

# PMA Rail Line

Modular process control I/O-system with independent function modules for precise measurement, control and monitoring



# Rail Line provides precise process control and enhances operational reliability in many applications

Precise measurement, reliable limit monitoring and stable control is essential for many demanding applications. For this reason the flexible rail line system, by WEST Control Solutions can be found in many industrial applications e.g. industrial ovens, Environmental chambers or within the semiconductor industry.

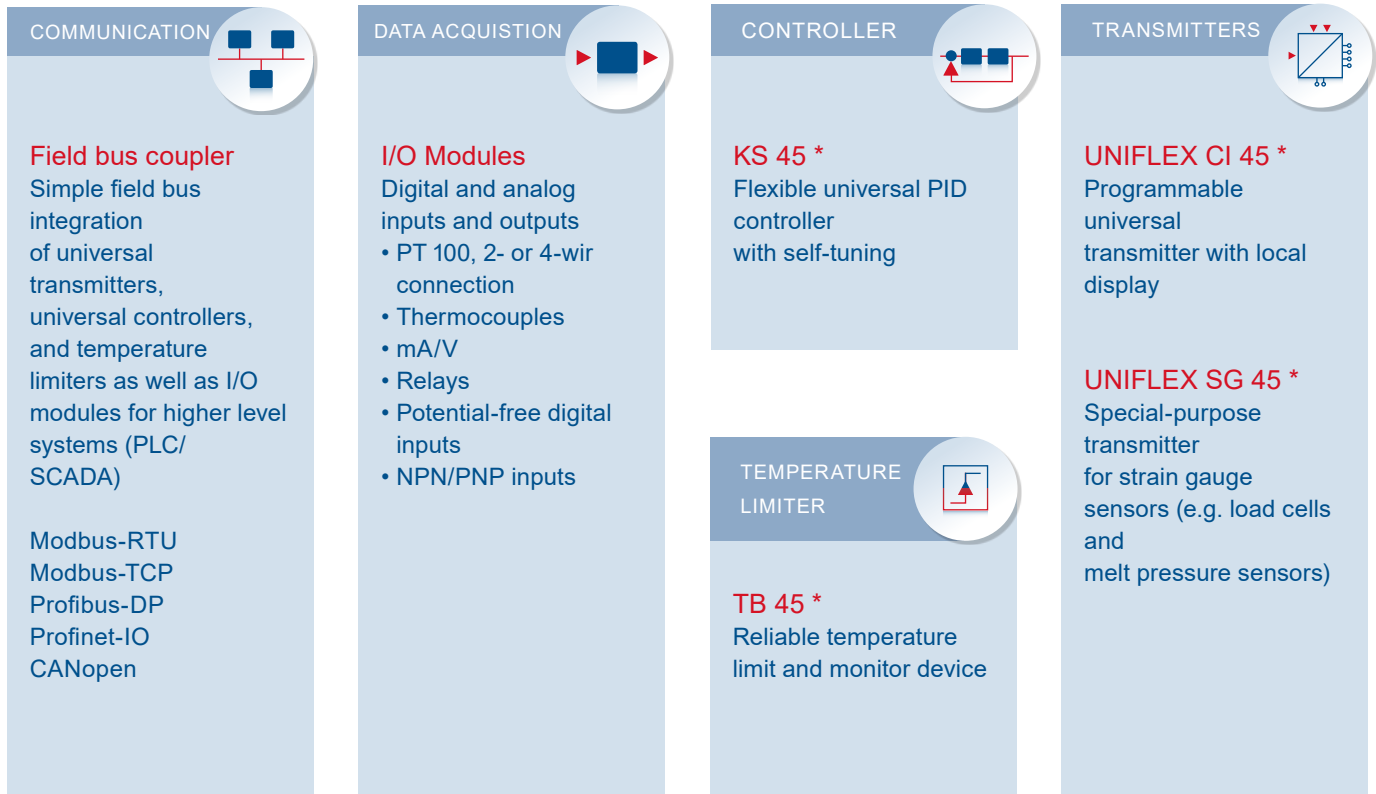
Rail Line modules monitor temperatures, pressures, humidity, weight, oxygen levels and flow rates and provide process data to PLC or SCADA systems.

