



Innovation Workshop **Online-Sessions**

PERFECTION IN AUTOMATION
A MEMBER OF THE ABB GROUP



Online-Workshop: Mobile Automation

Produktneuheiten Mobile Automation
Vorsprung für Ihr Automatisierungssystem



Agenda

- Company
- Mobile Automation Products
- Software



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Company

- Focus on Perfection in Automation since 40 years
- Active in different industries
- Worldwide with 200 offices, 3.400 employees
- Headquarter in Eggelsberg (Austria)



Mobile Automation

PERFECTION IN AUTOMATION
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Hard- and software for mobile machines



Smart Construction



Smart Farming



Robotic



Utility vehicles



Logistics

Environment

9 to 32 V



-40°C to 85°C



Harsh conditions



Sunlight



Shock



Vibration



Salt spray



Oil



Condensing water



Solution

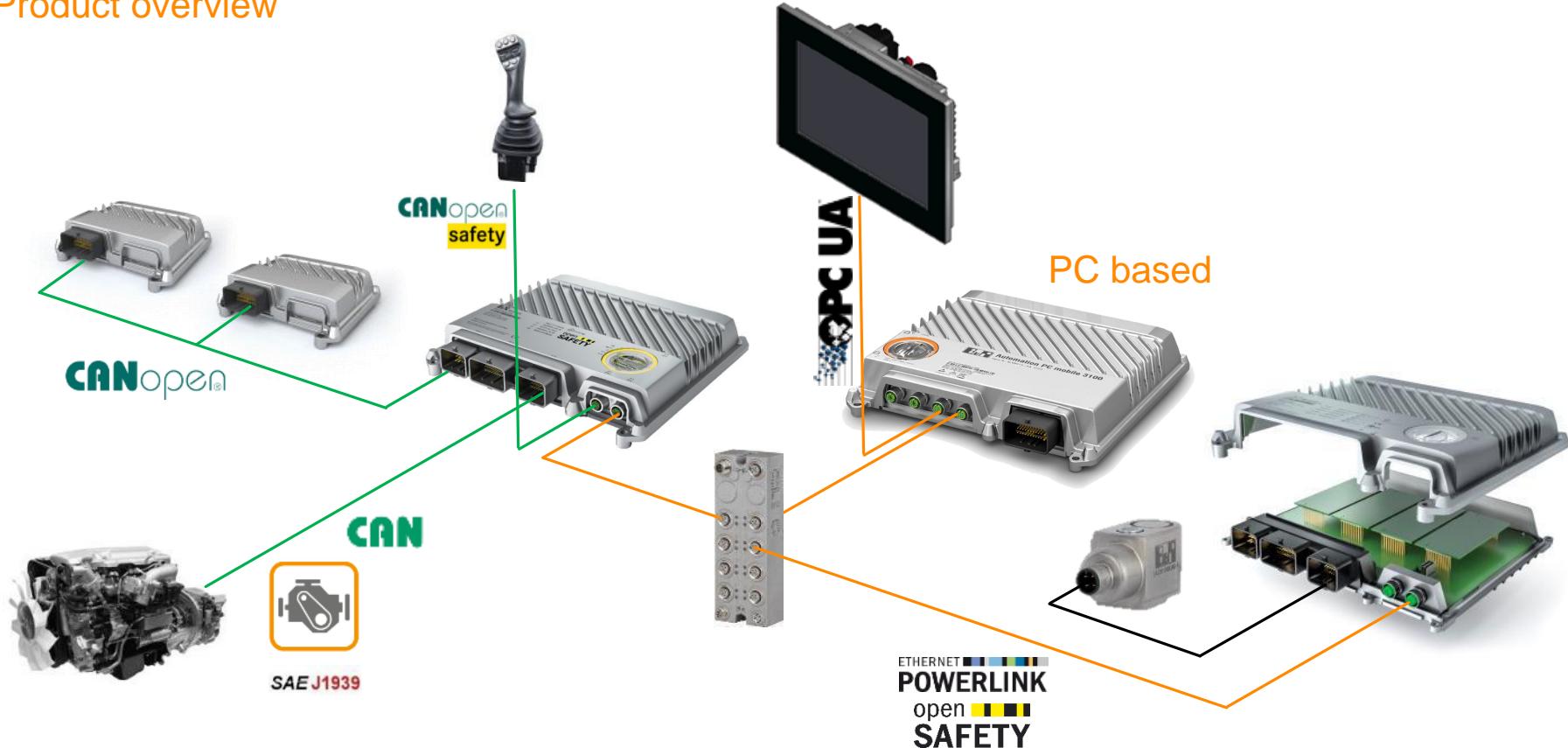


Products

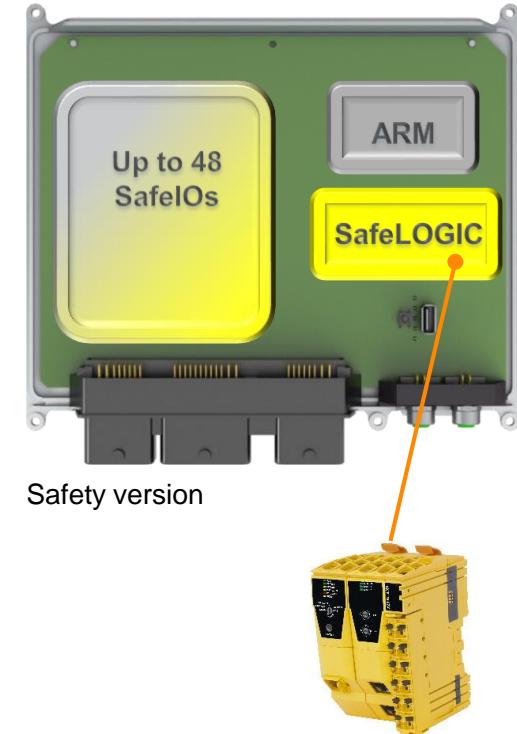
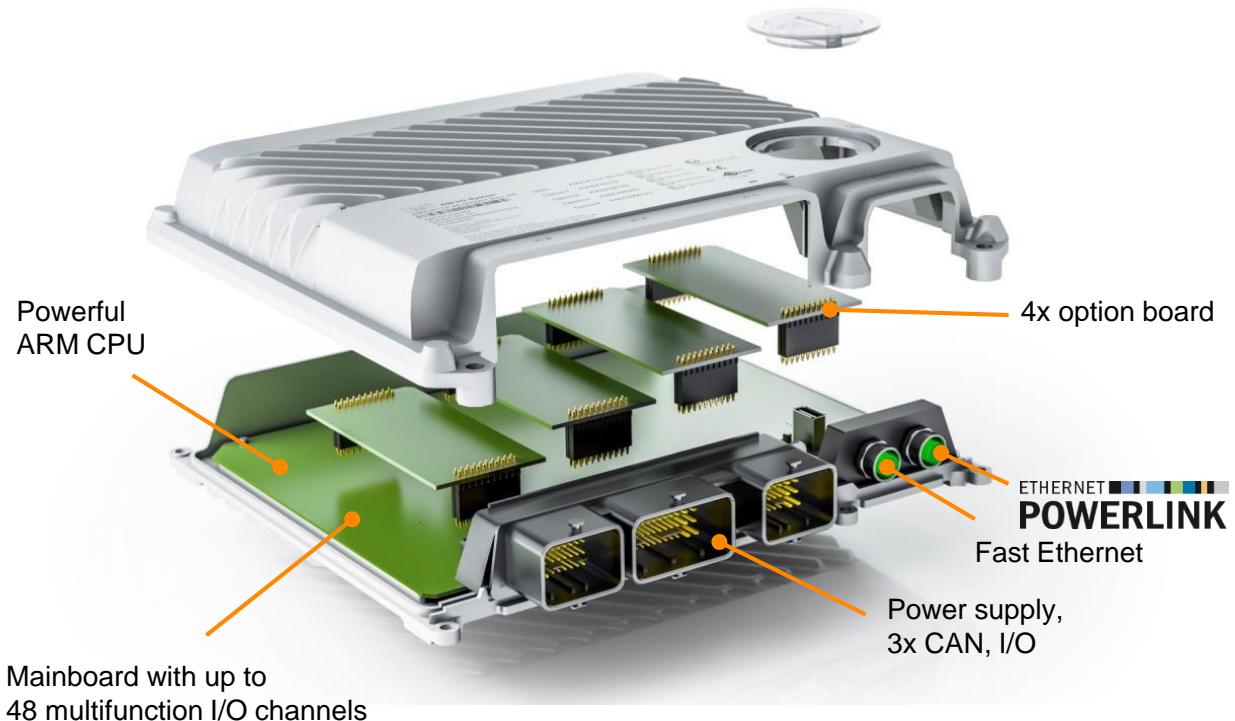
Mobile automation



