

# Control System HiCOS Plus

HIGHVOLT Prüftechnik Dresden GmbH

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# Introducing HiCOS Plus

*Design is not just what it looks like and feels like. Design is how it works.*  
Steve Jobs

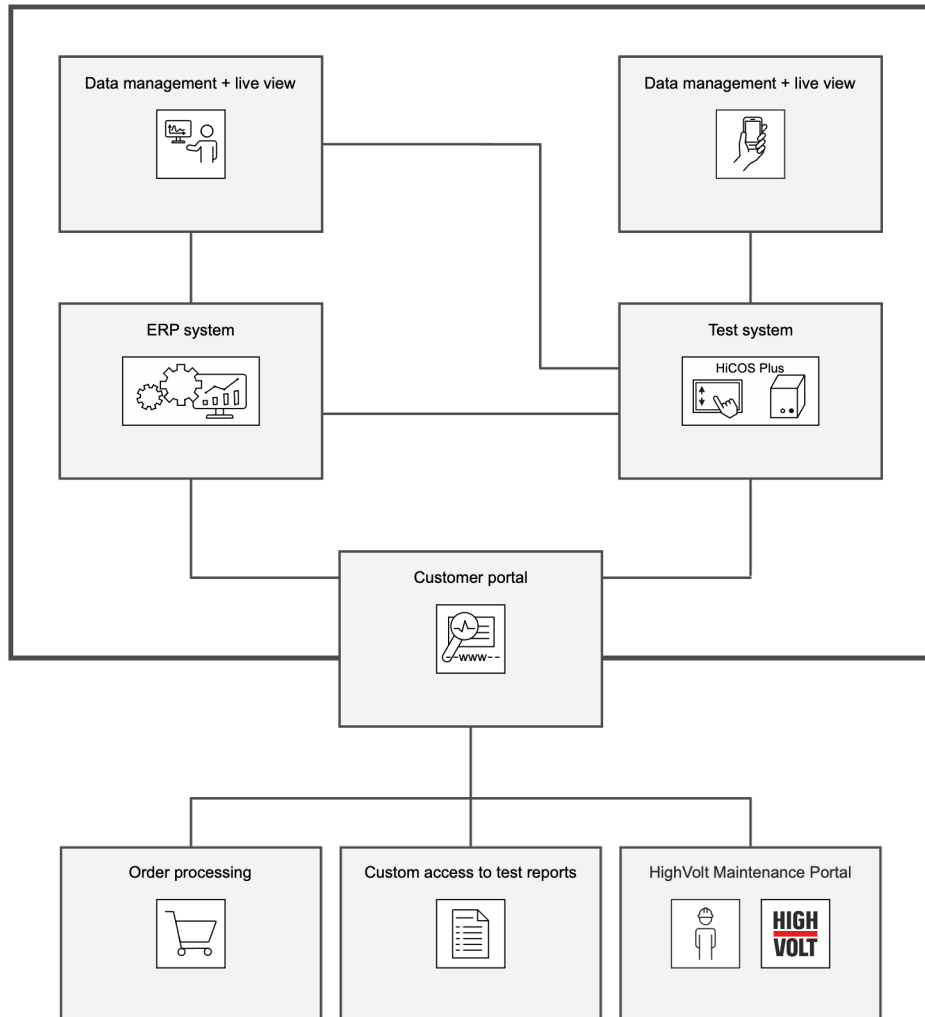
- Intuitive operation
- Usability: From the office to the test field
- Open interfaces for system integration
- Preventive maintenance and customized service recommendations
- Easy upgrade of older systems



