



Online-Workshop: Mobile Automation

Produktneuheiten Mobile Automation
Vorsprung für Ihr Automatisierungssystem





Agenda

- Company
- Mobile Automation Products
- Software

PERFECTION IN AUTOMATION
A MEMBER OF THE ABB GROUP



Stefan Messerklinger (vormals Taxer)
Product Manager Mobile Automation

B&R Industrial Automation GmbH

B&R Straße 1, 5142 Eggelsberg, Austria

Phone: +43 7748 6586 1152

Email: stefan.messerklinger@br-automation.com

www.br-automation.com



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



Hard- and software for mobile machines



Environment

9 to 32 V



-40°C to 85°C



Harsh conditions



Sunlight



Shock



Vibration



Salt spray



Oil



Condensing water





Solution

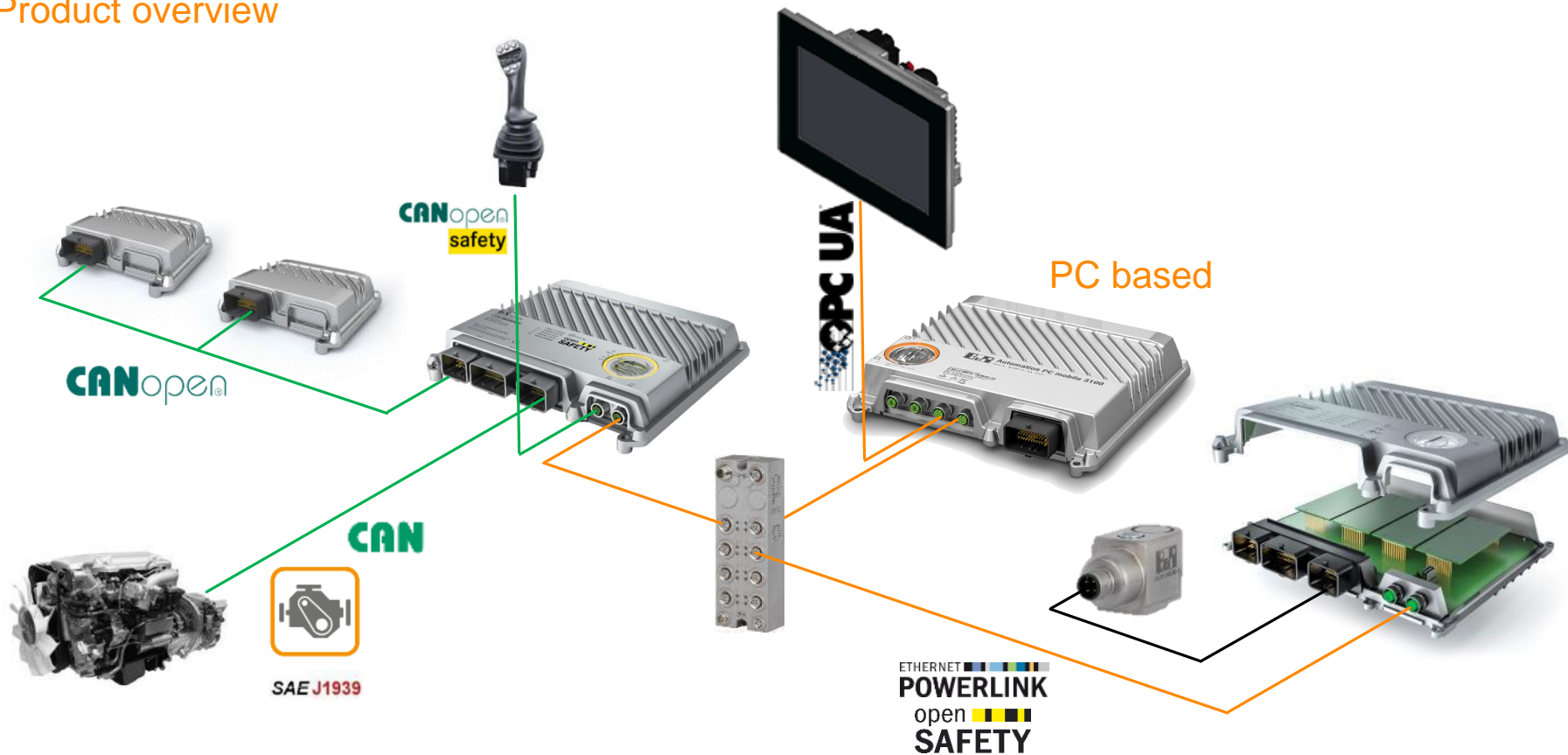


Products

Mobile automation

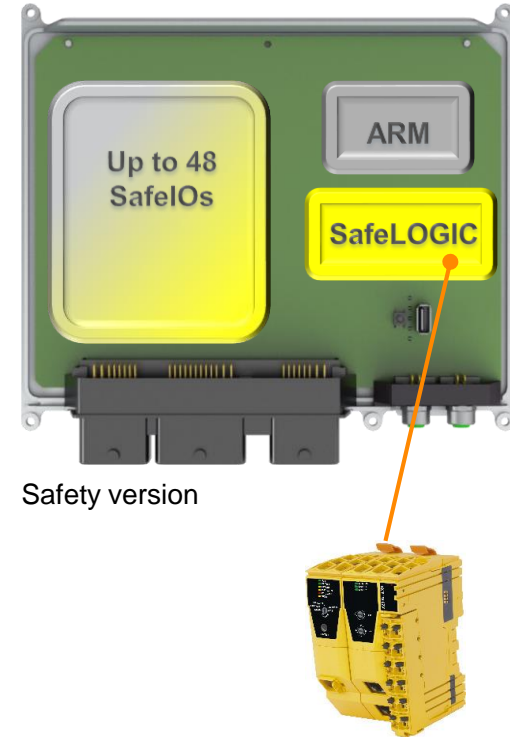
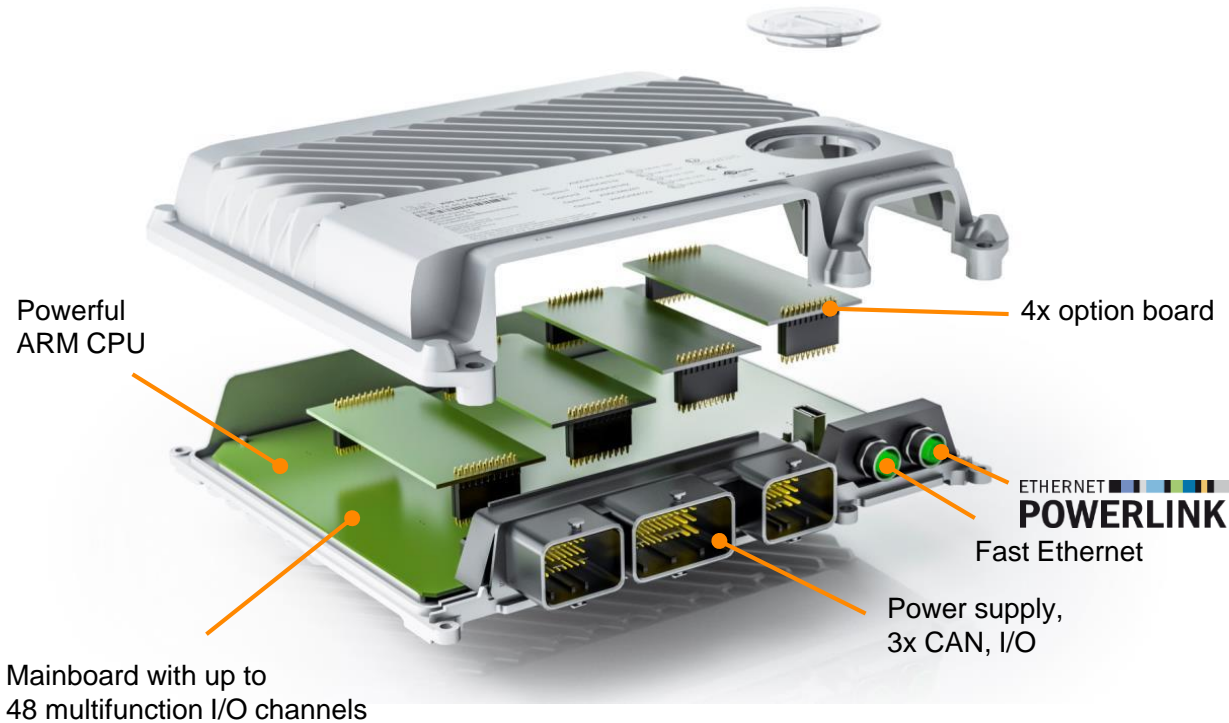