Product overview

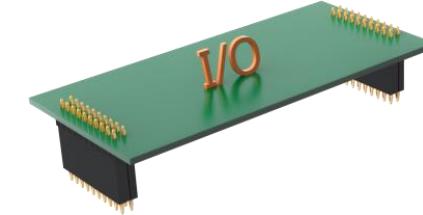


X90 – (safety) controllers and I/O modules



Option boards

Overview	Functions
I/O's	<ul style="list-style-type: none">Analog input and outputsDigital and PWM power outputs
Interfaces	<ul style="list-style-type: none">CAN, RS232, RS485
Condition Monitoring	<ul style="list-style-type: none">IEPE vibration sensorCalculation on board

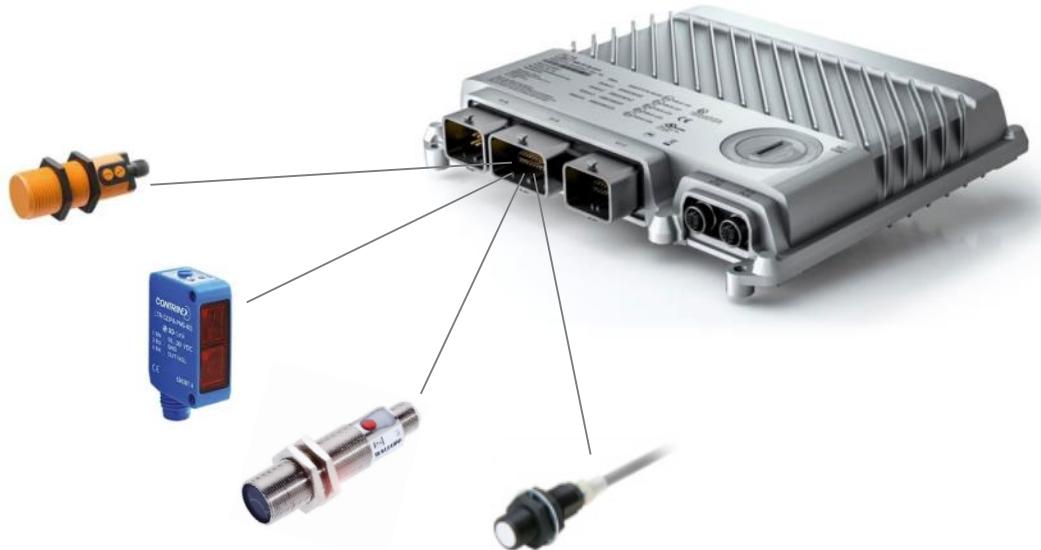


I/O-Link master

- 4x IO-Link master

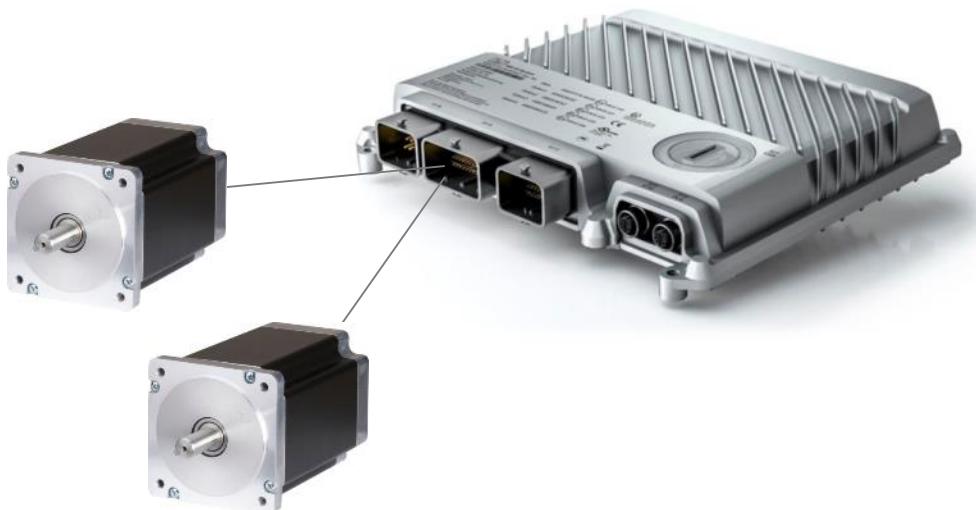
 **IO-Link**

new



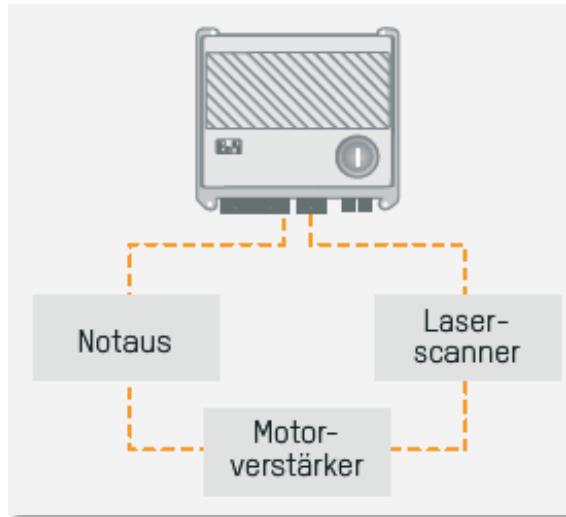
Stepper Module

- 2x Stepper Output
- 4A, 9-48V each channel