# Use cases in a smart factory

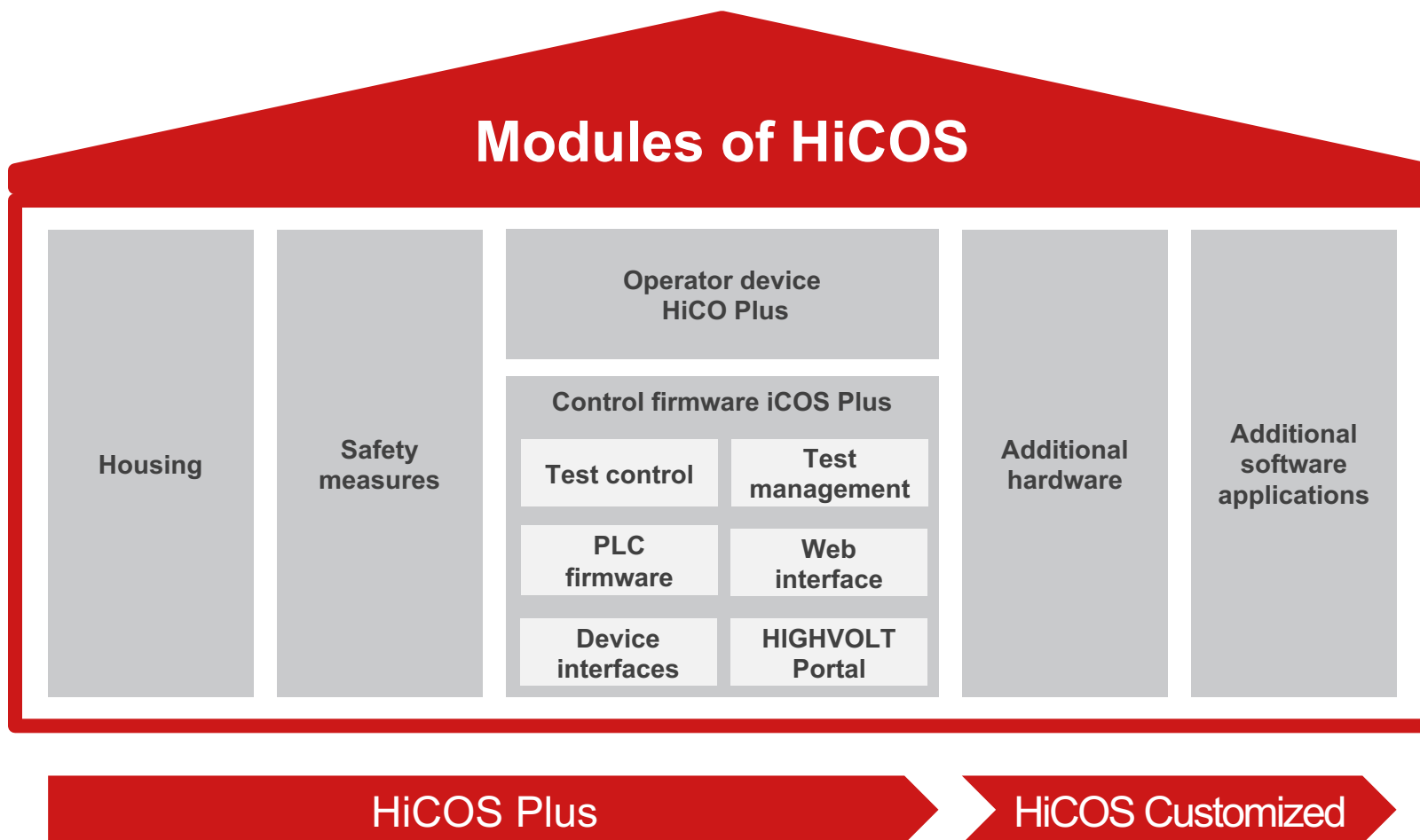
## HIGHVOLT test system as an intelligent IoT device

- Open interfaces for system integration
- Access by web browser and web API for
  - creation, parameterization and storing of tests
  - evaluation of measuring data and test results
  - download of test reports
  - upload of customer-specific test report templates
- Access by web browser for live view of the ongoing test
- Cloud-based evaluation of the test system operating data for preventive maintenance and optimized service
- High cyber security level



