

REVOLUTION PI

RevPi Connect 4

Technical Data

Article No.: 100376 (2 GB / 8 GB)

Article No.: 100377 (WLAN / 2 GB / 8 GB)

Article No.: 100378 (4 GB / 32 GB)

Article No.: 100379 (WLAN / 4 GB / 32 GB)

Article No.: 100380 (WLAN / 8 GB / 32 GB)



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	10.8 ... 28.8 V DC ¹
Max. power consumption	20 W (incl. 2 x 800 mA USB load) ²
Allowed operating temperature	-25 ... +55 °C
Allowed storage temperature	-40 ... +85 °C
Max. relative humidity (at 40 °C)	up to 93 % (non-condensing)
Interfaces	2 x USB A 3.2 Gen 1 2 x RJ45 GBit Ethernet 1 x RS485 screw-type terminal 1 x Micro-USB (solely for image transfer to eMMC) 1 x Micro-HDMI 2.0a (4K) 2 x PiBridge (connectors at the left and at the right side) 1 x RP-SMA socket for connecting an external WLAN/BT antenna (2.4 / 5 GHz), not available on Article No. 100376 and 100378
Connectors	1 x 4-pole screw-type terminal for RS485 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 BCM2711, quad-core Arm Cortex-A72
Clock rate	1.5 GHz
Processor cooling	Passive with heat sink

Errors and omissions excepted.

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REVOLUTION PI

RevPi Connect 4

RAM	2 GB LPDDR4 (Article No.: 100376, 100377), 4 GB LPDDR4 (Article No.: 100378, 100379), 8 GB LPDDR4 (Article No.: 100380)
Flash memory	8 GB (Article No.: 100376, 100377), 32 GB (Article No.: 100378, 100379, 100380)
WLAN / Bluetooth	2.4 GHz, 5.0 GHz IEEE 802.11 b/g/n/ac wireless; Bluetooth 5.0, BLE
Number of digital input channels	1
Digital input type	24 V DC control voltage (e.g. for power-good signal of a UPS)
Input thresholds	approx. 10 V DC (0 -> 1) resp. 7 V DC (1 -> 0); input current 2.4 mA (according to IEC 61131-2)
Number of digital output channels	1
Output type	opto-decoupled solid state relay, normally open, max. 30 V, 300 mA DC, any polarity
Software interface of input and output	Via GPIOs and process image
Hardware watchdog	Watchdog in RTC device, freely configurable watchdog character device
Compatible modules for system expansion	All RevPi IO modules can be connected via the PiBridge system bus Up to 5 modules can be connected as well to the left as to the right side of the device
EMC interference emission	according to IEC 61000-6-4 Emission standard for industrial environments
EMC immunity	according to IEC 61000-6-2 Immunity standard for industrial environments
Mean time between failures (MTBF) at 50 °C	67322 h / 7.7 years / 14854 FIT
Mean time between failures (MTBF) at 65 °C	35500 h / 4.1 years / 28169 FIT
RTC buffer	CR2032 lithium battery, lifetime approx. 10 years
Optical indicator	6 status LEDs; 5 x red/green/blue, freely programmable, 1 x red/green
Conformity	CE, UKCA

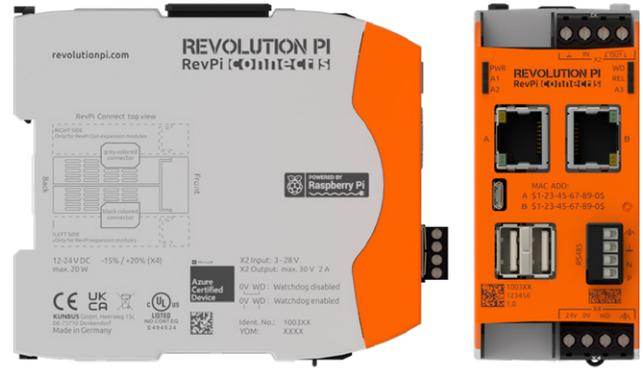
¹ The bridging time required by EN 61131-2 of voltage dips of at least 10 ms and the max. USB output current are only guaranteed with a supply voltage 24 V -15 % / +20 %.

² 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.

REVOLUTION PI

RevPi Connect S

Article No.: 100362 (8 GB version)
Article No.: 100363 (16 GB version)
Article No.: 100364 (32 GB version)



Technical Data

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)
IP Code	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
Operating temperature	-25 °C....+55 °C
Storage temperature	-40 °C....+85 °C
Humidity (at 40 °C)	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 HDMI 2.0a (4K) 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 BCM2711, quad-core Arm Cortex-A72
Clock rate	1.5 GHz
Processor cooling	Passive with heat sink
RAM	1 GB LPDDR4
Flash memory	8 GB (Article No.: 100362), 16 GB (Article No.: 100363), 32 GB (Article No.: 100364)
Number of digital input channels	1
Input type	24 V control voltage (e.g. for power-good signal of a UPS)
Input thresholds	approx. 3.0 V (0 -> 1) / 2.3 V (1 -> 0)
Input protection	against overvoltage, negative voltages

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 of at least 10 ms required by EN 61131-2 is only guaranteed with a 20.4 to 28.8 V power supply. With a 12 V power supply, this time is significantly reduced, especially when power is drawn from the USB ports.