Safe Relays output

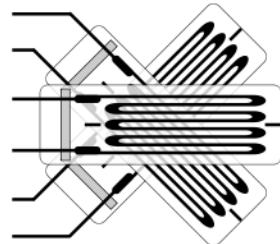
- 4x Safety relays normally open
- potential-free
- PL e / SIL 3
- 2A per channel



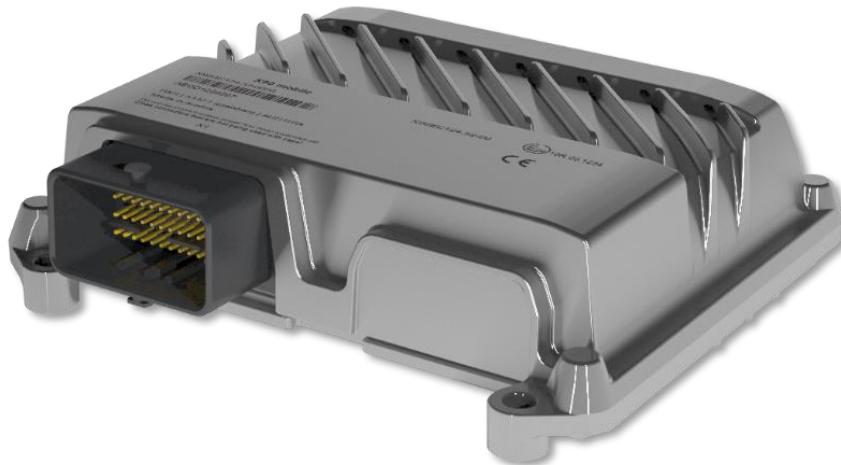
X90 system

Strain gauge inputs

- X90 strain gauge module,
- option board for 2 full-bridge inputs,
- comparable to X20 functions



- Decentralized, compact I/O expansion
- CANopen
- EDS file via field bus designer
- 32x multifunction I/O



APC mobile Mobile Automation



APC mobile 3100

- Up to Intel i7 2.8GHz
- 16 GB RAM, 480 GB Flash
- Extended temperature range
- IP69K sealing
- extremely shock- and vibration-resistant
- Modular expandable



