

PCs and panels System overview

PERFECTION IN AUTOMATION
A MEMBER OF THE ABB GROUP





B&R PCs & panels – Rugged elegance and lasting value



PC and panel systems from B&R are designed and built to meet industrial customers' demands for maximum robustness, reliability and long-term availability.

Decision-makers in a wide range of industries select B&R Industrial PCs because they know that PCs that may appear cheap at first glance are the most expensive in the long run. After all, it's the total cost over a product's life cycle that matters, and that's where the cost advantages of B&R Industrial PCs really shine. Their uncompromising quality ensures many years of trouble-free operation, even in the harshest industrial conditions. "Made by B&R" represents the highest standards in development and production – from circuit board engineering to logistics for replacement parts.

Powerful

Automation PC and Panel PC systems from B&R pack plenty of power. Using the latest technology, including the latest generation of Intel Core i-series processors, the Automation PC 910 and Panel PC 900 are the perfect choice for mastering highly demanding applications. USB 3.0 interfaces provide the optimal connection for integrating machine vision systems. Automation PC 3100 and Panel PC 3100 combine fanless Core i performance with a mid-sized PC form factor. The Automation PC 2200

and Panel PC 2200 are based on the latest Intel Atom technology. With minimal dimensions, these systems deliver optimized performance.

Energy-efficient

Another advantage of the latest generation of Core i-series and Atom processors from Intel is their considerably higher performance yet lower power consumption – maximized energy efficiency across the board. This makes it possible to do away with internal fans in many cases, an advantage already exploited by the passively cooled 2200 and 3100 series.

Highlights

- Uncompromising quality for operation over many years
- Powerful Intel® Core™ i3/i5/i7 and XEON processors
- Best graphics performance
- Fanless operation
- Projected capacitive multi-touch and analog resistive single-touch screens
- Extensive product range up to 24" Full HD
- Built-in and swing arm panel variants

Automation PC 2200 / 3100



Automation PC 910



Panel PCs



	APC2200	APC3100
Processors	Atom E3940 1.6 GHz quad-core Atom E3930 1.3 GHz dual-core	Core i7 7600U 2.8 GHz dual-core Core i5 7300U 2.6 GHz dual-core Core i3 7100U 2.4 GHz dual-core Celeron 3965U 2.2 GHz dual-core
Memory	Up to 8 GB DRAM	Up to 32 GB DRAM
Interfaces	2x Ethernet 10/100/1000 2x USB 3.0 1x CFast slot	2x Ethernet 10/100/1000 4x USB 3.0, 1x USB 2.0 (internal) 1x SDL/DVI-D 2x CFast slots
Options	ETHERNET POWERLINK CAN RS232/485 X2X FRAM	ETHERNET POWERLINK Ethernet 10/100/1000 RS232/422/485 CAN UPS Audio (HDA) SRAM Ready relay
Panel options	1x SDL/DVI-D 1x SDL4	1x SDL/DVI-D 1x SDL4 1x DisplayPort
Power supply	24 VDC	24 VDC
TPM 2.0	√	√
Operating systems	Windows 10 IoT Enterprise 64-bit Automation Runtime Embedded Hypervisor Linux	Windows 10 IoT Enterprise 64-bit Automation Runtime Embedded Hypervisor Linux

