

PC for mobile machinery

APC mobile 3100

PERFECTION IN AUTOMATION
A MEMBER OF THE ABB GROUP





PC for mobile machinery

Automation specialist B&R is adding a PC for mobile machinery to its portfolio. The powerful and exceptionally robust Automation PC mobile 3100 is equipped with an Intel Core i processor and offers IP69K protection. Its high performance makes it optimally suited for smart machines that communicate with each other, process data and send it to the cloud.



OPC UA
OVER TSN

PC technology – Made by B&R

Powerful.

The PC for mobile machinery adapts flexibly to your requirements and features a 7th-generation Core i processor from Intel. Its performance can be scaled from a 2.2 GHz Celeron processor to a 2.8 GHz Core i7. The PC also offers up to 16 GB RAM and 480 GB of flash memory and is equipped with a TPM module. It supports standard operating systems like Windows and Linux.

Rugged.

The PC's rugged design is resistant to shock, vibration, salt, UV light and oil. Despite the housing being completely sealed, it is also fanless. The zero-maintenance PC has a specially developed

temperature management system that allows it to be operated from -40°C to +85°C surface temperature.

Scalable.

The PC is insensitive to voltage fluctuations. In addition to a broad standard voltage range from 9 to 32 V, it also has integrated load dump protection. This compensates for peaks in the supply voltage to protect the electronics and ensure uninterrupted operation. Two internal slots allow the PC to be expanded modularly with additional functions.

Compact power for mobile machinery

PCs from BSR are built to meet its customers demands for maximum robustness, reliability and long-term availability. All BSR PCs are developed and built in-house and subjected to intensive function testing.

Performance in harsh environments

The PC for mobile machinery was subjected to comprehensive testing in BSR's own environmental testing lab throughout the development process. Intensive EMC, shock, vibration and temperature testing confirmed that the PC can easily stand up to the harsh conditions faced by mobile machinery.

Modular customization

The PC for mobile machinery is available in multiple variants, and additional functions can be added using PCIe option boards. Guaranteed long-term availability makes it a future-proof investment.

PC variants	Intel Celeron	Intel i5	Intel i7
Processor	3965 U - 2.20 GHz	7300 U - 2.60 GHz	7600 U - 2.80 GHz
RAM	4 GB	8 GB	16 GB
Flash	120 GB	240 GB	480 GB

Extensive outdoor portfolio

The demands placed on commercial vehicles have evolved dramatically over the years. With new functions being added all the time and requirements for operating efficiency and quality higher than ever, these vehicles need an automation system that is both powerful and scalable. BSR solutions make it easier than ever to implement automation concepts for construction equipment

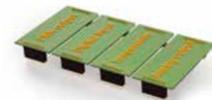
and municipal vehicles as well as for agriculture and forestry applications. The PC for mobile machinery complements BSR's extensive portfolio of other mobile automation technology, including the modular X90 control and I/O system, safety, handheld HMI and operator panels, as well as a wide variety of option boards.



Power Panel T50 mobile: HMI for the demands of outdoor applications



X90 Safety: control and I/O nodes for mobile safety



X90 option boards: modular scalability for new functions

APC mobile 3100

IP69K protection
Robust die-cast aluminum housing

Service access for USB 2.0 interface, battery buffer and DisplayPort interface

Area for customer information and logos

Future-proof with two slots for PCIe option boards

Heat pipe cooling
-40°C to +85°C housing temperature

CMC connection
9-32 V power supply
1x CAN
1x RS485/422
1x Audio

2x USB 2.0
2x Fast Ethernet

Intel Celeron to Intel CORE i7 with 2.8 GHz
4 to 16 GB RAM
120 to 480 GB flash
TPM 2.0

Highlights

- Suitable for use in harsh environments
- Standard operating systems: Windows and Linux
- High computing power

Hypervisor

Linux Windows 10

Software – Added value for every PC

Ready-made software solutions for the mobile PC:

Operating systems

In addition to Windows and Linux, the PC for mobile machinery can run BSR's real-time operating system Automation Runtime, turning it into a high-performance mobile controller. A hypervisor makes it possible to combine Windows or Linux in parallel with Automation Runtime.

One central programming tool

Automation Studio is BSR's integrated software development environment with tools for all phases of a project. Controls, safety, communication and HMI can all be configured in one environment. That reduces both integration time and maintenance costs.

More time for what counts

The ready-made software components of mapp Technology make it easy to master complex algorithms. mapp components – mapps for short – are as easy to use as a smartphone app. Rather than write lines and lines of code to build a user management system, alarm system or hydraulics control application from the ground up, developers of machine software simply configure the ready-made mapps with a few clicks of the mouse.

Completely consistent process control

BSR's APROL process control system provides centralized processing of large volumes of data, making it easy to handle complex analytics and process control loops.

mapp
TECHNOLOGY



Integrated automation
Global presence
Solid partnership

