### Current Input Specifications:

mA Range	0~20mA (4~20mA).
Input Resistance	10Ω.

### Sensor Power Supply:

22Vdc ±10%, 50mA max.
Can be used to power 2, 3 and 4 wire sensors.

### Thermocouple Input Specifications:

Thermocouple Types	B, E, J, K, N, R, S, T.
Accuracy	E, J, K, N, T <±1°C. B, R, S <±2°C.

### RTD Input Specifications:

RTD Input	Pt100 or Pt1000 DIN 3-wire Type. (2-wire can be used with offset calibration.)
Lead Wire Resistance	Pt100: 10Ω/wire Maximum. Pt1000: 5Ω/wire Maximum. 0.02% FSO Offset Error per Ω of Lead Resistance.

### NTC Thermistor Input Specifications:

NTC Sensor Types	10K (Beta 3984)    -55~125°C. 10K (Beta 3435)    -50~110°C.
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### Pulse & Frequency Input Specifications:

Input Type	Open Contact - NPN, PNP.
Frequency Range	0~2000Hz.

### Potentiometer Input Specifications:

Potentiometer input	3-wire.
Excitation voltage	Variable.
Potentiometer resistance	<1kΩ low pot; 1~4kΩ med pot; 4~20kΩ high pot.

## Output Specifications:

IN-uP4X only.

### Analogue Output:

mA Range	4~20mA or 20~4mA.
Output Drive	600Ω at 12Vdc.

### Relay Outputs:

Functions	2 Isolated Relays with LED Indication On Each Output. 2 on Board Controllers can be used as Set Point (SV), Switching Differential, Auto/Manual, Manual Output Setting, Dual Action Control, Single Action Control, Heat/Cool, Cool Only, Heat Only.
Relay Ratings	250Vac, 3A Max.

## General Specifications:

<b>Power Options:</b>	HV	85~265Vac, 100~300Vdc.
	LV	24Vac, 19~40Vdc.

Indicator Housing	IP65.
Indicator Case Dimensions	H=48, W=95, D=62mm.

Panel Cutout	Allow 80mm minimum behind panel for connectors and wiring. H=45, W=92mm.
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**Product Liability.** This information describes our products. It does not constitute guaranteed properties and is not intended to affirm the suitability of a product for a particular application. Due to ongoing research and development, designs, specifications, and documentation are subject to change without notification. Regrettably, omissions and exceptions cannot be completely ruled out. No liability will be accepted for errors, omissions or amendments to this specification. Technical data are always specified by their average values and are based on Standard Calibration Units at 25°C, unless otherwise specified. Each product is subject to the 'Conditions of Sale'.

**Warning: These products are not designed for use in, and should not be used for patient connected applications. In any critical installation an independent fail-safe back-up system must always be implemented.**