

**D-EMS 2020**

# **Environmental + Process Data Management System**

Modular and up-to-date acquisition and evaluation

# D-EMS 2020 Environmental + Process Data Management System

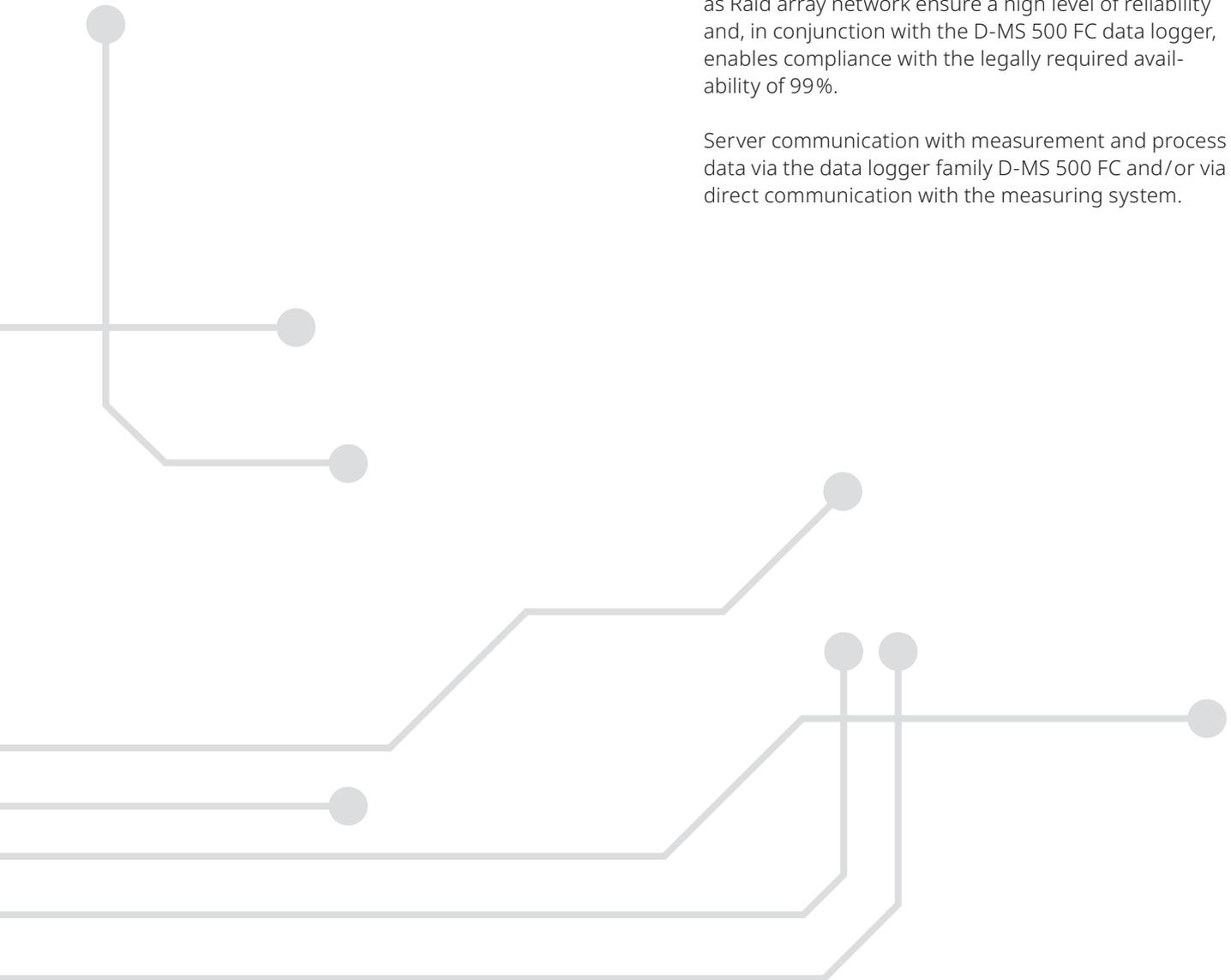
## MODULAR AND UP-TO-DATE ACQUISITION AND EVALUATION

D-EMS 2020 is a modular system for continuous acquisition, long-term storage, evaluation and visualization of environmental and process data. It monitors the legally given limit values and records their compliance. The collected data are optionally transmitted in parallel to the authorities.

The D-EMS 2020 system can be freely configured according to the needs of the plant and the requirements of the operator. The system is modular structured, fulfills the current requirements, is prepared for future guidelines and can be easily extended after installation by further software modules as well as hardware components.

The heart of the D-EMS 2020 system is the Server PC in an industrial design with the suitability tested D-EMS 2020 software. The use of server hard disks as Raid array network ensure a high level of reliability and, in conjunction with the D-MS 500 FC data logger, enables compliance with the legally required availability of 99%.

Server communication with measurement and process data via the data logger family D-MS 500 FC and/or via direct communication with the measuring system.



