REVOLUTION PI

RevPi Connect+ feat. CODESYS

Technical Data

Article No.: 100337
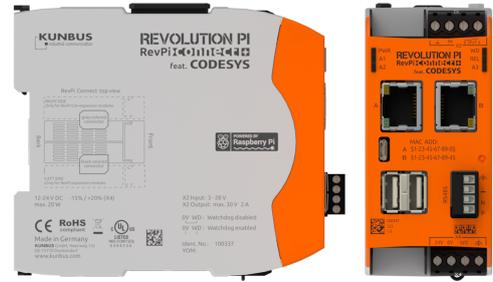
Housing dimensions (H x W x D)	96 x 45 x 110,5 mm
Housing type	DIN rail housing (for DIN rail version EN 50022)
Housing material	Polycarbonate
Weight	approx. 197 g / 224 g (incl. connectors)
Protection class	IP20
Power supply	12 … 24 V DC -15 % / +20 %, reverse-polarity protected
Max. power consumption	20 Watt (incl. 1 A total USB output current) [1]
Allowable operating temperature	-25 … +55 °C
Allowable storage temperature	-40 … +85 °C
Max. relative humidity (at 40 °C)	up to 93 % (non-condensing)
Interfaces	2 x USB A (Total current draw from both sockets max. 1 A) [2]
	2 x RJ45 10/100 Ethernet (using separate MAC addresses)
	1 x RS485 screw-type terminal
	1 x Micro-USB (solely for image transfer to eMMC)
	1 x Micro HDMI
	1 x PiBridge system bus
	1 x ConBridge system bus
Connectors	1 x 4-pole screw-type terminal for relay contact and signal input
	1 x 4-pole screw-type terminal for power supply
Processor	Broadcom BCM2837B0 quad-core ARM Cortex A53
Clock rate	1.2 GHz
Processor cooling	Passive with heat sink
RAM	1 GB
Flash memory	16 GB
Number of digital input channels	1
Digital input type	24 V control voltage (e.g. for power-good signal of a UPS)
Input thresholds	approx. 3.0 V (0 -> 1) resp. 2.3 V (1 -> 0)
Input protection	against overvoltage, negative voltages
Number of digital output channels	1

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Output type	Relay contact, approval up to 30 V switching voltage (e.g. for power supply of a router)
Maximum current load of the contact	2 A @ 30 V DC (resistive load!)
Software interface of input and output	Via GPIOs and process image. Output is optionally switched by hardware watchdog.
Hardware watchdog functionality	Can be disabled by bridging the 4-pole screw-type terminal. Reset by toggling a GPIO or alternatively a bit in the process image.
Hardware watchdog intervall	Trigger after approx. 60 seconds without toggling the reset bit.
Compatible modules for system expansion	All RevPi IO modules and RevPi Gate modules can be connected via the PiBridge system bus.
	Various transceiver modules can be connected via the ConBridge system bus.
ESD protection	4 kV / 8 kV (according to EN 61131-2 and IEC 61000-6-2)
EMI tests	Passed (according to EN 61131-2 and IEC 61000-6-2)
Surge/Burst tests	Passed (according to EN 61131-2 and IEC 61000-6-2)
Buffer time RTC	min. 24 h
Optical indicator	6 status LEDs (bi-color), two of them freely programmable
CODESYS runtime	Multicore CODESYS Control runtime pre-installed & licensed.
Conformity	CE, RoHS
UL certification	Yes, UL-File-No. E494534
	Note: The device may only be supplied from circuits that comply with Class 2 or Safety Extra Low Voltage (SELV) according to Class 9.4 of UL 61010-1.

[1] The average power consumption without USB load varies greatly and depends on the use of the interfaces, the GPU and the CPU. It is usually well below 4 watts without HDMI.

[2] 1 A USB output current (total of both USB outputs) is only available for input voltages >11 V. The bridging time required by EN 61131-2 of voltage dips of at least 10 ms is only guaranteed with a supply voltage of 20.4 to 28.8 V. At 12 V input voltage this time decreases drastically, especially when driving loads by USB ports.