# Introducing HiCOS Plus

## Modules of HiCOS



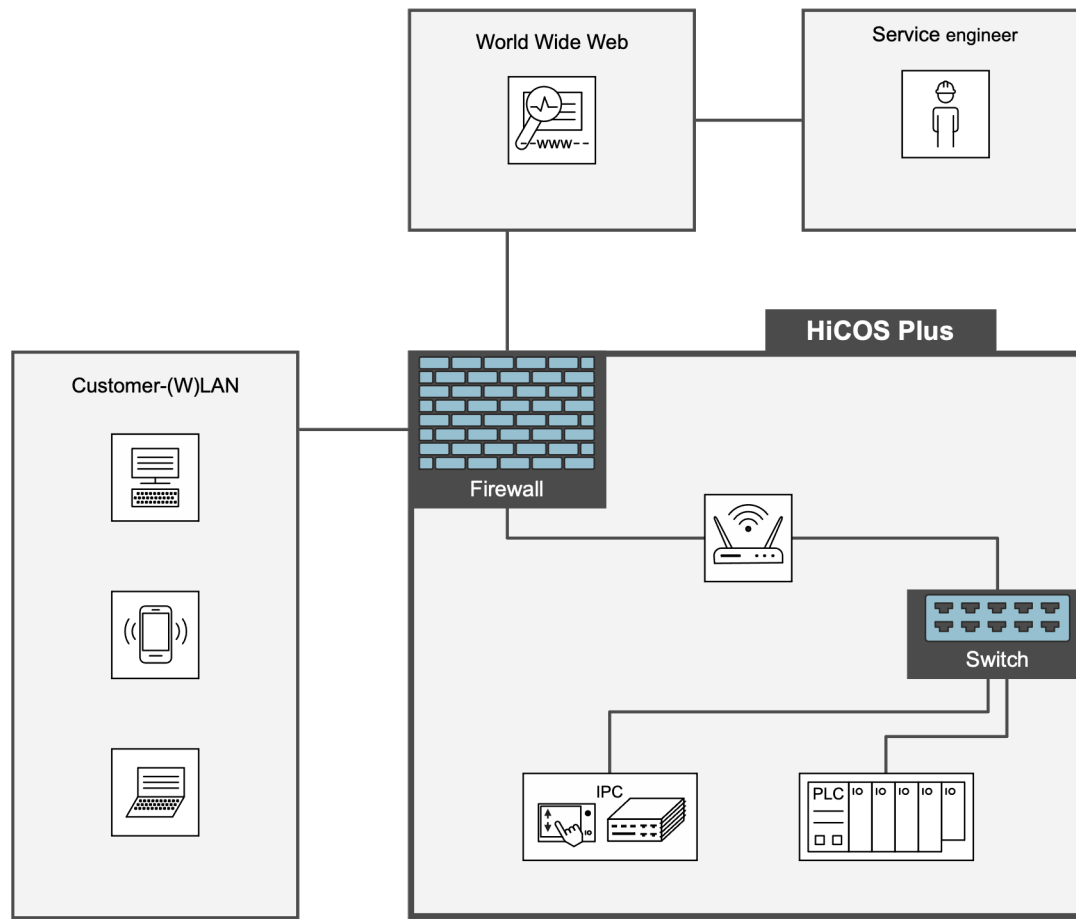
Basic Control includes:

- Test automation: Create, execute and analyze test procedures
- Test reporting
- Safety features (SIL 3)

Customized features can be:

- Test bay visualization
- Additional hardware
- Connection to factory's SCADA system