# Data + Facts

## FEATURES

- Modular system for continuous acquisition, long-term storage, evaluation and visualization of environmental and process data
- Monitoring of legally given limit values as well as the reporting of compliance
- Emission compliance monitoring and remote data transmission to the authorities
- QAL1 certified according to EN 15267-2 by TÜV Rheinland
- Evaluation according to German, European and US-EPA based regulations
  - TI Air, 1., 2., 13., 17., 27., 30. and 31. BImSchV
  - 2010/75/EU (IED) and 2003/87/EG (GHG)
  - US-EPA 40 CFR part 60, 63 and 75
  - and more...
- Complaint to EN 14181:2014 and EN 17255
- Adaptable to any size of plant up to overall assessment of complex industrial sites
- Continuous monitoring from 1 up to 1024 components per D-EMS 2020 server
- Connection of any number of D-EMS 2020 servers and data logger via data networks

## DATA ACQUISITION

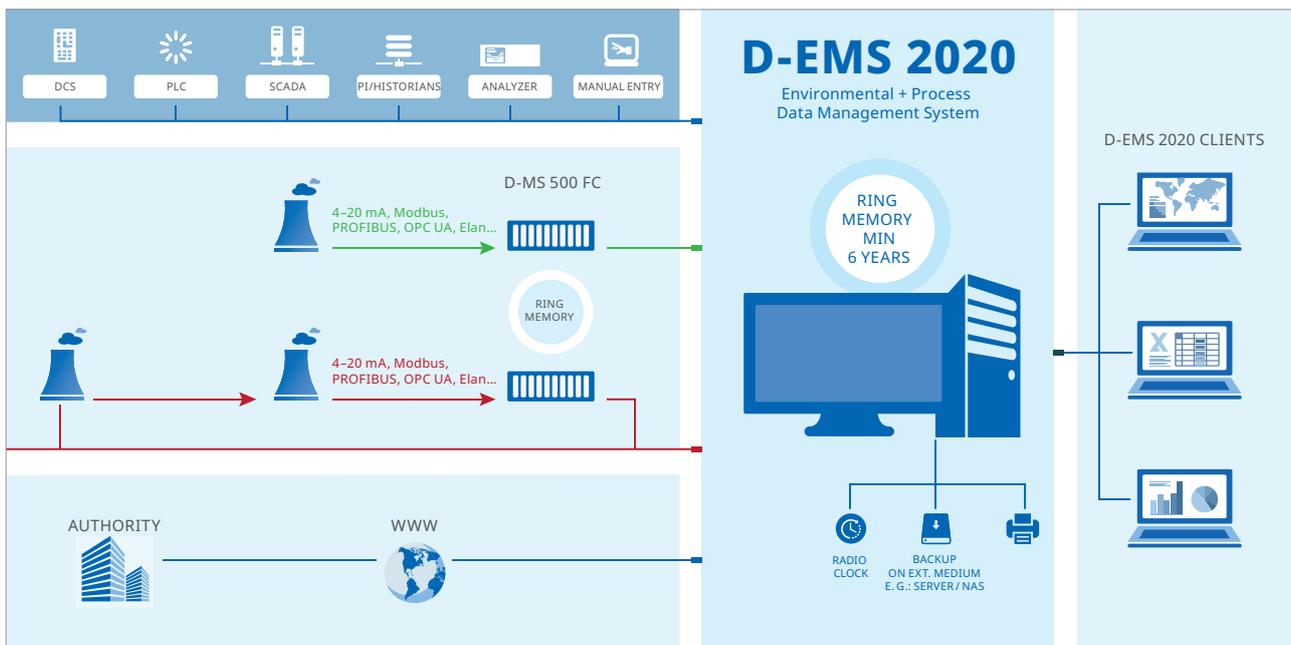
- Analog/digital inputs and outputs
  - as 19" solution with data memory
  - as PLC based DIN rail solution with data memory
  - or as decentralised modular units
- Data transmission via digital interfaces and bus systems
  - Modbus, PROFIBUS, TCP/IP, ELAN, Mode4, OPC UA
  - and more...

## DATA SOURCES

- Emission and ambient air
- Meteorological data
- Water and process data

## DATA EXPORT

- Data interface to MS-Excel for further evaluation of measurement data, e. g. for environmental protection officers
- Data and reports can be transmitted to the authorities e. g. via Internet
- Backup on external medium e. g.: Server/NAS in the connected data network
- Remote maintenance interface for fast and easy maintenance + cost-effective services



# Features + Benefits

## DATA SECURITY

- Up to 128 days buffer of the raw input values in the D-MS 500 FC data loggers on 1s basis
- Increased data security and availability through hard disks as RAID array
- Storage of raw values (components and status information) on 1s basis
- Backup on external medium e. g.: Server/NAS

