DC-Manager™

Extremely compact and modular process control system for the control cabinet assembly

HITEC ZANG
MADE IN GERMANY

The new terminal-based DC-Manager™ system - *DC stands for Distributed Control* - is an alternative to the plug-based LabManager® laboratory automation system.

The DC-Manager™ system is designed for installation in control cabinets. Accordingly, it is used when sensors, actuators and devices are permanently wired.

The functionality is in line with the LabManager® system. Both systems can be coupled, for example, if the base instrumentation of a plant with a DC-Manager™ has to be wired permanently and at the same retain the flexible expansion options via standardised LabManager® connector technology.

- ✓ Compact and modular design
- ✓ Flexibly expandable
- ✓ Easy installation on DIN-Rail
- ✓ Pluggable screw or spring terminals
- ✓ Tool-free interchange

DC-Manager™ connection modules have respectively four interfaces with pluggable connection terminals. Wiring can be done without any tools.

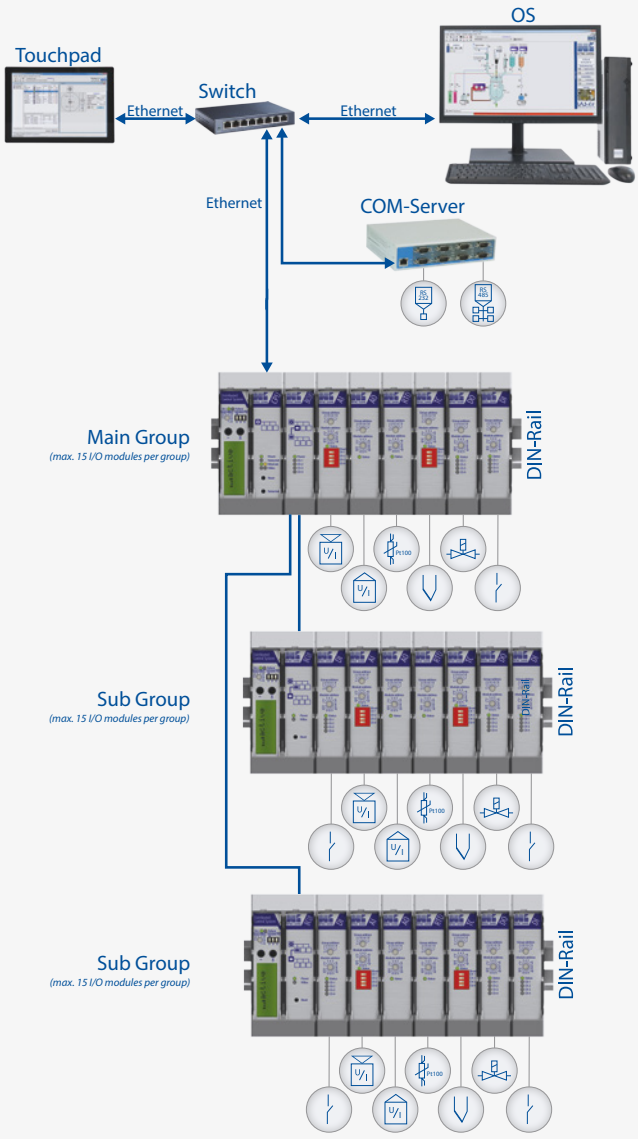
With the aid of bus coupling units, distributed systems can be easily implemented. The custom addressing of the I/O modules allows individual modules to be removed or inserted at any position in the group without the need to change the configuration.

Additionally, users without special knowledge in automation, can install the system.

Even larger installations can be realised straightforward, due to the new communication module with increased data throughput.

With the DC-Manager™ system, applications designed in the laboratory, can now migrate into the next scale-up step, e. g. pilot plant, without changes to the process.

Networked DC-Manager™ structure



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DC-Manager™ characteristics

Due to the integrated 32-bit processor the DC-Manager™ is able to control and regulate a plant autonomously, even without operator station.

The CPU is monitored by a hardware watchdog circuit and reboots automatically on system errors.

The DC-Manager™ is certified and complies with EN 61010/EN 61508. The firmware or respectively function complies with EN 61508/EN 61311.

The system can be operated locally via a touch-PC/tablet. The configuration is made using the proven LabVision® automation software suite.

Specifications

- Compact design
  I/O module (WxHxD): 22,5 x 100 x 114 mm
  CPU-/BCUI module (WxHxD): 45 x 100 x 114 mm
- Electrical insulation between bus and I/O side
- Industrial-grade, robust bus system
- Redundant monitoring of the main voltage and of the up to 3 activation voltages as well as the connected actuators and internal operational states
- Robust design against damage by ESD
- Low power consumption and heat generation
- Safety according to EN61010 and based on EN61508
- Convenient integration over Ethernet

Available modules

- 4 x analogue input, -10…+10 V, 0/4…20 mA, 24 Bit resolution, with sensor supply
- 4 x resistance temperature sensors Pt100, -200…+600 °C, with conductor error detection
- 4 x thermocouples with conductor error detection (types R, J, L, B, T, N, S, E, K and user defined characteristics)
- 4 x analogue output, -10…+10 V, 0/4…20 mA, 16 Bit resolution, with actuator supply
- 4 x digital input, 24 V (NAMUR level), passive switching contact, binary, event and frequency counter
- 4 x digital output, 24 V binary, PWM, PFM and PFLM
- 1 x bus coupling unit output to connect a sub group
- 1 x bus coupling unit as an head module for a sub group

For every group up to 15 I/O modules can be used. Several groups can be combined through bus coupling units.

Serial interfaces such as RS-232 or RS-485 can be integrated via a COM server.

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