Additionally Rail Line Systems can independently control and supervise essential process variables throughout the plant. Due to the HotSwap capability RailLine modules can even be replaced with no production down-time in many cases.

### Benefits and Features:

- Compact DIN rail modules, 22.5mm wide
- Up to 62 modules in a system
- Field bus communication to PLC systems
- Configurable fail safe mode
- Independent function modules
- Hot swap capability
- Plug-in terminals

## Rail Line: The system at a glance



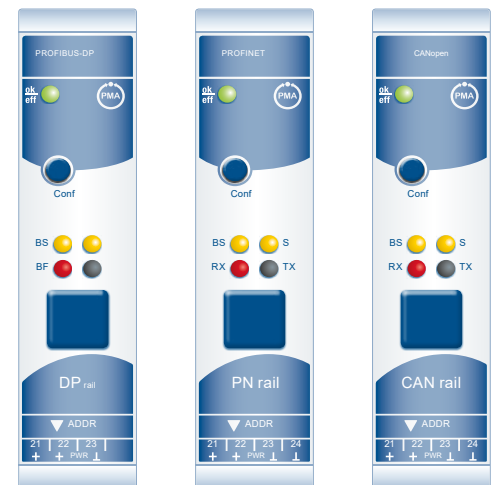
\* Function modules are also available in a stand-alone version

## Controlling, measuring, converting, and monitoring: The Rail Line product family

### Communication

#### Field bus couplers

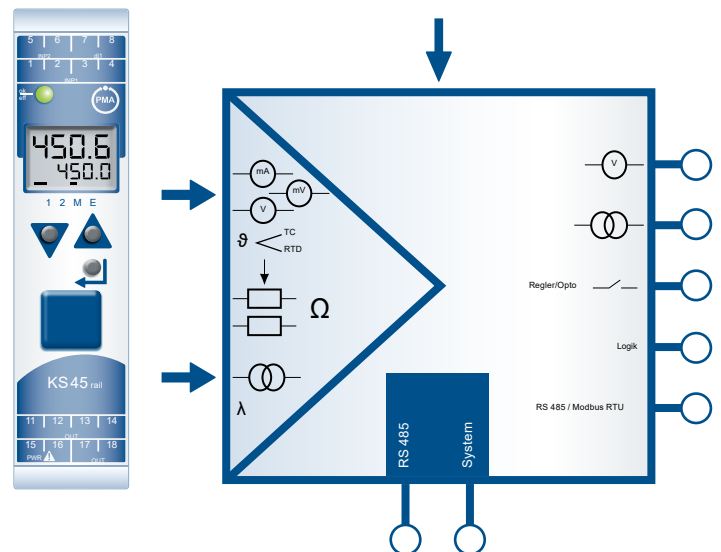
- RL PN / Profinet IO
- RL PD / Profibus DP
- RL ETH / Modbus TCP
- RL MOD / Modbus RTU
- RL CAN / CANopen



### Controller

#### KS 45

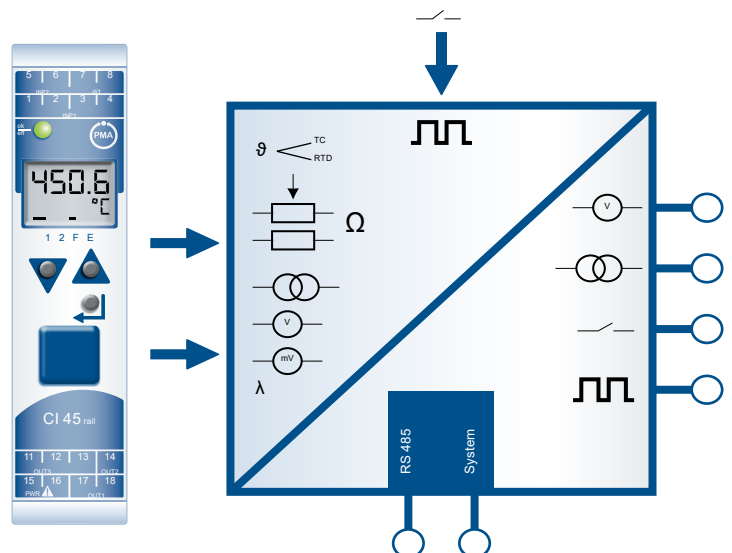
- Local configuration and status display
- Universal inputs for thermocouple, PT100, mV, V, mA
- Universal output
- Heat / Cool, continuous and VMD control strategies
- Fast sampling rate
- Customized linearisation for non-standard sensors
- Timer and programmer
- Auto/manual switchover
- Available as stand-alone unit with RS485 Modbus communication or system component with inter-system communication interface



