

USER INSTRUCTIONS

PC-programmable 2-wire Transmitter for Pt100 Input



IPAQ[®] R202



The user instruction must be read prior to adjustment and/or installation.
All information subject to change without notice.

MEASURE OF SUCCESS



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This product should not be mixed with other kind of scrap, after usage.
It should be handled as an electronic/electric device.

MEASURE OF SUCCESS

GENERAL INFORMATION

IPAQ R202 is a low cost, non-isolated, easy-to-use 2-wire temperature transmitter for Pt100 input intended to be used in industrial environment. IPAQ R202 is designed to be mounted on a 35 mm DIN Rail.

The transmitter is configured from a PC via a USB port, connected via the INOR USB Interface, by using the ConSoft program.

All necessary hardware and software for configuration are included in the ICON Configuration Kit, 70CFGUS001.

DATA (short form)

Input Pt100	3-wire connection
Pt100 (IEC 60751, $\alpha=0.00385$)	-200 to +850 °C / -328 to +1562 °F
Adjustments - Zero	Any value within range limits
Adjustments - Minimum span	20 °C / 36 °F
Output	4-20 mA, temperature linear
Sensor failure indication	Upscale (≥ 21.0 mA) or downscale (≤ 3.6 mA)
NAMUR Compliance	Current limitations and failure currents acc. to NAMUR NE 43
Response time	0.13 to 54 s, adjustable filtering level
Ambient temperature	
Storage and operation	-40 to +85 °C / -40 to +185 °F
Galvanic isolation	No
Power supply	6 to 35 VDC
Accuracy	Max. of ± 0.1 °C / ± 0.2 °F or ± 0.1 % of span
Sensor error correction	Via two-point correction
Runtime counter	Hour counter for elapsed operational time
Mounting	DIN rail acc. to EN 60715 / EN 50022, 35 mm
Factory settings	
Input	Pt100 3W, 0 to 100 °C
Output	4 to 20 mA
Filtering level	Response time 0.9 s
Sensor failure indication	Upscale (≥ 21.0 mA)

CONFIGURATION

Before making a configuration of IPAQ R202 you need to do following:

1. Install the configuration software ConSoft and drivers for the INOR USB communication interface on a PC.
2. Connect the USB Interface to a free USB port of your PC and wait for automatic installation of the USB Interface.

Please refer to the installation guide for ConSoft for detailed installation instructions.

Required versions of configuration software:

ConSoft, 3.1.0 or higher
USB Interface, firmware 1.2.06 or higher

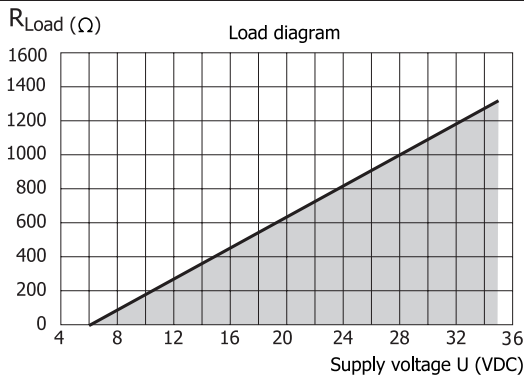
Connections:

PC to Interface: through USB type A to USB type B connection cable
Interface to transmitter: Mini USB type B to Mini USB type B cable

Configuration procedure:

1. Connect the transmitter to the PC via the USB Interface, LED indicator "DEV" on the USB Interface becomes green.
Configuration can be performed with or without connected power supply to the transmitter.
2. In ConSoft, click on the "Read" button. The software will recognize the connected transmitter and open the configuration window.
3. In the "C202/R202" configuration window you can edit:
 - a. Measuring range in three different engineering units
 - b. Upscale or downscale action at sensor errors
 - c. Compensation for known sensor errors
 - d. TAG-number
4. The selected configuration is downloaded to the transmitter by clicking the button "Write", when the data transfer is complete, the transmitter begins using the new parameters directly.