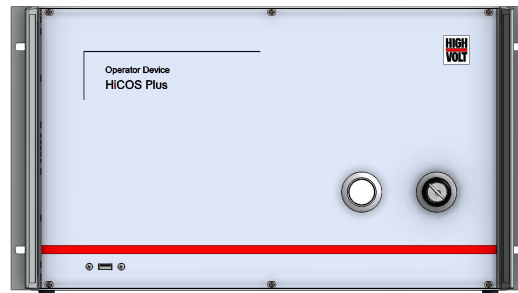
# Function and connectivity of HiCOS Plus



- Local control and test management
- Connection to the company intranet via the integrated router
- Access to the local test management via web browser
- Firewall for protection of the test system
- Authentication service for access control
- Interface to HIGHVOLT Maintenance Portal
- Open interfaces for system integration (web API), e.g., via ERP system

# Function and connectivity of HiCOS Plus

Local control and test management via operator device



- Operation of the test system
- Test creation, parameterization, and storing
- Recording, evaluation, and storing of measurement values
- Interfaces to measuring devices

# Function and connectivity of HiCOS Plus

## Web interface for test management



- Access to the local test management via web browser
- Test creation, parameterization, and storing
- Recording, evaluation, and storing of measurement values
- Creation of test reports (Excel)
- Access management to manage users, roles and permissions



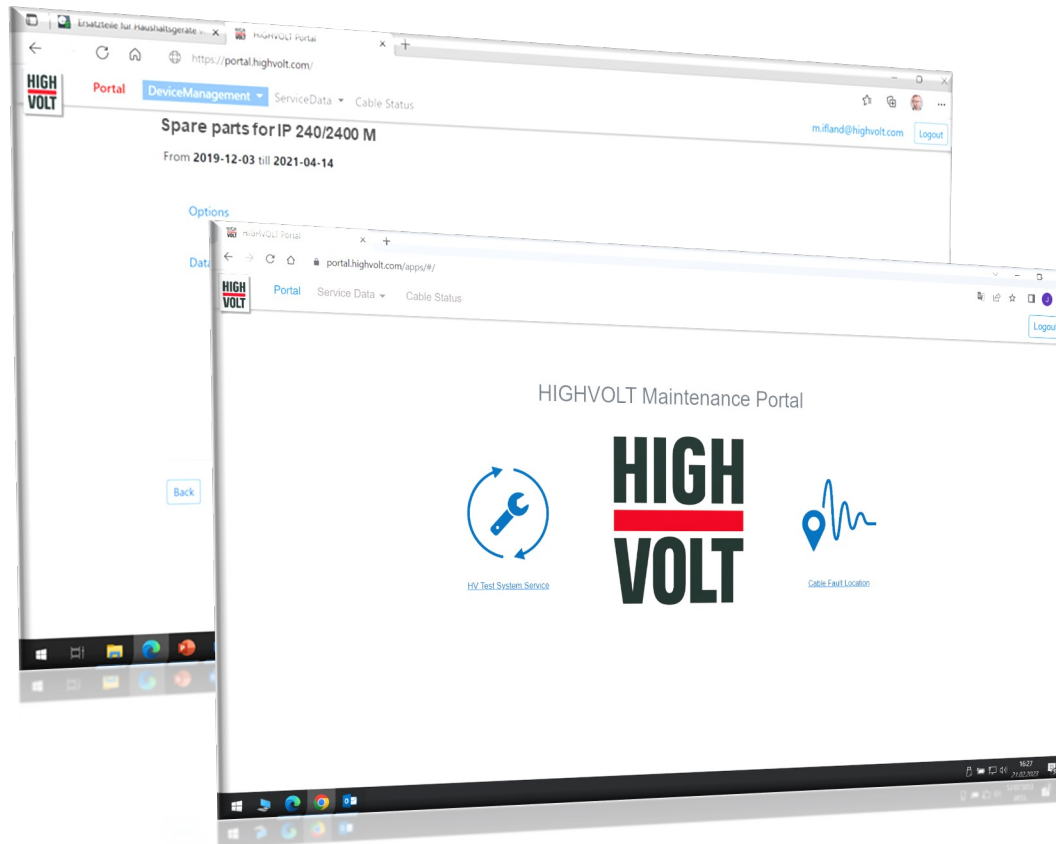
# Function and connectivity of HiCOS Plus

