IPAQ C310RTD

Programmable 2-wire transmitter for RTD and Resistance inputs

NFC C E 5 YEAR WARRANTY

The IPAQ C310RTD transmitter is a isolated temperature transmitter for measurement with a RTD sensor. It is compatible with Pt10 ... Pt1000 sensors with additional Ni100, Ni120, Ni1000 and resistance input. Its robust design and high quality gives excellent performance and accuracy also under harsh conditions.

IPAQ C310RTD supports communication via NFC (Near-field communication) and Bluetooth® which makes it possible to configure and monitor the transmitter remotely.
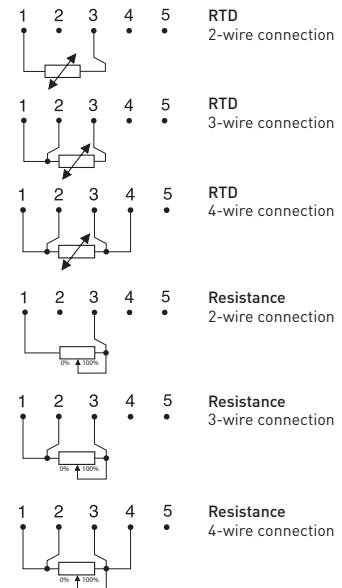
- High accuracy and long term stability
- Galvanic isolation
- Accepts RTD and Ω
- Sensor error and system (sensor+transmitter) error correction for highest total accuracy
- Low temperature drift
- Configuration via PC, NFC or Bluetooth® without external power
- Runtime counter - hour counter for elapsed operational time
- Rugged design tested for 10 g vibrations
- High security - Password protection and date of changes logged
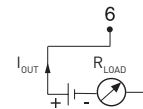
Specifications:

Input RTD	2-, 3-, 4-wire connection
Pt100 (α =0.00385)[1]	-200 to +850 °C / -328 to +1562 °F
PtX 10 ≤ X ≤ 1000 (α =0.00385)[1]	-200 to +850 °C / -328 to +1562 °F
Pt100 (α =0.003916)[2]	-200 to +850 °C / -328 to +1562 °F
Ni100[3], Ni120[4]	-60 to +250 °C / -76 to +482 °F
Ni1000[3]	-50 to +180 °C / -58 to +356 °F
Input Resistance	0 to 10 000 Ω
Sensor failure	Upscale (≥21.0 mA) or downscale (≤3.6 mA) action
Adjustments - Zero	Any value within range limits
Adjustments - Minimum spans	
RTD	10 °C / 18 °F
Resistance	10 Ω
Output	4-20 mA / 20-4 mA, temperature linear
Operating temperature	-40 to +85 °C / -40 to +185 °F
Galvanic isolation	1500 VAC, 1 min
Power supply	8.0...36.0 VDC
Typical accuracy	Max. of ±0.1 °C or ±0.1 % of span
Mounting	DIN B head or larger, DIN-rail (with adapter)

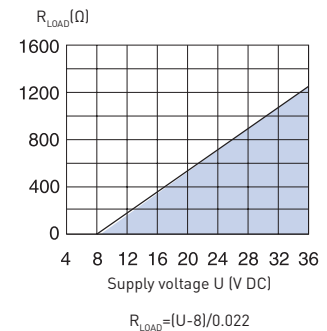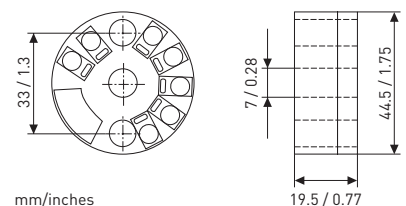[1] IEC 60751, [2] JIS C 1604, [3] DIN 43760, [4] Edison Curve No. 7

Input connections

RTD 2-wire connection
RTD 3-wire connection
RTD 4-wire connection
Resistance 2-wire connection
Resistance 3-wire connection
Resistance 4-wire connection

Output connections

I_{OUT} R_{LOAD}

Output load diagram

R_{LOAD} (Ω)

Supply voltage U (V DC)

$R_{LOAD} = (U-8)/0.022$

Dimensions

33 / 1.3
7 / 0.28
44.5 / 1.75
19.5 / 0.77

mm/inches

Ordering information

IPAQ C310RTD	70C3100011
ICON-X, PC configuration kit	70CFGUSX01
ICON-BT, Bluetooth® configuration kit	70CFGBT001
Head mounting kit	70ADA00017
Rail mounting kit	70ADA00015

INOR