### Transmitter

#### CI 45

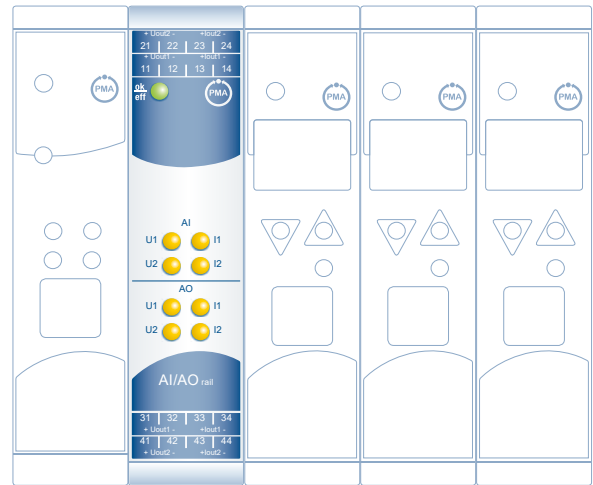
- Local configuration and status display
- Universal inputs for thermocouple, PT100, mV, V, mA
- Optional counter/frequency input
- Universal output
- Two relay outputs
- High resolution, Fast sampling rate
- Customized linearisation for non-standard sensors
- User calibration
- Slave pointer (min/max indicator)
- Available as stand-alone unit with RS485 Modbus communication or system component with inter-system communication interface



## I/O Modules

### RL 400

- LED indicators for status
- Digital and analog input & output modules
  - Pt 100 in 2 or 4-wire connection
  - Thermocouples
  - mA/V
  - Relays
  - Potential-free digital inputs
  - NPN/PNP inputs
- High precision analogue measurements
- 16bit A/D conversion
- Signal preprocessing in the module
- User calibration
- Galvanic isolation up to 300 V

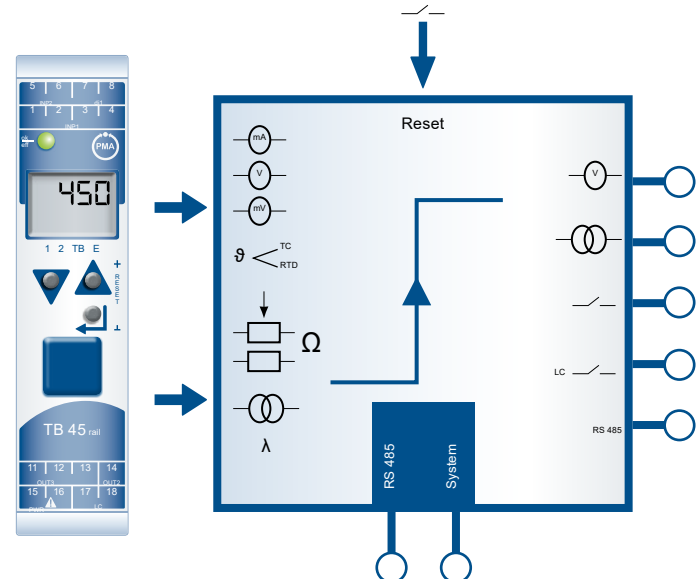


## Temperature Limiter

### TB 45

- Local configuration and status display
- Inputs for thermocouple and PT100
- Relay outputs for limit and early warning
- Retransmission output
- Alarm Reset via key or external contact
- Available as stand-alone unit with RS485 Modbus communication or system component with inter-system communication interface

