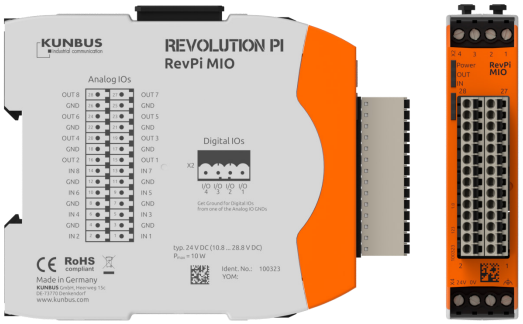
# REVOLUTION PI

## RevPi MIO

Article No.: 100323




## Technical Data

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|---|---|
| Standard | EN 61131-2 |
| Housing dimensions (H x B 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 | 24 V DC (10.8 ... 28.8 V DC) |
| Current consumption | 410 mA maximum load |
| Max. power consumption - system | 10 W |
| Operating temperature | -20…+55 °C |
| Storage temperature | -40…+85 °C |
| Humidity (at 40 °C) | 93 % (non-condensing) |
| Interfaces | 8 analog inputs<br>8 analog outputs<br>4 digital inputs/outputs |
| Analog inputs | Measurement range: 0…10 V DC<br>Rated voltage: 24 V DC<br>Input impedance: > 100 kOhm<br>ADC type: Single ended<br>Max. overall input error: ±0.3 % (of full-scale range)<br>Sample rate: 8 ms / 125 Hz<br>Resolution: 1 mv (process image)<br>Galvanic Isolation: No |
| Analog input modes | Analog input, logic level input |
| Analog outputs | Output voltage: 0…10 V DC<br>Rated voltage: 24 V DC<br>Output impedance: 30 mA during short-circuit -> 330 Ohm during short-circuit<br>Max. output current: 10 mA 10 V @ 1K<br>DAC type: PWM<br>Sample rate: 30mV peak to peak<br>PWM frequency: 8 ms / 125 Hz<br>Max. overall output error: ±0.3 % (of full-scale range)<br>Data control rate: 1 PiBridge cycle<br>Resolution: 4.48 mV<br>Galvanic Isolation: No |
| Analog output modes | Analog output, logic level output |

## Technical Data

| | |
|---|---|
| Digital in/outputs | Voltage: 24 V DC<br>Impedance: > 100 kOhm<br><br>**Description**<br>• Switchable current source approx. 30 mA<br>• Edge improvement (Line driver)<br>• Level detection (Threshold 1 V)<br>• EMC protection<br><br>**GPO [PIN OUT]**<br>• $U_{high}$ = 24 V (at $I_{high}$ < 30 mA)<br>• $I_{high}$ --> max. 40 mA<br>• Short-circuit proof (short circuit always Low)<br>• Can be loaded with external 24 V (then always High)<br>• Feedback via GPI [PIN IN] (Error message possible)<br>• Line driver up to 1 km at 2 kHz<br><br>**GPI [PIN IN] (Internal 24 V GPO [PIN OUT] = High)**<br>By short circuit via switch/variable resistor -> GPI becomes low<br>• No external voltage needed<br>• Idle mode High<br>• Threshold at 1 V<br>• No filtering<br><br>**GPI [PIN IN] (external voltage GPO[PIN OUT]= LOW)**<br>External voltage with reference to GND (GNDs must be connected)<br>• External voltage 24 V +/- 10 %<br>• Idle mode LOW<br>• Threshold at 1 V<br>• No filtering |
| Digital modes | Digital input, digital output, PWM input, PWM output, pulse input, pulse output, encoder input |
| EMC interference emission | According to EN 61000-6-4 |
| EMC immunity | According to EN 61000-6-2 |
| Optical indicator | 3 status LEDs (bi-color), two of them freely programmable |
| RoHS conformity | Yes |
| CE conformity | Yes |