

# F11-C330

## Universal

PC-Programmable 2-wire transmitter



F11-C330 is a universal, isolated, temperature transmitter with additional voltage and resistance input. Its robust design and high quality give excellent performance and accuracy also under harsh conditions.

F11-C330 supports communication via NFC<sup>®</sup> (Near-field communication) and Bluetooth<sup>®</sup> which makes it possible to configure and monitor the transmitter remotely.

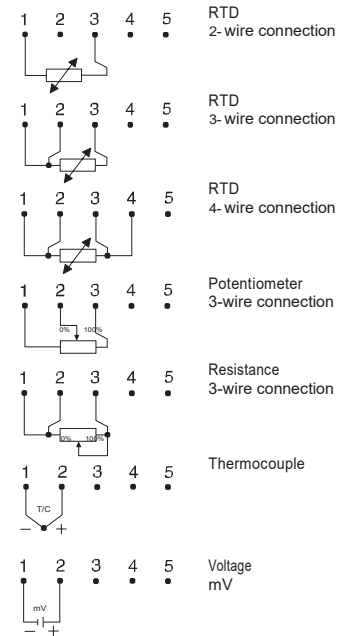
- High accuracy and long-term stability
- 50-point Customized Linearization and Calendar-Van Dusen
- Accepts RTD, T/C, mV and  $\Omega$
- Sensor error and system (sensor/transmitter) error
- correction for highest total accuracy
- Low temperature drift
- Configuration via USB or NFC without external 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:

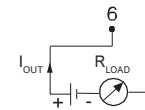
Input RTD	2-, 3-, 4-wire connection
Pt100 ( $\alpha = 0.00385$ )	-200 to +850 °C / -328 to +1562 °F
PtX $10 \leq X \leq 1000$ ( $\alpha = 0.00385$ )	Upper range depending on X-value
Pt100 ( $\alpha = 0.003916$ )	-200 to +850 °C / -328 to +1562 °F
Ni100, Ni120	-60 to +250 °C / -76 to +482 °F
Ni1000	-50 to +180 °C / -58 to +356 °F
Cu10	-50 to +200 °C / -58 to +392 °F
Input Resistance / potentiometer	0 to 10000 $\Omega$ / 100 to 10000 $\Omega$
Input Thermocouples	Types B, C, D, E, J, K, N, R, S, T
Input mV	-10 to +1000 mV
Sensor failure	Upscale ( $\geq 21.0$ mA) or downscale ( $\leq 3.6$ mA) action
Adjustments - Zero	Any value within range limits
Adjustments - Minimum spans	
Pt100, Pt1000, Ni100, Ni100010	°C / 18°F
Potentiometer	10 Oh
T/C, mV	2 mV
Output	4-20 / 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
Intrinsic safety	
F11-C330X ATEX:	II 1 G Ex ia IIC
F11-C330X IECEx:	Ex ia IIC
F11-C330X cFMus:	IS CL I Div 1 GP A-D, CI I Zn 0 AEx/Ex ia IIC
Typical accuracy	$\pm 0.08^\circ\text{C}$ or $\pm 0.08\%$ of span
Connection head	DIN B or larger

### Input connections

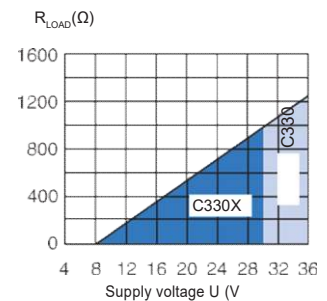
See data sheet for more alternatives



### Output connections



### Output load diagram



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