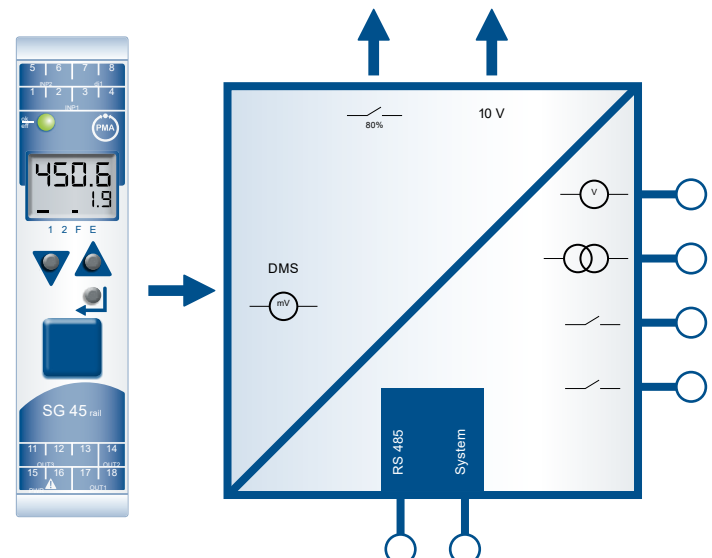
- Type-tested to EN 14597 (TB, TW)



## Transmitter for strain gauge sensors

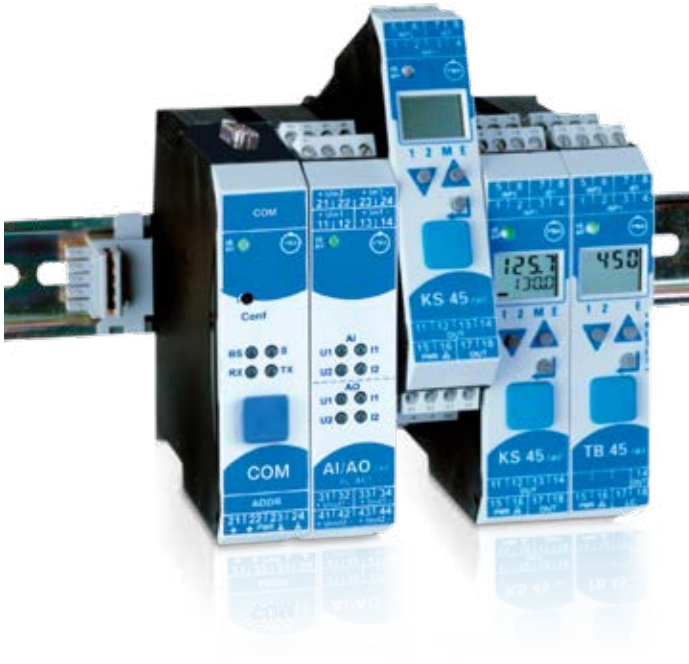
### SG 45

- Local configuration and status display
- 24bit Input for strain gauge bridges including voltage supply for the bridge
- 4 or 6-wire connection for sensors
- 2 Relay outputs
- Simple scaling during commissioning
- Available as stand-alone unit with RS485 Modbus communication or system component with inter-system communication interface

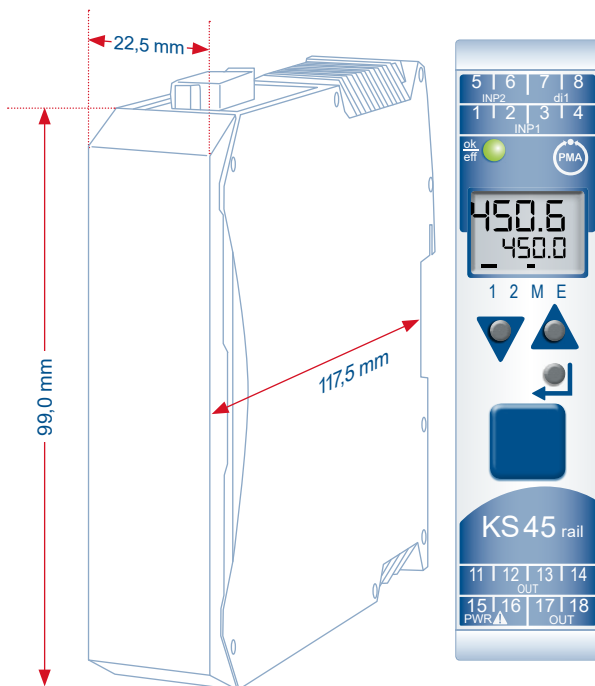


## Compact, multi-functional and flexible

### System features



- Inter-module connections without wiring
- Space-saving rail mounting
- Communication via field bus coupler
- Hot swap capable
- Plug in screw terminals or spring-clamp connectors



