

IPAQ C202

Basic Programmable 2-wire Transmitter for Pt100



The IPAQ C202 is a digital, easy-to-use 2-wire temperature transmitter for measurement with a Pt100 resistance sensor. Its robust design and high quality gives excellent performance and accuracy also under harsh conditions. IPAQ C202 combines competitive cost with easy and user friendly functionality and reliable accuracy during the lifetime.

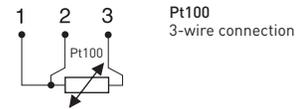
- Robust terminals with test connections
- Input: Pt100 in 3-wire connection
- PC configurable measuring ranges without need for calibration
- Temperature linear output
- Very short response time
- Excellent EMC immunity
- Configuration without external power
- Easy-to-use Windows configuration software
- USB communication
- Withstands vibrations up to 10 g
- Runtime counter
- Only 19.5 mm / 0.72 inch high

Specifications:

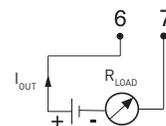
Input Pt100		3-wire connection
Pt100 ($\alpha=0.00385$) ¹⁾		-200 to +850 °C / -328 to +1562 °F
Sensor failure		Upscale (≥ 21.0 mA) or downscale (≤ 3.6 mA) action
Adjustments		
Zero adjustment		Any value within range limits
Minimum span		20 °C / 36 °F
Sensor error compensation		$\pm 10\%$ of span for span $< 100^\circ\text{C}/180^\circ\text{F}$ otherwise $\pm 10^\circ\text{C}/\pm 18^\circ\text{F}$
Output		4...20 mA, temperature linear
Adjustable filtering level		0.13 to 54 s, (default 0.9 s)
Response time		< 50 ms
Environment conditions		
Ambient temperature		-40 to +85 °C / -40 to +185 °F
Humidity		0...98% RH (non-condensing)
Vibrations		Acc. to IEC 60068-2-6, test Fc, 10...2000 Hz, 10 g
EMC		Directive: 2014/30/EU Harmonized standards: EN 61326-1, EN 61326-2-3
Galvanic isolation		No
Power supply	Standard version	6.0...32.0 VDC
	Ex version	8.0...30.0 VDC
Intrinsic safety		
IPAQ C202X	ATEX:	II 1G Ex ia IIC T6...T4 Ga
	IECEX:	Ex ia IIC T6...T4 Ga
Accuracy		Max of $\pm 0.1\text{K}$ or $\pm 0.1\%$ of span
Long-term stability		$\pm 0.1\%$ of span per year
Mounting		DIN B head or larger, DIN-rail (with adapter)
Weight		32 g / 0.07 lb
Protection, housing / terminals		IP 65 / IP 00

¹⁾ IEC 60751

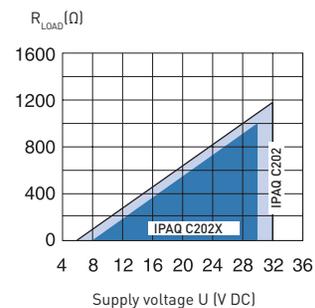
Input connections



Output connections



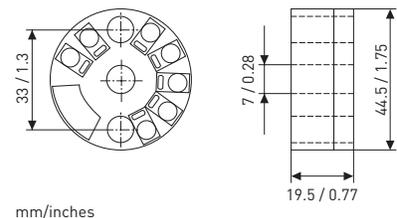
Output load diagram



$$R_{LOAD} = (U - 6) / 0.022$$

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

Dimensions



Ordering information

IPAQ C202	70C2020010
IPAQ C202X (ATEX, IECEx)	70C202X010
ICON-X, PC configuration kit	70CFGUSX01
Head mounting kit	70ADA00017
Rail mounting kit	70ADA00015