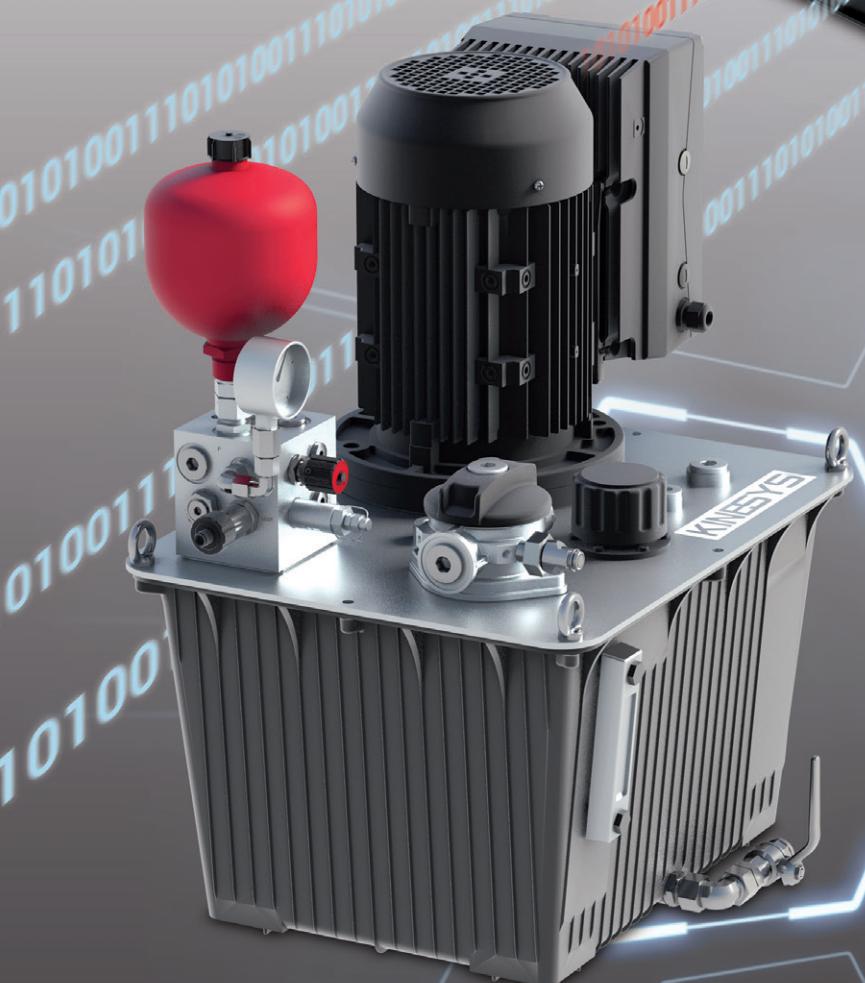




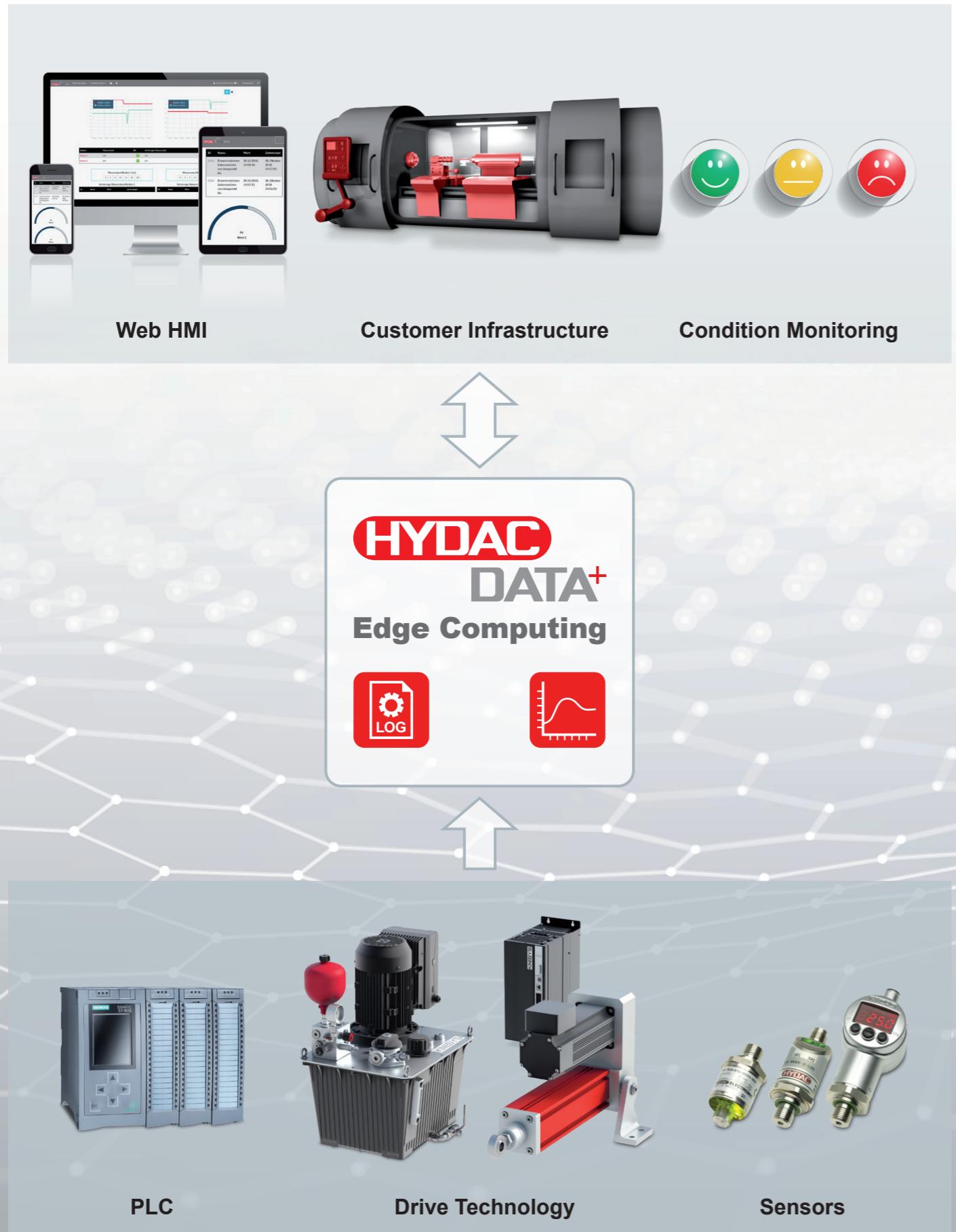
HYDAC DATA⁺ Edge Computing for KineSys Drive Systems



PROCESS
OPTIMIZATION

SYSTEM
AVAILABILITY

HYDAC DATA⁺ – Process Optimisation and System Availability



Data Management

- Database for long-term storage
- Data transfer to higher-level systems

Condition Monitoring

- Representation of system/machine status:
 - Recommended actions
 - Warnings
 - Alarms
- Report events and send notifications
- Algorithms for calculating hydraulic performance data



Web Visualisation

- Compatible with standard browsers (Chrome, Firefox, etc.)
- Visualisation of physical quantities (p , Q , P_{el} , etc.)
- Management of
 - Users
 - Assets
 - Interfaces
 - Data points
- Dashboard + dashboard editor
- Graphic programming
- Simple parameterisation of the DATA⁺ software environment

Optional Internet Connection

- Update service
- Remote maintenance/remote access to DATA⁺ and peripherals
- Cloud connection and customised services possible

Software

- DATA⁺ software
- Linux operating system

Hardware

- ARM Cortex-A7 processor
- 792 MHz
- 8 GB eMMC memory
- 512 MB DDR3 RAM
- Additionally up to 32 GB via industrial SD card

Interfaces

- HFI-MM
- HFI-CM
- Modbus TCP / RTU
- OPC-UA (client and server)
- REST, WebSocket

General

- -20 to +85 °C operating temperature
- IP 65 protection type

External hardware interfaces

- 24 V DC supply voltage
- RS 485
- USB 2.0
- CAN
- 2 x Ethernet
- Optional: connection of sensors via decentralised I/O modules, e.g. IO-Link-Master

Further information

- HYDAC KineSys microsite:
kinesys.hydac.com
- Microsite HYDAC KineSys DATA⁺:
data-plus.kinesys.hydac.com