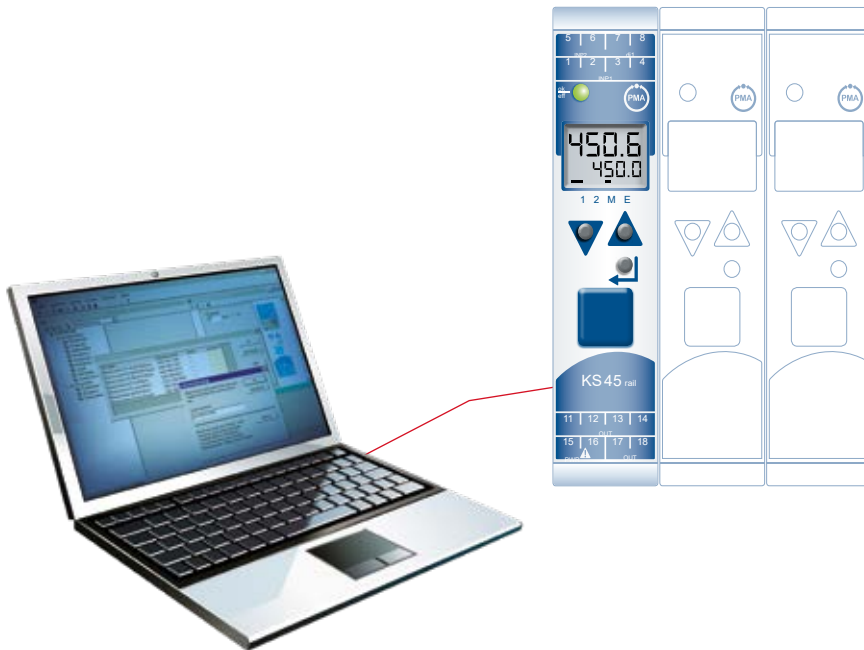
### Highlights

- Field bus coupler for Profibus, CAN, Modbus TCP, Modbus RTU, Profinet – ensures cost-effective and convenient connections to PLCs, IPC, and operating terminals
- Configurable output states in case of communication failure
- Compact design – modules only 22,5 mm wide
- Local operation with 3-keys and multi-line LC display
- Plug-in terminals – no wiring to disconnect in case of module replacement
- Module replacement during operation (hot swap)
- BluePort® front port interface for easy PC aided configuration
- PC configuration tool BlueControl®
- Cost advantages during projecting, commissioning and maintenance



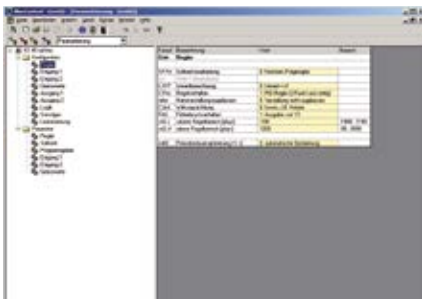
## BlueControl® :Engineering Tool

On-site commissioning, and remote configuration

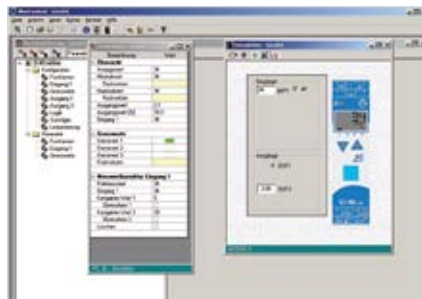


- Powerful tool for setting parameters, simulation, commissioning, and diagnosing
- Fast configuration and commissioning of the system via the BluePort® front interface on the field bus coupler
- Reliable copying of device parameters
- Settings are tested with the built-in device and process simulation
- Archiving and documentation

### Configuration



### Device simulation



### Trend recording



## Contact



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