REVOLUTION PI

RevPi Connect S

Article No.: 100362 (8 GB version)

Article No.: 100363 (16 GB version)

Article No.: 100364 (32 GB version)

Technical Data

Number of digital output channels	1
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 @ 30V DC (resistive load!)
Software integration 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 Gateway modules can be connected via the PiBridge system bus. All RevPi Con modules can be connected via the ConBridge system bus.
ESD protection	4 kV / 8 kV (according to EN61131-2 and IEC 61000-6-2)
EMI tests	Passed (according to EN61131-2 and IEC 61000-6-2)
Surge/Burst tests	Passed (according to EN61131-2 and IEC 61000-6-2)
Buffer time RTC	min. 24 h
Optical indicator	6 status LEDs (bi-color), two of them freely programmable
RoHS conformity	Yes
CE conformity	Yes
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.

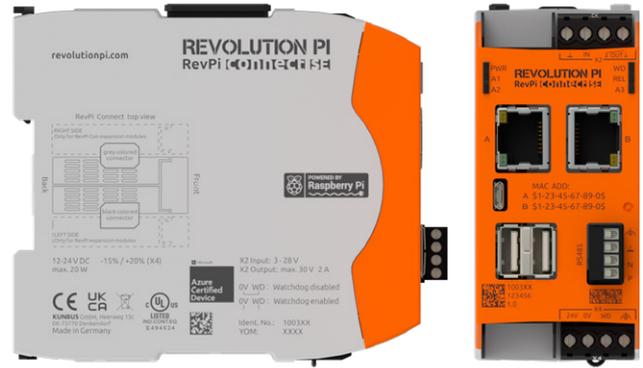
REVOLUTION PI

RevPi Connect SE

Article No.: 100368 (8 GB version)

Article No.: 100369 (16 GB version)

Article No.: 100370 (32 GB version)



Technical Data

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)
IP Code	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
Operating temperature	-25 °C....+55 °C
Storage temperature	-40 °C....+85 °C
Humidity (at 40 °C)	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 HDMI 2.0a (4K) 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 BCM2711, quad-core Arm Cortex-A72
Clock rate	1.5 GHz
Processor cooling	Passive with heat sink
RAM	1 GB LPDDR4
Flash memory	8 GB (Article No.: 100368), 16 GB (Article No.: 100369), 32 GB (Article No.: 100370)
Number of digital input channels	1
Input type	24 V control voltage (e.g. for power-good signal of a UPS)
Input thresholds	approx. 3.0 V (0 -> 1) / 2.3 V (1 -> 0)
Input protection	against overvoltage, negative voltages

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 of at least 10 ms required by EN 61131-2 is only guaranteed with a 20.4 to 28.8 V power supply. With a 12 V power supply, this time is significantly reduced, especially when power is drawn from the USB ports.

REVOLUTION PI

RevPi Connect SE

Article No.: 100368 (8 GB version)

Article No.: 100369 (16 GB version)

Article No.: 100370 (32 GB version)

Technical Data

Number of digital output channels	1
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 @ 30V DC (resistive load!)
Software integration 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 can be connected via the PiBridge system bus. All RevPi Con modules can be connected via the ConBridge system bus. ! Not compatible with RevPi Gateways !
ESD protection	4 kV / 8 kV (according to EN61131-2 and IEC 61000-6-2)
EMI tests	Passed (according to EN61131-2 and IEC 61000-6-2)
Surge/Burst tests	Passed (according to EN61131-2 and IEC 61000-6-2)
Buffer time RTC	min. 24 h
Optical indicator	6 status LEDs (bi-color), two of them freely programmable
RoHS conformity	Yes
CE conformity	Yes
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.

REVOLUTION PI

RevPi Connect+

Article No.: 100302 (8 GB version)
Article No.: 100303 (16 GB version)
Article No.: 100304 (32 GB version)



Technical Data

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)
IP Code	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
Operating temperature	-25 °C....+55 °C
Storage temperature	-40 °C....+85 °C
Humidity (at 40 °C)	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	8 GB (Article No.: 100302), 16 GB (Article No.: 100303), 32 GB (Article No.: 100304)
Number of digital input channels	1
Input type	24 V control voltage (e.g. for power-good signal of a UPS)
Input thresholds	approx. 3.0 V (0 -> 1) / 2.3 V (1 -> 0)
Input protection	against overvoltage, negative voltages

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 of at least 10 ms required by EN 61131-2 is only guaranteed with a 20.4 to 28.8 V power supply. With a 12 V power supply, this time is significantly reduced, especially when power is drawn from the USB ports.

REVOLUTION PI

RevPi Connect+

Article No.: 100302 (8 GB version)

Article No.: 100303 (16 GB version)

Article No.: 100304 (32 GB version)

Technical Data

Number of digital output channels	1
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 @ 30V DC (resistive load!)
Software integration 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 EN61131-2 and IEC 61000-6-2)
EMI tests	Passed (according to EN61131-2 and IEC 61000-6-2)
Surge/Burst tests	Passed (according to EN61131-2 and IEC 61000-6-2)
Buffer time RTC	min. 24 h
Optical indicator	6 status LEDs (bi-color), two of them freely programmable
RoHS conformity	Yes
CE conformity	Yes
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.