

# GIVE US A **CHALLENGE**



## **RevolutionX**

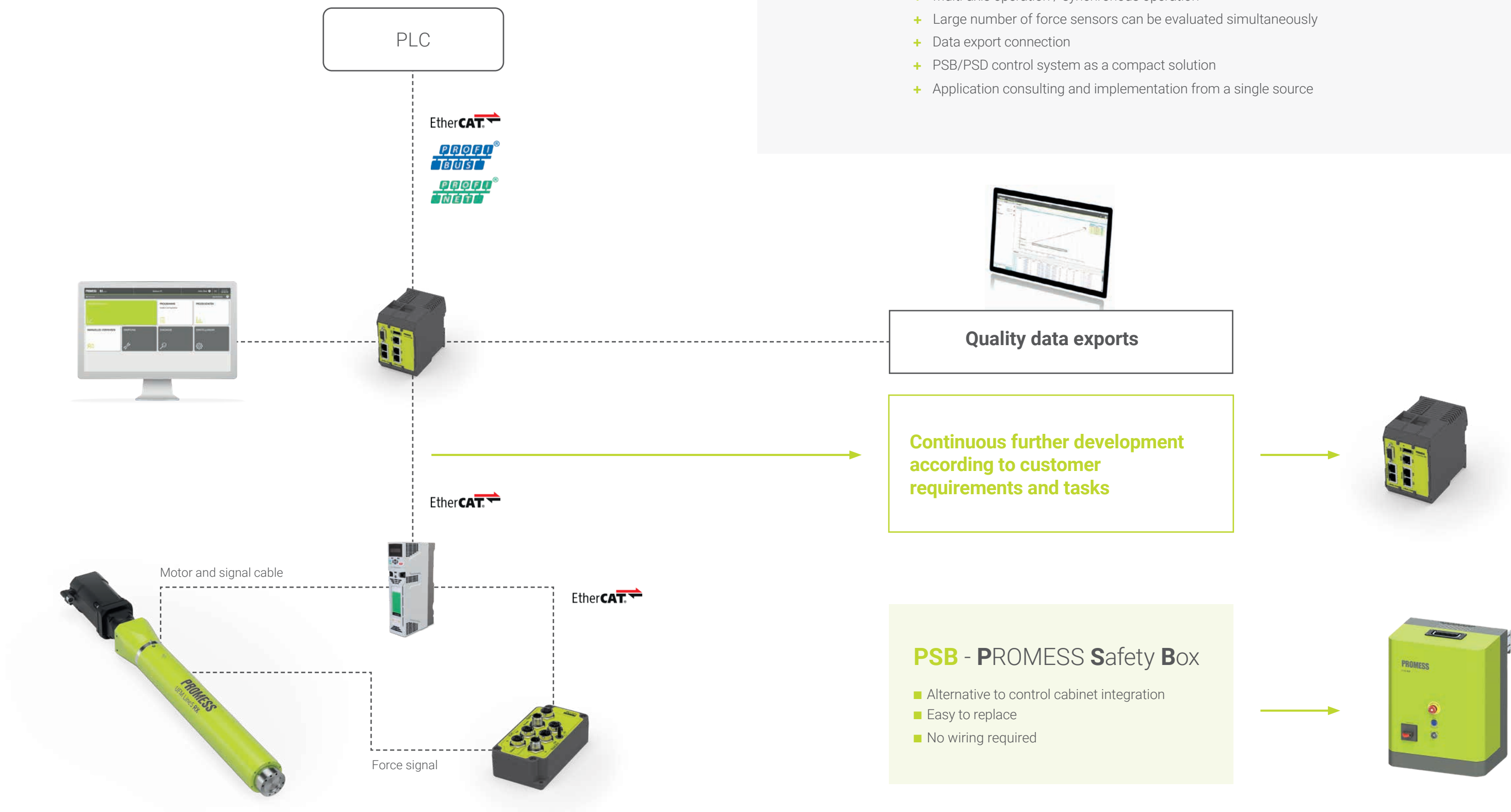
Development service for  
special requirements

For more efficiency.

