uP4-Din

Universal Input Indicator, Din-Rail, Controller, Transmitter.

Features

- Universal Input with Indication.
- DIN Rail Mount.
- Universal AC or DC supply.
- Two Relay Outputs (with Setpoint LEDs).
- Option to add One Retrans Analogue Output (4~20mA or 0~10Vdc selectable).
- Programmable via USB Port using uP Configure software and the **XU-USB** (Rev 1) key.
- Simple setup and calibration.
- 4-digit LED display with Transparent Cover.
- Sensor power supply for powering external transmitter.
- Low cost.

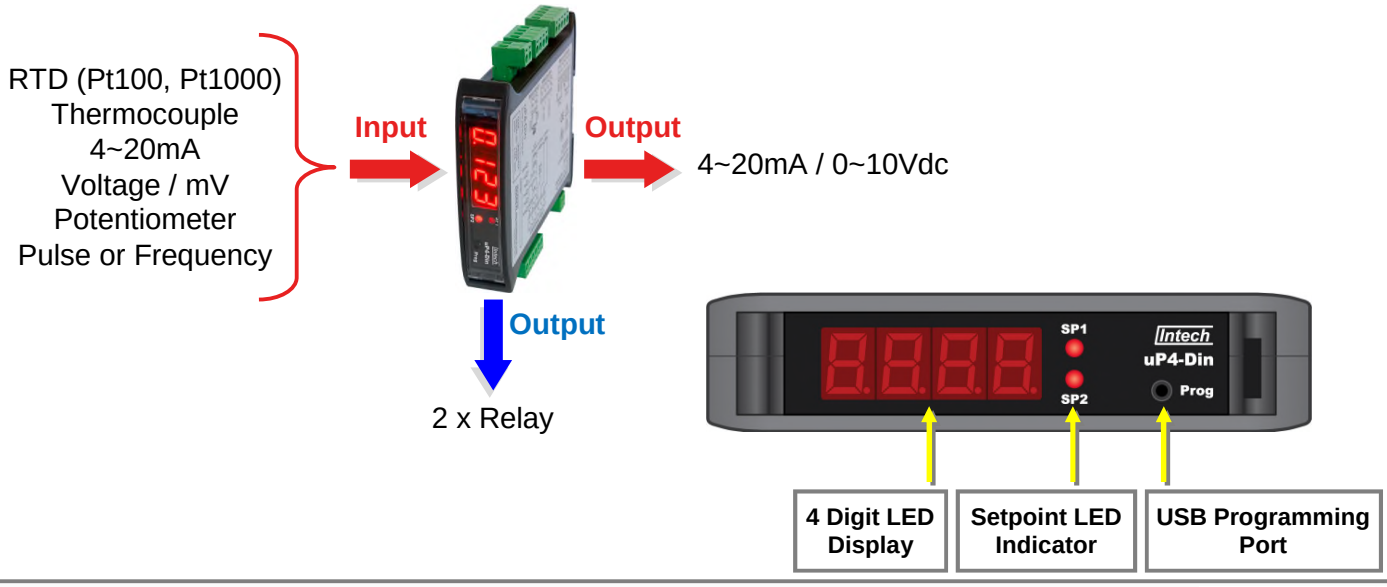
The uP4-Din is a DIN rail mount, universal single input indicator, which gives easy interface with a wide range of sensors. It is also fitted with two relay outputs (with two setpoint indicator LEDs), and one optional retransmission output (4~20mA or 0~10Vdc selectable). The uP4-Din has a 4-digit LED front display, and a universal power supply of 24~250Vac / 19.5~250Vdc. Setup and calibration is simple, using 'uP Configure' software (version 1.5.23 or later), with step-by-step instructions.

Ordering Information

CODE	*DESCRIPTION*
uP4-Din-R2	Universal Input Indicator, DIN rail mount with Two Relay Outputs.
uP4-Din-R2A	Universal Input Indicator, DIN rail mount with Two Relay Outputs plus One Analogue Output (4~20mA or 0~10Vdc selectable).

Universal Power Supply of 24~250Vac / 19.5~250Vdc.

XU-USB (Rev 1)	USB Programming Key for programming uP4-Din using **uP Configure** Programming software. Note: XU-USB must be (Rev 1) or later! Older versions will NOT connect with the uP4-Din. (Same Key as used for programming XU Series transmitters, 2400-A16, Z-2400-Sleeper, Z-2400-A2 Series and IN-uP4.)



Specifications

Input Specifications

Excitation - Sensor Power Supply	+22Vdc ±10%, 25mA max.
Voltage DC Input:	
mV Range	-200mV~200mV.
V Range	0~1V, 0~10V, -10~30V, 0~300Vdc.
Linearity and Repeatability	<±0.02% FSO typical.
Current Input:	
mA Range	0~20mA (4~20mA).
Input Resistance	10Ω.
Linearity and Repeatability	<±0.02% FSO typical.
Thermocouple Input:	
Thermocouple Types	B, E, J, K, N, R, S, T.
Input Impedance	1MΩ Minimum.
T/C Lead Resistance	100Ω Maximum.
Cold Junction Compensation	-10~70°C.
Accuracy	E, J, K, N, T <±1°C/ C.
	B, R, S <±2°C.
RTD Input:	
RTD Input	Pt100 or Pt1000 DIN 3-wire Type.
	(2-wire can be used with offset calibration.)
Lead Wire Resistance	Pt100: 50Ω/wire Maximum. 0.02% FSO Offset Error per Ω of Lead Resistance.
	Pt1000: 20Ω/wire Maximum. 0.002% FSO Offset Error per Ω of Lead Resistance.
Accuracy	Better than 0.2°C.
Linearity (Pt100)	0.02% FSO for Span Inputs ≤200°C. 0.1% FSO for Span Inputs ≤300°C.
Linearity (Pt1000)	0.02% FSO for Span Inputs ≤200°C. 0.2% FSO for Span Inputs ≤300°C.
NTC Thermistor Input:	
NTC Sensor Types	10K (Beta 3984) -55~125°C, 10K (Beta 3435) -50~120°C.
Pulse & Frequency Input:	
Input Type	Open Collector - NPN, PNP.
Frequency Range	0~2000Hz.
Software Modes	General Frequency, Flow Rate or RPM.
Potentiometer Input:	
Potentiometer input	3-wire.
Excitation voltage	Variable.
Potentiometer resistance	<1kΩ low pot; 1~4kΩ med pot; 4~20kΩ high pot.

Output Specifications:

Analogue Output:	Output type software selectable.
mA Range	0~20mA (4~20mA) Active.
V Range	0~10Vdc Active.
Isolation	1400Vrms for 1 minute. Working voltage 125V.
Output Drive	20mA, 600Ω at 12Vdc.
Accuracy / Repeatability	0.05% of FSO.
Relay Outputs:	2 Isolated Relays with LED indication on each output.
Functions	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 Type & Ratings	Relay 1: Form A, 3A max 120/240Vac or 28Vdc (resistive load).
	Relay 2: Form C, 10A max 120/240Vac or 28Vdc (resistive load).

Power Supply Specifications:

24~250Vac / 19.5~250Vdc (47-63Hz, 6VA max).

Isolation	2300Vrms for 1 minute to all inputs and outputs.

Case Specifications:

IP20.

DIN Rail Mount	35mm.
Display	4 digits with Plastic Protective Flap.
Dimensions	H=112mm, W=23mm, D=120mm.