## INTERNET AND INTRANET CONNECTION

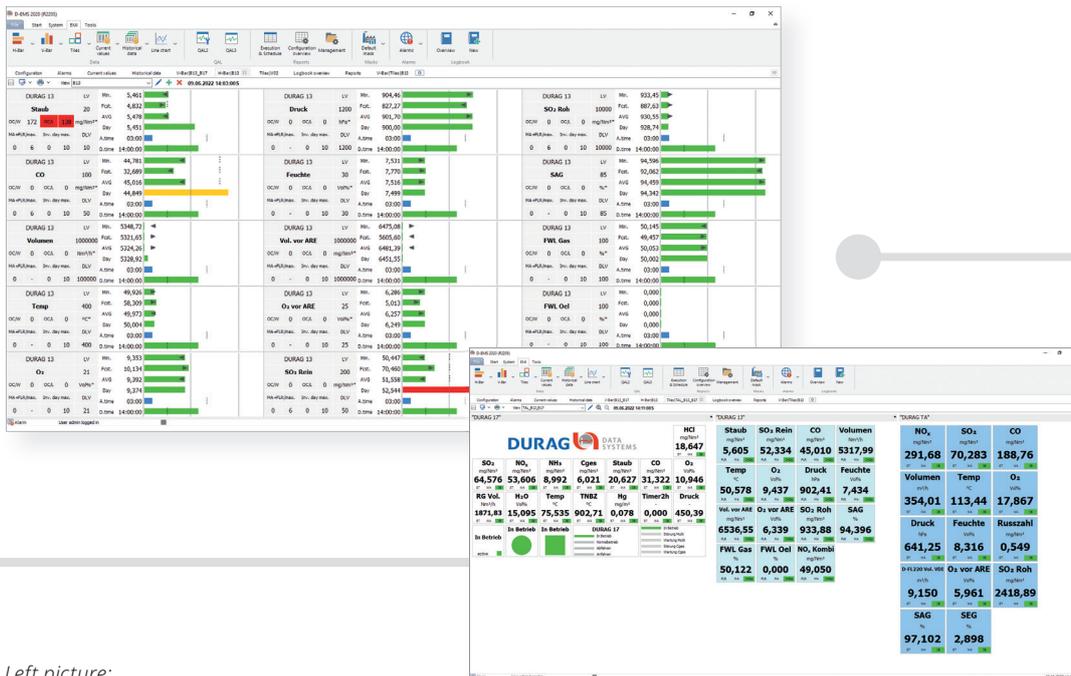
- HTML-based presentation of selected values and reports on a web server in the Inter-/Intranet
- Password protected access to the stored data and reports

## REPORTING IN ACCORDANCE WITH THE LEGAL REQUIREMENTS

- Daily, monthly and annual reports
- Statistics report
- Configuration report
- Or according to customer-specific specifications as PDF or XLS file

## VISUALISATION

- Display of current, prognostic and historical evaluated data
- Optional display of pollutant compensation, characteristic map and correlation representations
- Alarm and event system with comment function
- Flexible visualization of standard information up to complex user-defined process pictures



Left picture:  
Display of evaluated values  
as bar chart

Right picture:  
Custom display with the  
Tiles Dashboard

# Data management

## TAILORED TO CUSTOMER REQUIREMENTS

DURAG DATA SYSTEMS has more than 40 years of experience in supplying soft- and hardware products and solutions for emission and process data evaluation.

Our dedicated team of experts will support you in designing your PEMS solution including full-fledged data acquisition and handling systems (DAHS).

### SUPPORT 24/7

Quick, comprehensive + competent

### SERVICE

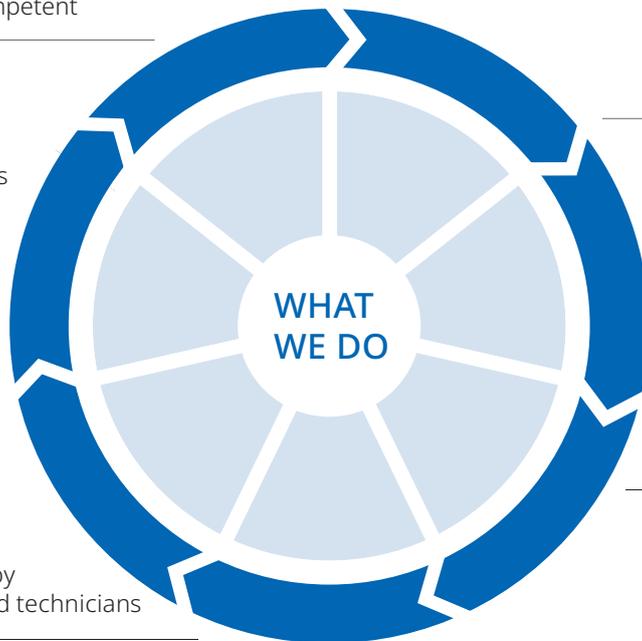
Qualified service technicians worldwide

### TRAINING

Comprehensive training for maintenance personnel

### COMMISSIONING

Worldwide commissioning by highly qualified, experienced technicians



### CONSULTING

Expert consulting  
Application know-how

### DEVELOPMENT

Made in Germany  
Customer specific solutions

### INSTALLATIONS

Quick + reliable



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