**PROMESS**  
ASSEMBLY + SENSOR TECHNOLOGY

# The PROMESS RX assembly system

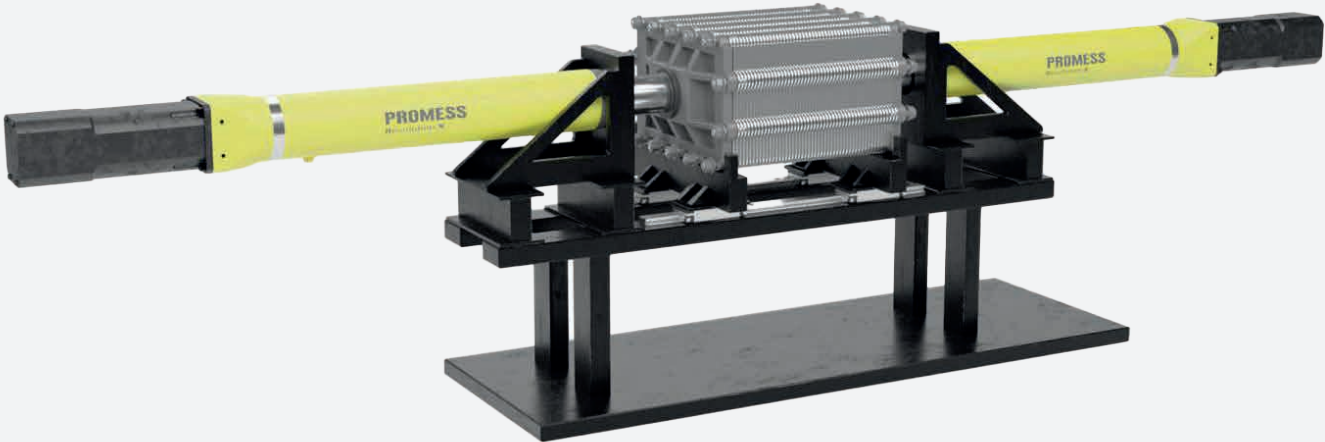
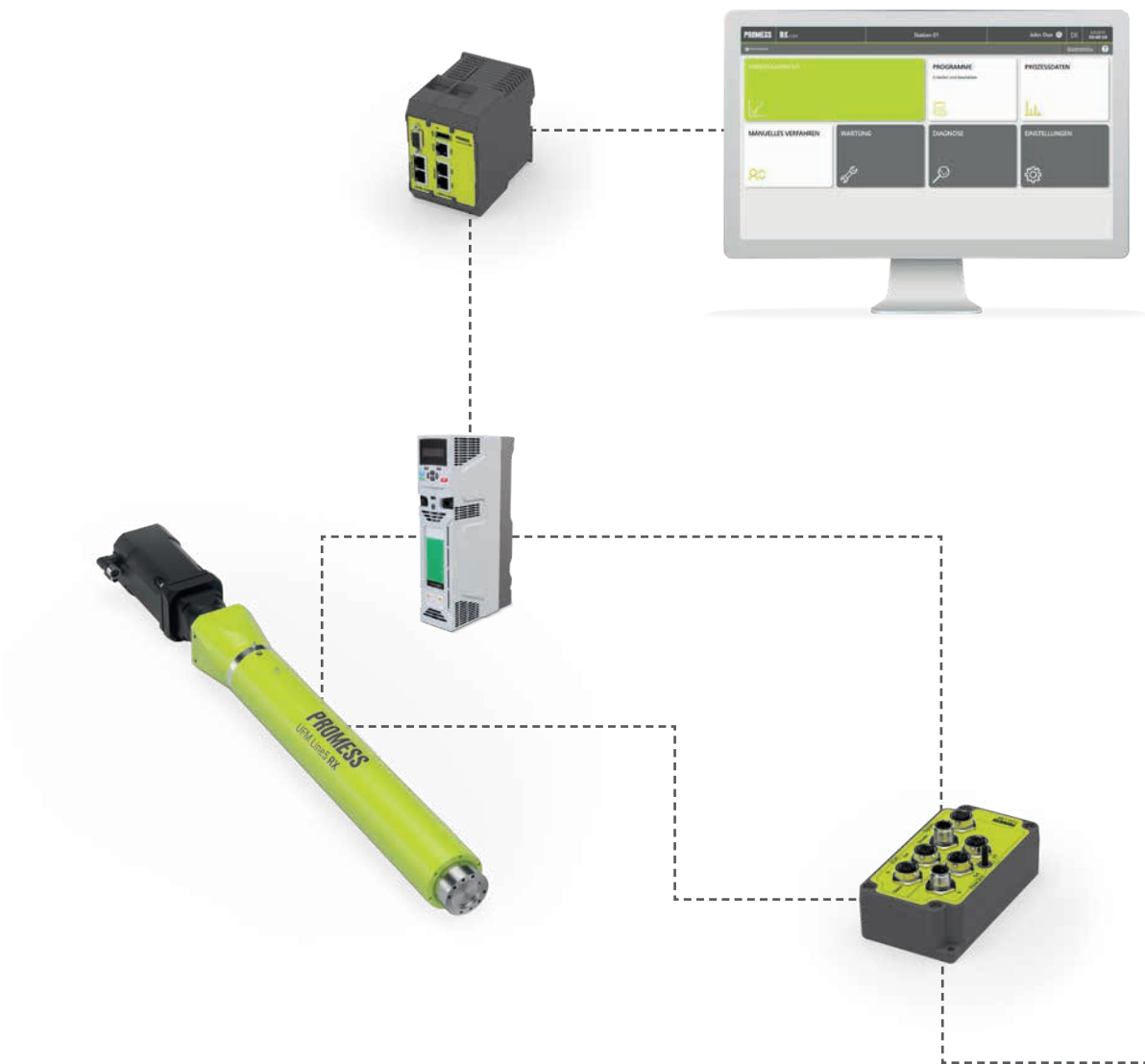
- Benefits RX**
- + Very robust mechanics (>15 million cycles)
  - + Force range 0.05 kN – 1000 kN
  - + Various frequency inverters on request
  - + 0.5 ms cycle time (2000 Hz)
  - + Visualization via web interface / PLC HMI
  - + Multi-axis operation / synchronous operation
  - + Large number of force sensors can be evaluated simultaneously
  - + Data export connection
  - + PSB/PSD control system as a compact solution
  - + Application consulting and implementation from a single source



