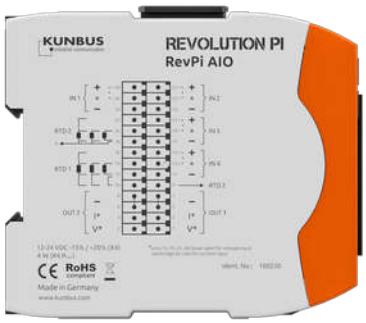
REVOLUTION PI

RevPi AIO

Article No.: 100250





Technical Data

Compliance	EN61131-2
Housing dimensions (H x W x D)	96 x 22.5 x 110.5 mm
Housing type	DIN rail housing (for DIN rail version EN 50022)
Housing material	Polycarbonate
Weight	approx. 115 g
IP Code	IP20
Power supply	12 - 24 V (-15%/+20%)
Current consumption	max. 200 mA at 24V (full load) max. 400 mA at 12V (full load) max. 500 mA during start up
Operating temperature	-30…+55 °C
Storage temperature	-40…+85 °C
Humidity (at 40 °C)	93 % (non-condensing)
Voltage measuring range	±10 V | ±5 V | 0…10 V | 0…5 V
Current measuring range	0…20 mA | 0…24 mA | 4…20 mA | ±25 mA
Temperature measuring range	-200…+850 °C
Voltage output range	±10 V | ±11 V | ±5 V | ±5.5 V | 0…10 V | 0…11 V |0…5 V | 0…5.5 V
Current output range	0…20 mA | 0…24 mA | 4…20 mA
Number of input channels for voltage for current for RTD (Pt100/Pt1000)	6 max. 4 max. 4 2
Number of output channels for voltage for current	2 max. 2 max. 2
Galvanic isolation Input to Input Input to Output Output to Output System bus to inputs/outputs	 No Yes No Yes
Input type Voltage/current RTD	 differential 2-, 3-, 4-wire
Output type	single ended, common ground, short-circuit proof
ADC type	24 bit ΔΣ
DAC type	16 bit

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Input resolution in process image	
Voltage	1 mV (16 bit)
Current	1 µA (16 bit)
Temperature	0.1 K (16 bit)
Output resolution in process image	
Voltage	1 mV (16 bit)
Current	1 µA (16 bit)
Max. overall input error (at 25 °C ambient temperature)	
Voltage (for all ranges)	±10 mV (±5 mV @ 0…5 V range)
Current (for all ranges)	±20 µA (±24 µA @ 0…24 µA range)
Temperature (for complete range)	±0.5 K
Max. overall input error (for -30…+55 °C ambient temperature)	
Voltage (for all ranges)	±10 mV
Current (for all ranges)	±72 µA
Temperature (for complete range)	±1.5 K
Max. overall output error (at 25 °C ambient temperature)	
Voltage (for all ranges)	±15 mV
Current (for all ranges)	±20 µA
Max. overall output error (for -30…+55 °C ambient temperature)	
Voltage (for all ranges)	±15 mV
Current (for all ranges)	±72 µA
Input conversion time (data rate in process image)	8…1000 ms (adjustable)
Output data rate	1 PiBridge cycle
Output slew rate	
Adjustable digital slew rate control	1 LSB@3.3 kHz up to 128 LSB@258 kHz
Input impedance	
Voltage	>900 kΩ
Current	<250 Ω
Output impedance	
Voltage	<16 Ω
Max. capacitive load	5 nF @ 1 kΩ
Max. load resistance for current output	600 Ω
Min. load resistance for voltage output	1 kΩ
Further features	All inputs and outputs are linear scalable Overtemperature monitoring Overcurrent monitoring Range monitoring
Optical indicator	3 status LEDs (bi-color)