# PROFIPAQ-L



# Universal High-performance Profibus-PA **Transmitter**



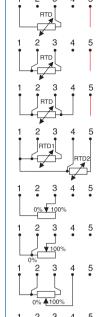
Thanks to the digital output PROFIPAQ-L offers very accurate measurements as well as sensor and process information. With five input terminals new features such as two redundant Pt100 in 3-wire connection, are included. Configuration from a PC with Inor software, ProfiSoft, or over the Profibus network.

- Up to 125 transmitters in one Profibus network
- Profile version 3.0, Class A & B
- Fully universal, linearized and isolated
- $\bullet$  Accepts RTD, T/C, mV and  $\Omega$
- Double Pt100, 3-wire, and T/C input
- Multiple outputs: Input value of Ch1 and Ch2, a scaled process value, redundancy with double sensor elements, aritmetic functions (difference, average, minimum and maximum)
- Easy wiring, plug-in screw terminals
- Sensor matching corrects for sensor errors
- 50 point linearization any sensor can be matched
- Excellent sensor monitoring functions such as: sensor break, sensor short circuit, low sensor isolation and sensor aging
- Up to 8 Masters Class 2
- Integrated in Siemens PDM system

# Specifications:

Input RTD and Resistance	2-, 3- and 4-wire connection
Pt10 <sup>1]</sup> , Pt50 <sup>1]</sup> , Pt100 <sup>1]</sup> , Pt200 <sup>1]</sup> , Pt500 <sup>1]</sup> , Pt1000 <sup>1]</sup>	-200 to +850 °C / -328 to +1562 °F
PtX 10 ≤ X ≤ 1000 <sup>1], 4]</sup>	-200 to +850 °C / -328 to +1562 °F
Pt10 <sup>2]</sup> , Pt50 <sup>2]</sup> , Pt100 <sup>2]</sup>	-200 to +850 °C / -328 to +1562 °F
Ni50 <sup>3)</sup> , Ni100 <sup>3)</sup> , Ni120 <sup>3)</sup> , Ni1000 <sup>3)</sup>	-200 to +850 °C /-328 to +1562 °F
Input Potentiometer / Resistance	0 to 4000 Ω
Input Thermocouples	B, C, D, E, J, K, L, N, R, S, T, U
Input Voltage	-10 to +1000 mV
Double channels for redundancy and arithmetic	functions
Differential	Ch1 - Ch2 or Ch2 - Ch1
Average value	0.5 x (Ch1 + Ch2)
Average value with redundancy	0.5 x (Ch1 + Ch2), Ch1 or Ch2 if the
	other one is broken
Minimum value	Min (Ch1, Ch2)
Maximum value	Max (Ch1, Ch2)
Operating temperature	-20 to +70 °C / -4 to +158 °F
Galvanic isolation	1500 VAC, 1 min
Power supply	9 to 32 VDC
Typical accuracy	Pt100: 0.10 °C / 0.18 °F <sup>5]</sup>
Mounting	Rail acc. to DIN EN50022, 35 mm

# Input connections



## RTD

2-wire connection

Low isolation detection lead

3-wire connection

Low isolation detection lead

4-wire connection

Low isolation detection lead

#### Double RTD

3-wire connection

#### Potentiometer 2-wire connection

# Potentiometer

3-wire connection

#### Potentiometer 4-wire connection

#### Thermocouple

Low isolation detection lead

### Double thermocouple

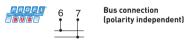
Low isolation detection lead

#### Thermocouple with remote CJC

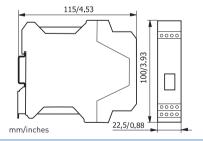
# Voltage

Double voltage

# **Output connections**



# **Dimensions**



### Ordering information

PROFIPAQ-L	70PPL00001
PC Configuration kit	70CFG00092
Configuration	70CAL00001



5) For other inputs, see datasheet

<sup>1)</sup>IEC 60751, α=0.00385 <sup>2)</sup>JIS 1604, α=0.003916 <sup>3)</sup>DIN 43760, α=0.006180 <sup>4)</sup>With Inor PC software ProfiSoft