# Multi-axis PROMESS RX

Multi-axis capability

- Multi-axis operation with one RX controller freely programmable
- Sequential programs linked, even without PLC (communication)
- No complex PLC sequences required to synchronize the axes
- Process monitoring, parameterization via a central controller



Application example

- Batterie stack production
- Large-area pressing without tilting
- Synchronous and asynchronous press-fitting of several components into one assembly group
- Coupling of torque and joining systems

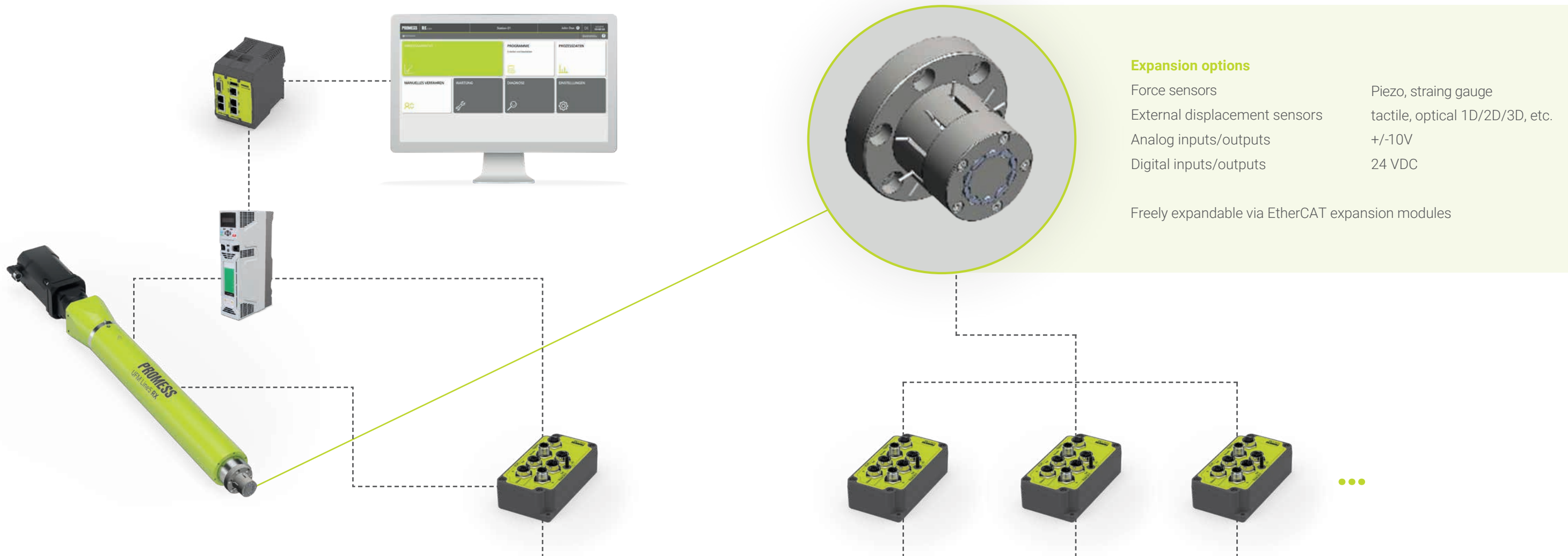




# PROMESS RX multi-sensor system

## Multi-sensory capability

- Graphical force-distance monitoring
- Parallel monitoring and display of all sensors
- Large number of sensors can be integrated (up to 16)
- Application e.g.:
  - Simultaneous pressing of several components and separate individual visualization
  - Monitoring the uniform pressing of fuel cells in a stack
  - Subsequent expansion of additional sensors possible e.g. light band measurements 1D/2D/3D



# Optional accessories

## PROMESS RX

### PSD (PROMESS Safety Device)

- The PSD safety module is supplied as a ready-to-install and tested module. It includes the power electronics and the safety controller for the joining unit
- Less wiring required for integration in the control cabinet
- Tested safety functions can be activated directly.
- With performance level



### Safety functions

- Safe torque off: STO
- Safely-limited speed: SLS
- Safe operating stop: SOS
- Safe Stop 1: SS1
- Safe Stop 2: SS2
- Cyclical brake test for holding/safety brake

### PSB (PROMESS Safety Box)

- The PSB safety module is an alternative to electric cabinet integration and contains all the necessary safety functions, including the power components and safety controller
- No wiring work for the integrator - plug & play
- E-construction not applicable - black box principle
- Tested safety functions can be activated directly
- IP 54 protection
- With performance level



**PROMESS.** For more efficiency.



**PROMESS**

**Gesellschaft für Montage- und Prüfsysteme mbH**

Nunsdorfer Ring 29 | D-12277 Berlin

Phone +49 (0)30 / 62 88 72 - 0

[promess@promessmontage.de](mailto:promess@promessmontage.de)

[www.promessmontage.de](http://www.promessmontage.de)

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