Linux  Windows 10 

OPC UA
OVER TSN

ETHERNET
POWERLINK

Product lines

- Industry Version vs Mobile Version

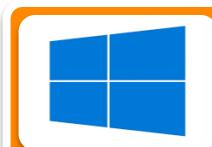
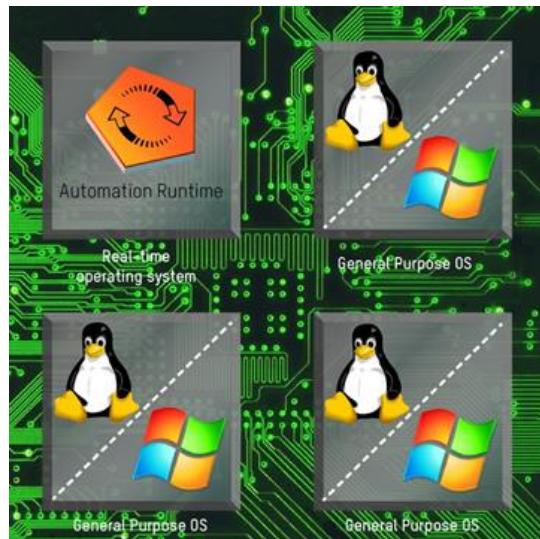
	Industry	Mobile
Temperature	0 – 55°C	- 40°C to 60°C (expansion possible)
Active Heating Unit	No	Yes
Humidity	90%	Condensing
Power supply	24V	9 – 32V
Load Dump Protection	No	Yes
Shock and Vibration	15g/1g	30g/4g
Sealing	IP20	IP69K

Many different use cases

- Complex algorithm (Robotic, path planning, image processing...)
- Edge computing, Security Gateway, EPR Gateway, contracting,...
- Powerful embedded controller with ARembedded



Hypervisor



Use of Windows features



Use of Linux features



mapp View visualization
(browser on Linux)



Automation Runtime
Embedded

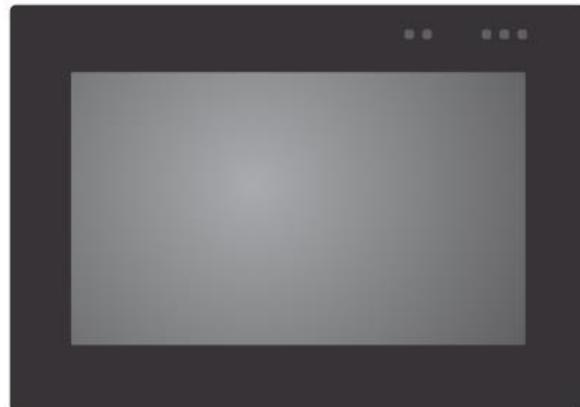
Power Panel Mobile

Mobile Automation



T50 mobile

- Browser devices
- Available in 5", 7" and 10.1"
- LED and brightness sensor on front