	APC910 - 1 PCI / PCIe	APC910 - 2 PCI / PCIe	APC910 - 5 PCI / PCIe
Processors	XEON E3 1515M v5 2.8 GHz quad-core Core i7 6820EQ 2.8 GHz quad-core Core i5 6440EQ 2.7 GHz quad-core Core i3 6100E 2.7 GHz dual-core Celeron G3900E 2.4 GHz dual-core		
Memory	Up to 32 GB SDRAM		
Interfaces	2x Ethernet 10/100/1000 1x RS232 4x USB 3.0, 1x USB 2.0 1x SDL/DVI-I 1x DisplayPort 1x CFast slot		
Options	ETHERNET POWERLINK Ethernet 10/100/1000 RS232/422/485 CAN UPS Audio (HDA) SRAM Ready relay		
Slide-in compact drives	1x SSD/HDD		
Slide-in drives	-	1	2
Bus	1x PCIe x8	1x PCI + 1x PCIe x8 2x PCIe x4	4x PCI + 1x PCIe x8 2x PCI + 1x PCIe x8 + 2x PCIe x1 2x PCIe x4 + 3x PCIe x1
Panel options	-	SDL/DVI-D SDL3/SDL4 DisplayPort	SDL/DVI-D SDL3/SDL4 DisplayPort
Fan kit	Optional		
Power supply	24 VDC		
TPM 2.0	√		
Operating systems	Automation Runtime Embedded Linux	Hypervisor Windows 10 IoT Enterprise 64-bit	

	PPC2200	PPC3100	PPC900
Processors	Atom E3940 1.6 GHz quad-core Atom E3930 1.3 GHz dual-core	Core i7 7600U 2.8 GHz dual-core Core i5 7300U 2.6 GHz dual-core Core i3 7100U 2.4 GHz dual-core Celeron 3965U 2.2 GHz dual-core	Core i7 3615QE 2.3 GHz quad-core Core i7 3612QE 2.1 GHz quad-core Core i7 3517UE 2.1 GHz dual-core Core i5 3610ME 2.7 GHz dual-core Core i3 3120ME 2.4 GHz dual-core Core i3 3217UE 1.6 GHz dual-core Celeron 1020E 2.2 GHz dual-core Celeron 1047UE 1.4 GHz dual-core Celeron 827E 1.4 GHz single-core
Memory	Up to 8 GB SDRAM	Up to 32 GB SDRAM	Up to 16 GB SDRAM
Interfaces	2x Ethernet 10/100/1000 2x USB 3.0 1x CFast slot	2x Ethernet 10/100/1000 4x USB 3.0, 1x USB 2.0 (internal) 1x SDL/DVI-D 2x CFast slots	2x Ethernet 10/100/1000 2x RS232 4x USB 3.0, 1x USB 2.0 1x SDL/DVI-I Audio (HDA) 1x CFast slot
Options	ETHERNET POWERLINK CAN RS232 X2X FRAM	ETHERNET POWERLINK Ethernet 10/100/1000 RS232/422/485 CAN UPS Audio (HDA) SRAM Ready relay	ETHERNET POWERLINK RS232/422/485 CAN UPS SRAM Ready relay
Slide-in compact drives	-	-	1x SSD/HDD
Fan kit	-	-	Optional
Panel options	-	1x SDL/DVI-D 1x SDL4 1x DisplayPort	-
Power supply	24 VDC	24 VDC	24 VDC 85 to 264 VAC (optional)
Slot expansions	-	-	1x PCI / 1x slide-in 1x PCIe x8 / 1x slide-in 2x PCI / 1x slide-in 1x PCI + 1 PCIe x8 / 1x slide-in 2x PCIe x4 / 1x slide-in
TPM 2.0	√	√	√
Operating systems	Windows 10 IoT Enterprise 64-bit Automation Runtime Embedded Hypervisor Linux	Windows 10 IoT Enterprise 64-bit Automation Runtime Embedded Hypervisor Linux	Windows 10 IoT Enterprise 64-bit Automation Runtime Embedded Hypervisor Linux