Product overview



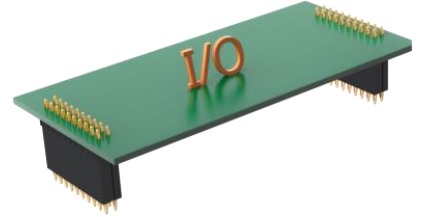
Mobile automation

X90 – (safety) controllers and I/O modules





Option boards



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

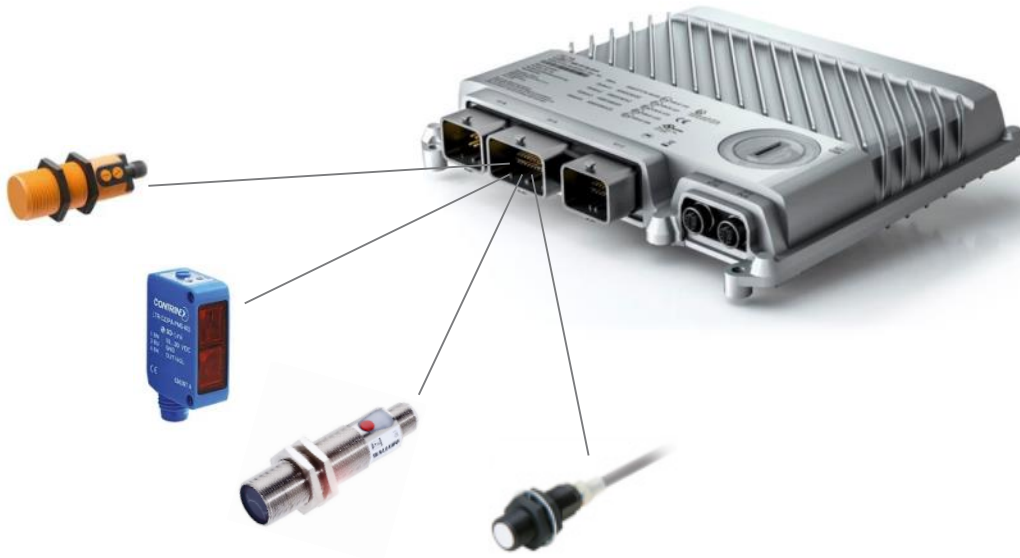


I/O-Link master

- 4x IO-Link master

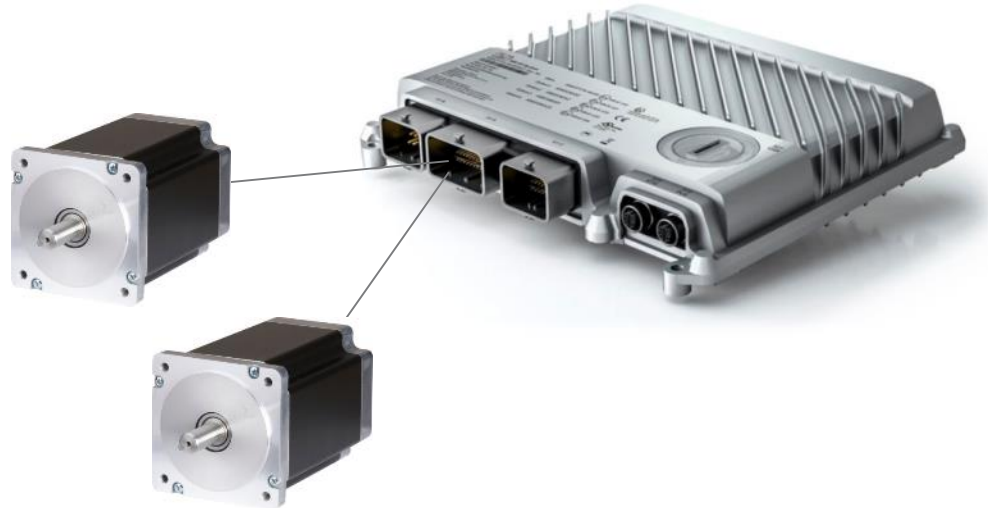
 **IO-Link**

new



Stepper Module

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

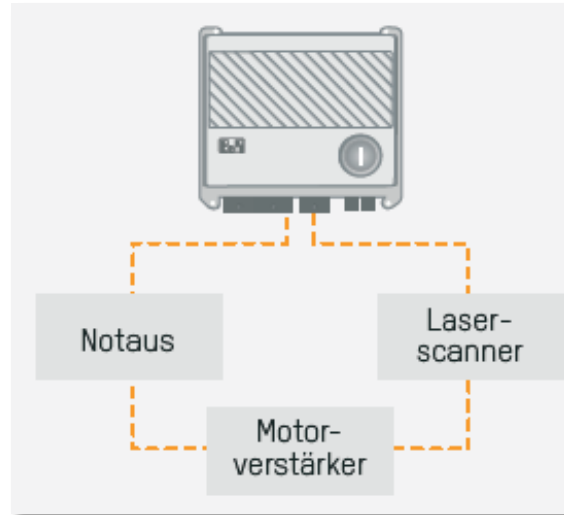


X90 system



Safe Relays output

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

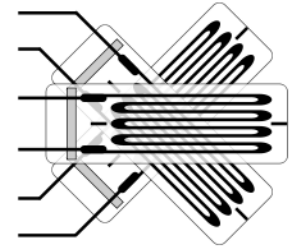


open 
SAFETY

X90 system

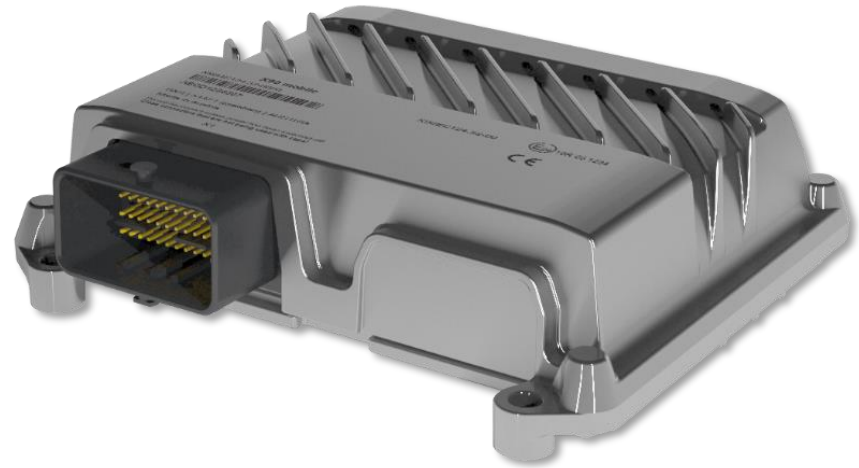