T50 mobile

Die-cast aluminum housing

Optional USB

Fast Ethernet


IP65 front sealing
IP65/67 product sealing

power supply
USB 2.0 interface
Digital I/O's

Swing arm mount or
Panel mount



Tools and solutions Mobile Automation



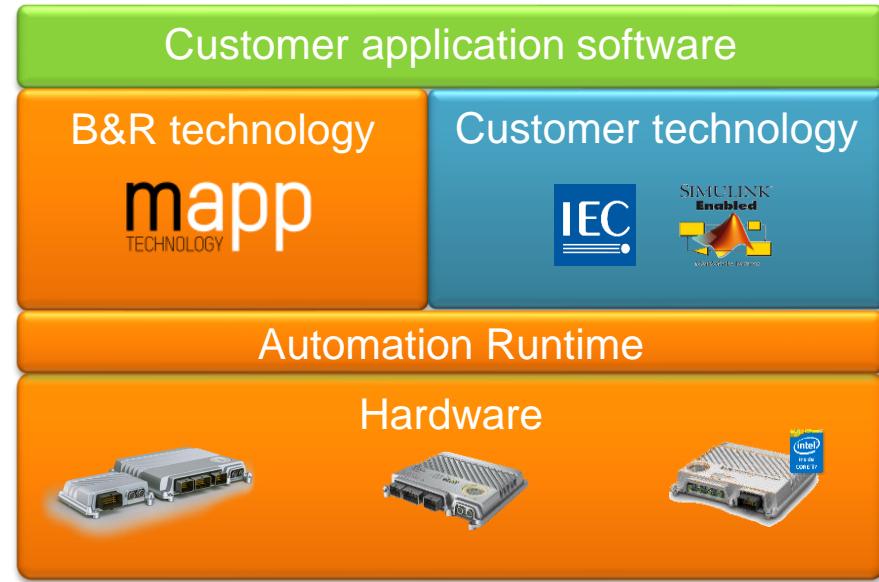
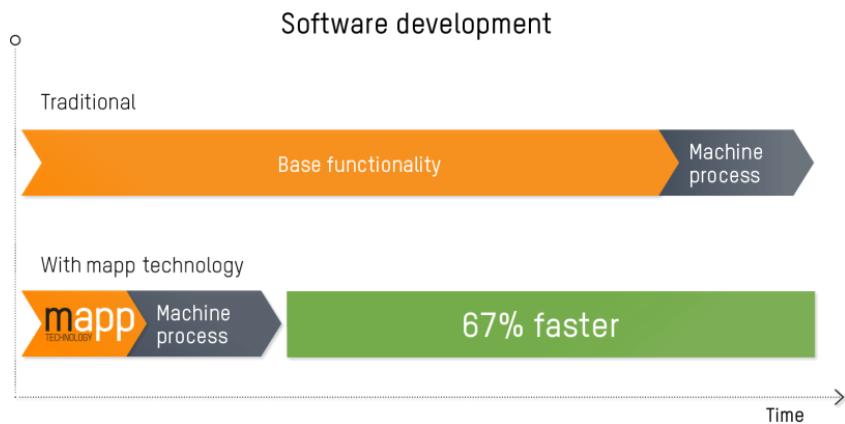
Automation Studio

- Innovation is SW based
- B&R Automation Studio tool
- one tool for many targets



Mapp Technology

- Pre-developed applications by B&R
- Reduced development costs
- Improved software quality





Remote maintenance



Logging



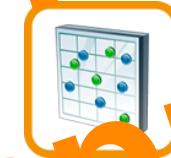
Access rights



Alarm system



XML recipe system



Variable tracing



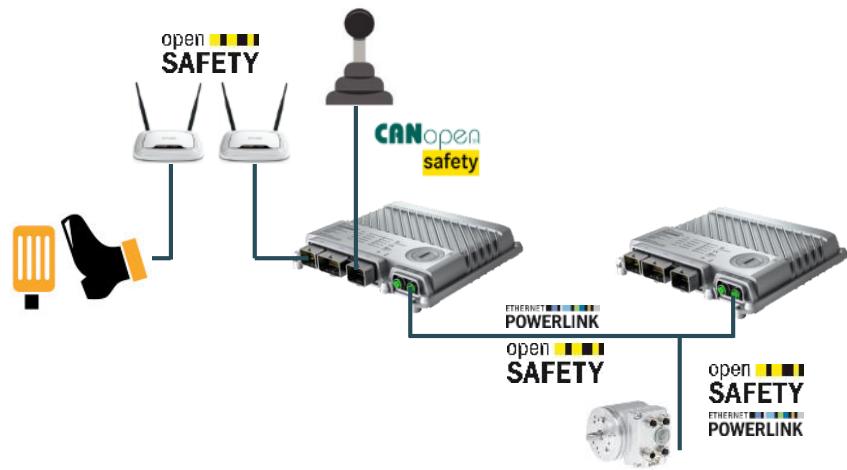
File browser



Overall equipment
effectiveness

More than
250 mapp's

- For sensor communication



More than just hardware

- Questions?
- Direct contact to technical sales:
<https://www.br-automation.com/en/about-us/locations/>
- Overview Mobile Automation with videos:
<https://www.br-automation.com/en/industries/mobile-automation/>