Built-in panels



	Widescreen	Widescreen	4:3 - 5:4	4:3 - 5:4	4:3	4:3	Widescreen
Resolution	7.0" WVGA (800 x 480) 10.1" WXGA (1280 x 800) 12.1" WXGA (1280 x 800) 15.6" HD (1366 x 768) 18.5" HD (1366 x 768) 21.5" Full HD (1920 x 1080) 24.0" Full HD (1920 x 1080)	7.0" WVGA (800 x 480) 10.1" WXGA (1280 x 800) 12.1" WXGA (1280 x 800) 15.6" HD (1366 x 768)	12.1" XGA (1024 x 768) 15.0" XGA (1024 x 768) 19.0" SXGA (1280 x 1024)	5.7" VGA (640 x 480) 10.4" VGA (640 x 480) 12.1" SVGA (800 x 600) 15.0" XGA (1024 x 768) 19.0" SXGA (1280 x 1024)	5.7" VGA (640 x 480) 10.4" VGA (640 x 480)	10.4" VGA (640 x 480) 15.0" XGA (1024 x 768)	7.0" WVGA (800 x 480) 10.4" VGA (640 x 480) 10.4" SVGA (800 x 600) 15.0" XGA (1024 x 768)
Touch technology Operating elements	Projected capacitive multi-touch	Analog resistive single-touch	Analog resistive single-touch	Analog resistive single-touch	Analog resistive single-touch (10.4") Function keys Soft keys System keys	Analog resistive single-touch Function keys Soft keys	Analog resistive single-touch RFID (read / write) ¹
Front protection	IP65	IP65	IP65	IP65	IP65	IP65	IP69K
Back protection	IP20	IP20	IP20	IP20	IP20	IP20	IP20
Front USB	-	-	-	10.4" and up	10.4"	√	-
Front/Back material	Aluminum / Metal	Aluminum / Metal	Aluminum / Metal	Aluminum / Metal	Aluminum / Metal	Aluminum / Metal	Hygienic stainless steel
Smart Display Link / DVI Smart Display Link 3 Smart Display Link 4	√	√	√	√	√	√	√
PPC2200	√	√	√	√	√	√	√
PPC3100	10.1" and up	10.1" and up	√	10.4" and up	10.4"	√	10.4" and up
PPC900	15.6" and up	15.6"	√	10.4" and up	10.4"	√	10.4" and up
PP500, PPC700/800 compatible	Compatible only with 7" devices	Compatible only with 7" devices	-	√	√	√	√

(1) RFID not available on 7.0" panel

Swing arm panels



	Widescreen	4:3	5:4	Widescreen	Widescreen	Widescreen	Widescreen
Resolution	18.5" HD (1366 x 768) 21.5" Full HD (1920 x 1080) 24.0" Full HD (1920 x 1080)	15.0" XGA (1024 x 768)	19.0" SXGA (1280 x 1024)	15.6" HD (1366 x 768) 18.5" HD (1366 x 768) 21.5" Full HD (1920 x 1080) 24.0" Full HD (1920 x 1080)	21.5" Full HD (1080 x 1920)	18.5" HD (1366 x 768) 24.0" Full HD (1920 x 1080)	15.6" HD (1366 x 768) 18.5" HD (1366 x 768) 21.5" Full HD (1920 x 1080)
Touch technology Operating elements	Projected capacitive multi-touch	Analog resistive single-touch	Analog resistive single-touch	Projected capacitive multi-touch E-stop Key switch Selector switch Push buttons	Projected capacitive multi-touch E-stop Key switch Push buttons	Projected capacitive multi-touch with laminated panel overlay	Projected capacitive multi-touch with laminated panel overlay E-stop Illuminated ring keys RFID (read / write)
Front protection	IP65	IP65	IP65	IP65	IP65	IP69K	IP69K
Back protection	IP65	IP65	IP65	IP65	IP65	IP66	IP66
Front USB	-	-	-	✓	✓	-	-
Front/Back material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Hygienic stainless steel	Hygienic stainless steel
Smart Display Link / DVI Smart Display Link 3 Smart Display Link 4	✓	✓	✓	✓	✓	✓	✓
PPC2200	✓	✓	✓	✓	✓	✓	✓
PPC3100	-	-	-	-	-	-	-
PPC900	-	-	-	-	-	-	-
Optional handles	✓	✓	✓	✓	✓	-	-

Integrated automation
Global presence
Solid partnership



ETHERNET 
POWERLINK

open 
SAFETY