Strain gauge inputs

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



CANopen Buscontroller

- 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



Product lines

- Industry Version vs Mobile Version

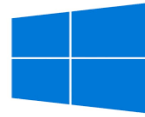
	Industry	Mobile
		
Temperature	0 – 55°C	- 40°C to 60°C (expansion possible)
Active Heating Unit	No	Yes
Humidity	90%	Condensing
Power supply	24V	9 – 32V
Load Dump Protection	No	Yes
Shock and Vibration	15g/1g	30g/4g
Sealing	IP20	IP69K

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)

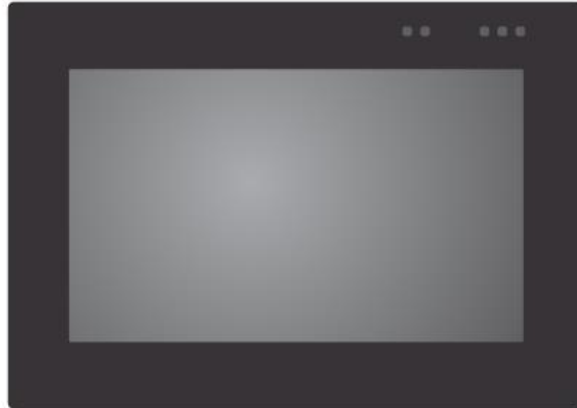
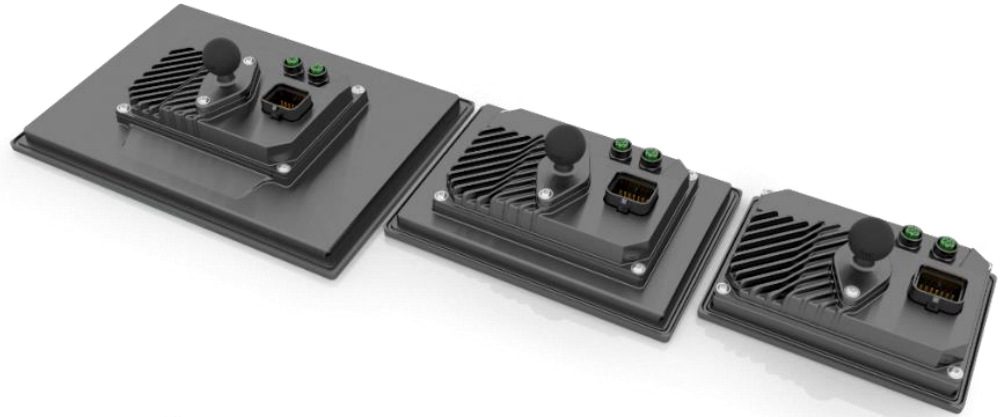