OUTPUT LOAD DIAGRAM

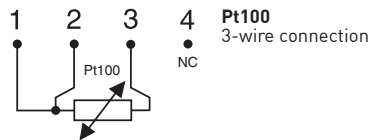


Maximum load depending on power supply

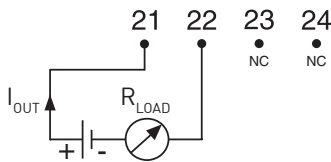
Formula for the max. permissible output load: $R_{Load} = (U-6)/0.022$

CONNECTIONS

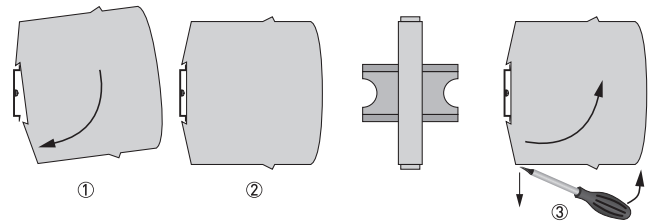
Input



Output



MOUNTING



Mounting and removal of the transmitter

1. Fix the upper part of the transmitter onto the rail.
2. Press the lower part of the transmitter against the rail.
3. To remove the transmitter, use a screwdriver and bend the locking under the transmitter downwards.

LIMITED WARRANTY

INOR Process AB, or any other affiliated company within the Inor Group (hereinafter jointly referred to as "Inor"), hereby warrants that the Product will be free from defects in materials or workmanship for a period of five (5) years from the date of delivery ("Limited Warranty"). This Limited Warranty is limited to repair or replacement at Inor's option and is effective only for the first end-user of the Product. Upon receipt of a warranty claim, Inor shall respond within a reasonable time period as to its decision concerning:

- 1 Whether Inor acknowledges its responsibility for any asserted defect in materials or workmanship; and, if so,
- 2 the appropriate cause of action to be taken (i.e. whether a defective product should be replaced or repaired by Inor).

This Limited Warranty applies only if the Product:

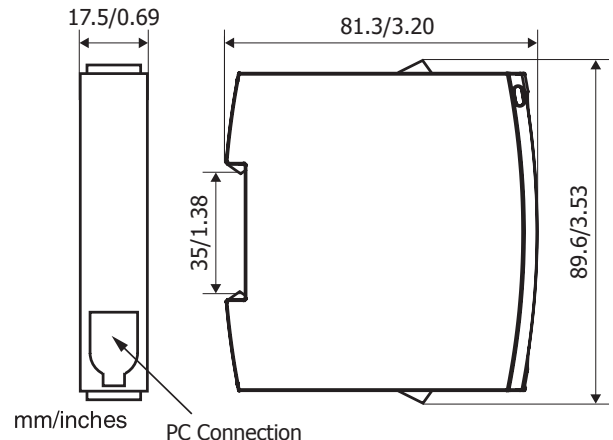
- 1 is installed according to the instructions furnished by Inor;
- 2 is connected to a proper power supply;
- 3 is not misused or abused; and
- 4 there is no evidence of tampering, mishandling, neglect, accidental damage, modification or repair without the approval of Inor or damage done to the Product by anyone other than Inor.

This Limited Warranty is provided by Inor and contains the only express warranty provided.

INOR SPECIFICALLY DISCLAIMS ANY EXPRESS WARRANTY NOT PROVIDED HEREIN AND ANY IMPLIED WARRANTY, GUARANTEE OR REPRESENTATION AS TO SUITABILITY FOR ANY PARTICULAR PURPOSE, PERFORMANCE, QUALITY AND ABSENCE OF ANY HIDDEN DEFECTS, AND ANY REMEDY FOR BREACH OF CONTRACT, WHICH BUT FOR THIS PROVISION, MIGHT ARISE BY IMPLICATION, OPERATION OF LAW, CUSTOM OF TRADE OR COURSE OF DEALING, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. EXCEPT AS PROVIDED HEREIN, INOR FURTHER DISCLAIMS ANY RESPONSIBILITY FOR LOSSES, EXPENSES, INCONVENIENCES, SPECIAL, DIRECT, SECONDARY OR CONSEQUENTIAL DAMAGES ARISING FROM OWNERSHIP OR USE OF THE PRODUCT.

Products that are covered by the Limited Warranty will either be repaired or replaced at the option of Inor. Customer pays freight to Inor, and Inor will pay the return freight by post or other "normal" way of transport. If any other type of return freight is requested, customer pays the whole return cost.

DIMENSIONS



ORDERING INFORMATION

IQAQ R202	70R2020010
ICON Configuration Kit (non-Ex)	70CFGUS001

The transmitter is delivered with either a default factory setting or configured according to customer's specification.