## Web interface for test management



- Live view of ongoing test on operator device
- Operation of test system only for devices located in immediate surroundings (connection via WLAN interface of operator device)

## Preventive maintenance offering failsafe operation



- Electronic system status report
- Analysis of tests system's health data (operating hours, switching cycle, etc.)
- Indications for re-calibration
- Simplified procurement of spare parts via HIGHVOLT Portal
- Simplified extension of warranty

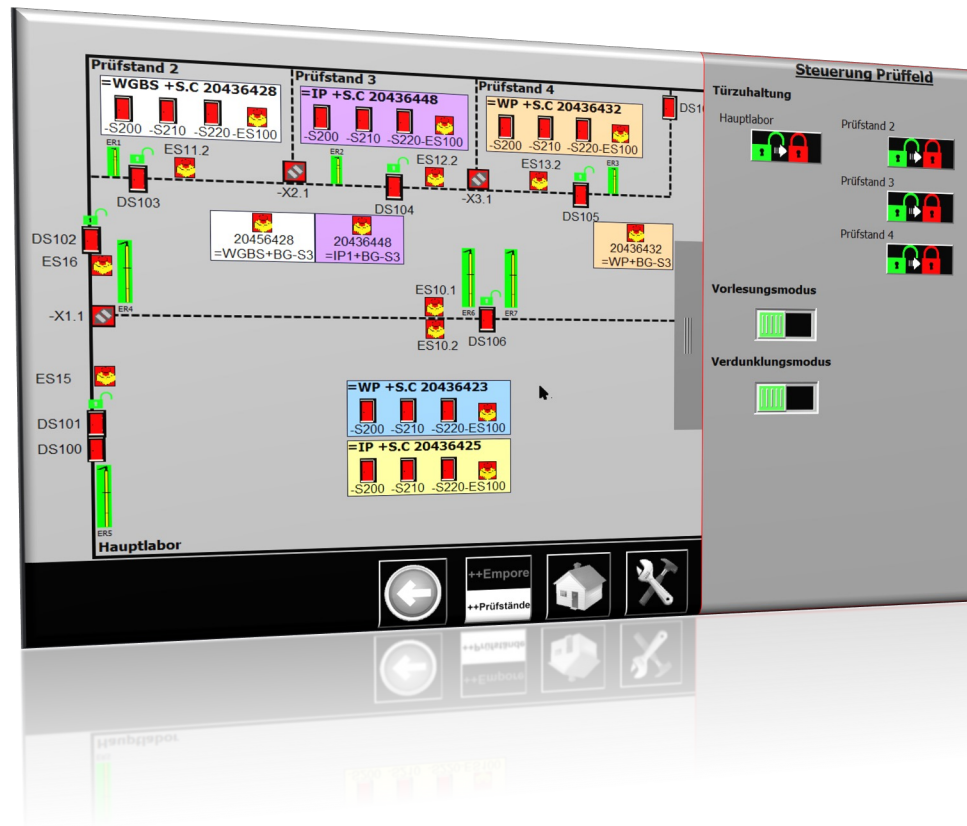
# Hardware design of HiCOS Plus

## Professional Workspace: The new OB 215

- Sideboard container with operator device
- Suitable for integration of further measurement devices (HiRES)
- Extensions
  - Second screen (PC screen or touch display)
  - 2<sup>nd</sup> container for measurement devices



## How to optimize efficiency and safety in a test field



### Customer orientated, turn-key solutions

- Development of software applications according to customer requirements
- Software integration of third-party devices
- Test field visualization enables separation in different test areas
  - Preparation and testing in different areas at the same time
  - Optimal utilization of available space
  - Full status control over laboratory
- Additional hardware packages



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