Automation Runtime
Embedded



T50 mobile

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



Mobile automation

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T50 mobile

Die-cast aluminum housing

Optional USB

Fast Ethernet
OPC UA

power supply
USB 2.0 interface
Digital I/O's

IP65 front sealing
IP65/67 product sealing

Swing arm mount or
Panel mount



Tools and solutions

Mobile Automation





Automation Studio

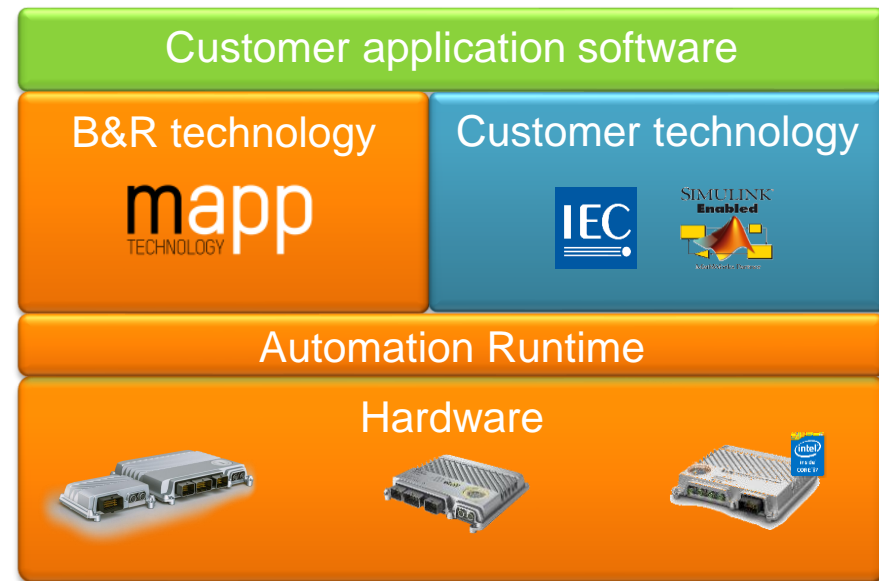
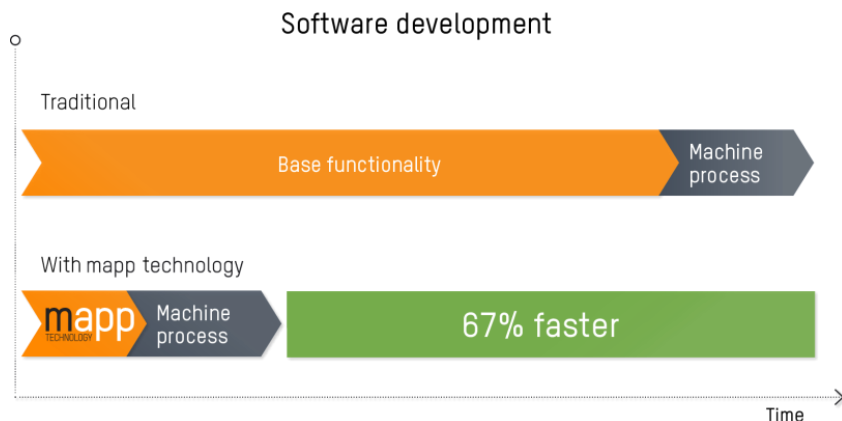
- Innovation is SW based
- B&R Automation Studio tool
- one tool for many targets



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

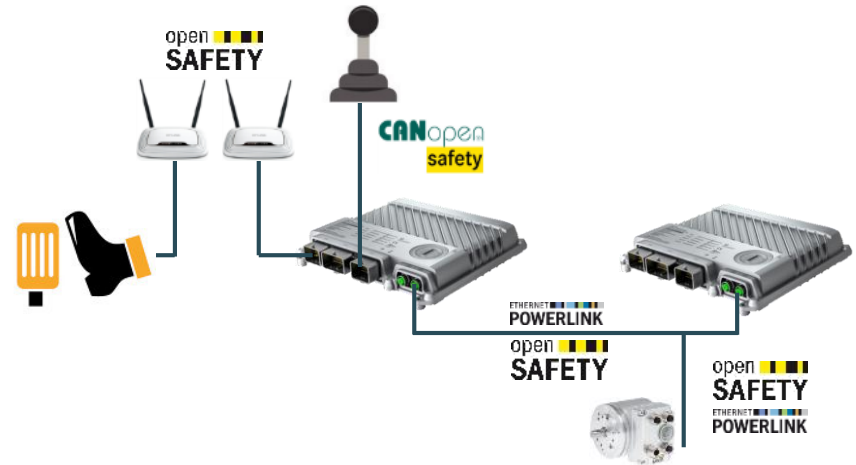


Overall equipment effectiveness

More than
250 mapp's

Decentral safety solutions

- 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/>

