REVOLUTION PI

RevPi DO

Article No.: 100196



Technical Data

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. 100 g / 130 g (incl. connectors)
IP Code	IP20
Power supply	12-24 V DC -5 % / +20 % (X2 and X4) [1]
Max. power consumption	1.5 Watt (X4/power supply)
Operating temperature	-40 °C....+55 °C
Storage temperature	-40 °C....+85 °C
Humidity (at 40 °C)	93 % (non-condensing)
Connectors	2 x 4-pole screw-type terminal for power supply 2 x 14-pin socket connectors with spring clamp contacts (0.2 - 1.5 mm²) for IOs, pitch 3.5 mm (Wieland Item No. 27.630.4453.0)
Optical indicator	3 status LEDs (bi-color)
Number of digital output channels	16
Output type	Galvanically isolated from the system bus, individually configurable as direct digital output with high-side or push-pull drivers as well as a PWM output [2]
Maximum current per output	500 mA (high-side mode), 100 mA (push-pull mode)
PWM frequency	Collectively selectable for all outputs: 40 Hz, 80 Hz, 160 Hz, 200 Hz, 400 Hz [2]
Alarm	Thermal shutdown or short circuit of outputs (individually for each output)
Dual watchdog function	In the event of communication failure with the controller (after 50 ms or 500 ms [3]) or internal communication with the CPU (after 9 ms, hardware-controlled), the outputs are reseted to zero
Output protection	According to EN 61131-2 (IEC 61000-4-4, -5, -6, and -2) against short circuit, overload, burst, ESD

[1] Two independent supply voltage sources must be available for galvanic isolation of the outputs.

[2] The PWM pulse width is stored as a value from 0 to 100 in the process image in 1 byte. The maximum resolution of the conversion of this value in % by the module depends on the PWM frequency: 40 Hz / 1%, 80 Hz / 2%, 160 Hz / 4%, 200 Hz / 5%, 400 Hz / 10%.

[3] 50 ms for all RevPi DO with software version 1.4 or older.
500 ms for all RevPi DO with software version 1.5 or younger.

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Compatible modules for system expansion	All RevPi base module, expansion modules and RevPi Gate modules (connected via overhead PiBridge connector)
Protection of the power supply inputs	Reverse polarity protected, transient overvoltages
EMC interference emission	according to EN 61000-6-4
EMC immunity	according to EN 61000-6-2
RoHS conformity	Yes
CE conformity	Yes
UL certification	Yes, UL-File-No. E494534