

## IPAQ-H

# Universal Programmable 2-wire Transmitters



IPAQ-HX



IPAQ-H/-HX are universal, isolated 2-wire transmitters for temperature and other measurement applications. They combine competitive pricing, functionality and simple configuration.

Useful error correction functions improve the accuracy.

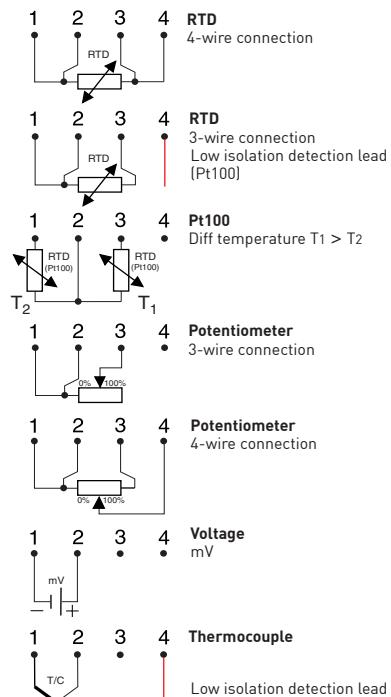
- Fully universal, linearized and high-isolation
- Accepts RTD, T/C, mV and  $\Omega$
- Sensor error and system (sensor/transmitter) error correction for highest total accuracy
- Full access to all features while in operation
- NAMUR compliant
- Consistent sensor break function
- Simplified loop check-up with calibration output
- Low sensor isolation detection
- IPRO, easy-to-use Windows configuration software

## Specifications:

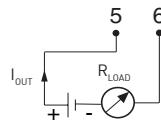
Input RTD	3-, 4-wire connection
Pt100 ( $\alpha = 0.00385$ )	-200 to +1000 °C / -328 to +1832 °F
Pt1000 ( $\alpha = 0.00385$ )	-200 to +200 °C / -328 to +392 °F
Pt10 $\leq X \leq$ 1000 ( $\alpha = 0.00385$ )	Upper range depending on X-value
Pt100 ( $\alpha = 0.003902$ )	-200 to +1000 °C / -328 to +1832 °F
Pt100 ( $\alpha = 0.003916$ )	-200 to +1000 °C / -328 to +1832 °F
Ni100 <sup>1)</sup> , Ni120 <sup>2)</sup>	-60 to +250 °C / -76 to +482 °F
Ni1000 <sup>1)</sup>	-100 to +150 °C / -148 to +302 °F
Cu10 <sup>3)</sup>	-200 to +260 °C / -328 to +500 °F
Input Potentiometer / resistance	3-, 4-wire connection, 0 to 2000 $\Omega$
Input Thermocouples	Types B, C, E, J, K, L, N, R, S, T, U
Input mV	-10 to +500 mV
Sensor failure / Low isolation	User definable output
Adjustments - Zero	Any value within range limits
Adjustments - Minimum spans	
Pt100, Pt1000, Ni100, Ni1000	10 °C / 18 °F
Potentiometer	10 $\Omega$
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	IPAQ-H: 6.5 to 36 VDC IPAQ-HX: 8 to 30 VDC
Intrinsic safety	
IPAQ-HX ATEX:	II 1 G Ex ia IIC T4-T6
IPAQ-HX FM:	IS Class I, DIV 1, GP A-D
IPAQ-HX CSA:	Class I, Groups A-D
Typical accuracy	$\pm 0.1\%$ of span
Connection head	DIN B or larger

<sup>1)</sup> DIN 43760   <sup>2)</sup> Edison No. 7   <sup>3)</sup> Edison No. 15

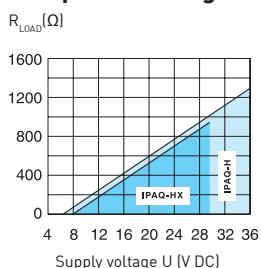
## Input connections



## Output connections



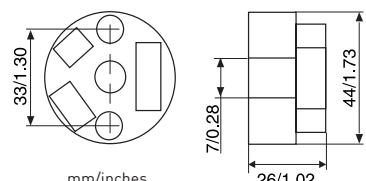
## Output load diagram



$$R_{LOAD} = (U - 6.5) / 0.022 \text{ (IPAQ-H)}$$

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

## Dimensions



## Ordering information

IPAQ-H	70IPH00001
IPAQ-HX (ATEX)	70IPHX0001
IPAQ-HX (FM, CSA)	70IPHX1001
PC Configuration Kit	70CFG00092
Configuration	70CAL00001