



IPAQ R330

Universal Programmable 2-wire transmitter



IPAQ R330 is a universal, isolated, temperature transmitter with additional voltage and resistance input. Its robust design and high quality gives excellent performance and accuracy also under harsh conditions. IPAQ R330 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
- 50-point Customized Linearization and Callendar-Van Dusen
- Accepts RTD, T/C, mV and Ω
- Sensor error and system (sensor/transmitter) error correction for highest total accuracy
- Low temperature drift
- Configuration via USB, without external power
- Runtime counter - hour counter for elapsed operational time
- Rugged design tested for 5 g vibrations
- High security - Password protection and date of changes logged
- Accepts mA input signals within -1 to +100 mA when used with Adapter mA
- Acts like a passive isolator (isolation transmitter) with a 2-wire loop-powered 4-20 mA output
- Suitable for direct connection to an active input module of a control system

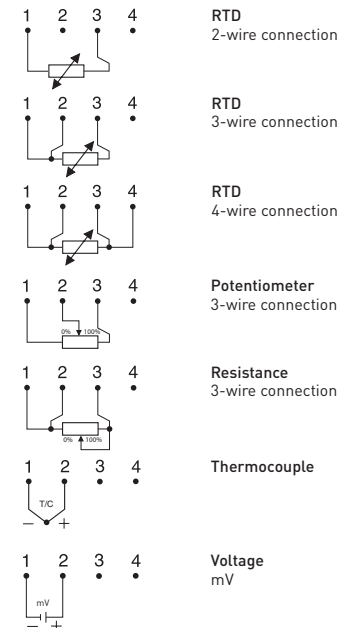
Specifications:

Input RTD	2-, 3-, 4-wire connection
Pt100 ($\alpha = 0.00385$) ¹⁾	-200 to +850 °C / -328 to +1562 °F
PtX 10 ≤ X ≤ 1000 ($\alpha = 0.00385$) ¹⁾	-200 to +850 °C / -328 to +1562 °F
Pt100 ($\alpha = 0.003916$) 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
Cu10 ⁵⁾	-50 to +200 °C / -58 to +392 °F
Input Resistance / potentiometer	0 to 10000 Ω / 100 to 10000 Ω
Input Thermocouples	Types B, C, D, E, J, K, N, R, S, T
Input mV	-10 to +1000 mV
Sensor failure	Upscale (≥ 21.0 mA) or downscale (≤ 3.6 mA) action
Adjustments - Zero	Any value within range limits
Adjustments - Minimum spans	
Pt100, Pt1000, Ni100, Ni1000	10 °C / 18 °F
Resistance / potentiometer	10 Ω / 10 %
T/C, mV	2 mV
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	IPAQ R330: 8.0...36.0 VDC IPAQ R330X: 8.0...30.0 VDC
Intrinsic safety	
IPAQ R330X ATEX:	II 1 G Ex ia IIC T6...T4 Ga
IPAQ R330X IECEx:	Ex ia IIC T6...T4 Ga
IPAQ R330X FM US:	IS CL I Div 1 GP A-D, T6...T4 ⁴⁾
IPAQ R330X FM CA:	CL I Zn 0 AEx/Ex ia IIC T6...T4 Ga ⁴⁾
Typical accuracy	± 0.08 °C or ± 0.08 % of span
Mounting	35 mm DIN rail acc. to EN 60715

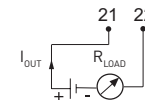
¹⁾ IEC 60751, ²⁾ JIS C 1604, ³⁾ DIN 43760, ⁴⁾ Edison No. 7, ⁵⁾ Edison No. 15, ⁶⁾ T6...T4 are depending on effect

Input connections

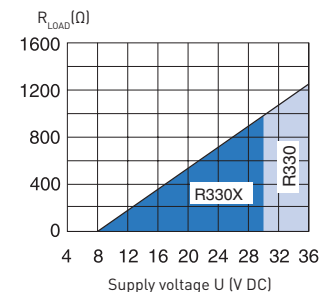
See data sheet for more alternatives



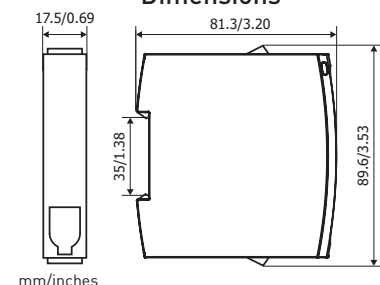
Output connections



Output load diagram



Dimensions



Ordering information

IPAQ R330	70R3300012
IPAQ R330X (ATEX, IECEx)	70R330X012
IPAQ R330X (cFMus, ATEX, IECEx)	70R330F012
ICON-X, PC configuration kit	70CFGUSX01
ICON-BT, Bluetooth® configuration kit	70CFGBT001
Adapter mA, adapter for mA input signal	70ADA00051