PC for mobile machinery
APC mobile 3100
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.

**PC for mobile machinery**

**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 B&R are built to meet its customers demands for maximum robustness, reliability and long-term availability. All B&R 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 B&R’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.

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. B&R 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 B&R’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.

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.

<table>
<thead>
<tr>
<th>PC variants</th>
<th>Intel Celeron</th>
<th>Intel i5</th>
<th>Intel i7</th>
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</thead>
<tbody>
<tr>
<td>Processor</td>
<td>3965 U - 2.20 GHz</td>
<td>7300 U - 2.60 GHz</td>
<td>7600 U - 2.80 GHz</td>
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<tr>
<td>RAM</td>
<td>4 GB</td>
<td>8 GB</td>
<td>16 GB</td>
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<tr>
<td>Flash</td>
<td>120 GB</td>
<td>240 GB</td>
<td>480 GB</td>
</tr>
</tbody>
</table>
APC mobile 3100

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

Specifications:

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

- 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

- 2x USB 2.0
- 2x Fast Ethernet

- APC connection
  - 0-32 V power supply
  - 1x CAN
  - 1x RS485/422
  - 1x Audio

- Terminal connections for CAN and RS485/422 interfaces

- Area for customer information and logos
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 B&R’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 B&R’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
B&R’s APROL process control system provides centralized processing of large volumes of data, making it easy to handle complex analytics and process control loops.
Integrated automation
Global presence
Solid partnership