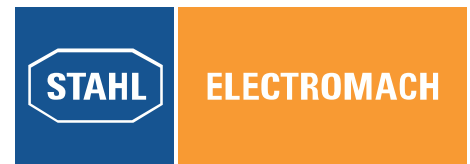


System Solutions Remote I/O



System Solutions with Remote I/O in Zone 1 and Zone 2

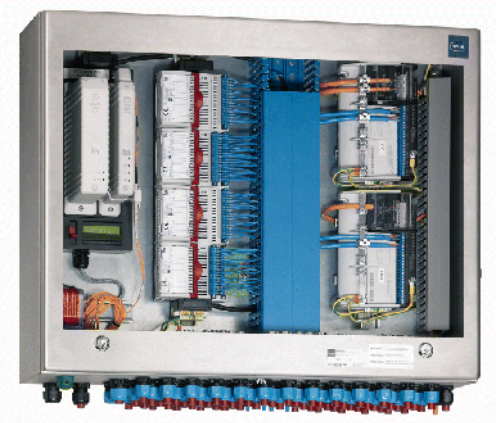
IS1 by R. STAHL is the most commonly used Remote I/O system in Zone 1 and Division 1. IS1 systems are also used in the most systems of process automation in applications of Zone 2 or Division 2.

Its simple structure, unique flexibility and excellent economics has made it years ago to the world market leader.



Example 1: IS1 Ethernet for Zone 1

- Worldwide first Remote I/O for Zone 1 with 100 MBIT/s Industrial Ethernet connection
- Support of the Ethernet protocols most popular currently in the process automation: Modbus TCP and **NEW**: EtherNet/IP (certified)
- Platform for the upcoming Ethernet protocols: PROFINET and FF HSE (both available from the end of 2011)
- Redundant Ethernet connection available (200 ms response time)
- Communication over explosion-protected optical fibre connection; type of protection "ex op is" acc. to IEC/EN 60079-28
- Extensive diagnosis functions using DTM and web server



Example 2: IS1 Profibus DP for Zone 2

- Support of PROFIBUS DP V1 HART as well as Modbus RTU
- Intrinsically-safe communication with Zone 1 installations via RS485-IS
- Copper cables or fibre optics can be used
- **NEW**: Design of fully redundant systems according to Profibus standard (slave redundancy); can also be used for most other systems with Flying Master Redundancy concept
- As an alternative it is also possible to use media redundancy independent from the control system and optical fibre ring
- Configuration, diagnosis and HART transmission via separate ServiceBus or high-performance device and gateway DTM
- Solutions for SIL2 applications via PROFIsafe available



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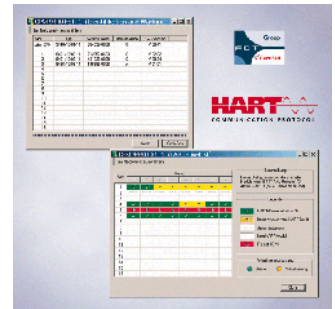
Leveringen geschieden

overeenkomstig onze voorwaarden.

Deliveries subject to our general
conditions of sale.

Certified Device DTM for IS1 Systems

- Support of all IS1 communication protocols: PROFIBUS DP, Modbus RTU, Modbus TCP and Ethernet/IP
- Full access to all module and station parameters and diagnosis data
- Integrated HART Gateway DTM for connection of HART field devices (up to version 7) in Asset Management systems
- Condition monitoring for automatic online diagnosis of HART field devices in the background
- Extensive "Information & Maintenance" functions for reading out and recording of serial numbers, versions, device data, etc.
- Convenient automatic functions, such as "HART Live List" display (also without control system) or automatic network topology design (if supported by the frame)



NEW: Digital Output Module with Integrated Solenoid Valves, Series 9478

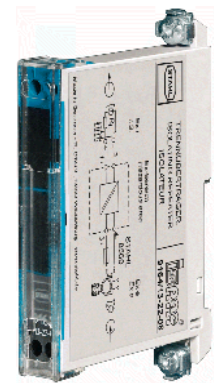
- Installation in Zone 1, Zone 2 or in the safe area
- 8 integrated 3/2-way valves for pneumatic valves
- Pressure range from 2.5 to 7 bar
- The internal 3/2-way valves are activated electronically, their activation is monitored even if a pilot valve is depressurized.
- Up to approx. 1,000 switching cycles per minute (cpm) can be achieved.
- On value at 20 °C air temperature, 6 bar at the valve inlet and 1 bar of differential pressure: 300 l/min. - compact design, can be combined with all IS1 modules
- The safety position for communication errors can be configured freely: "On", "Off" or holding the last valid state
- Additional Ex i input for "System OFF" complies with SIL2 requirements
- All functions can be adjusted freely (e.g. using Profibus master and/or DTM)
- Live module can be replaced (hot swap)



DOMV-Modul Type 9478

NEW: Converter Ex e/Ex i With Electronic Output for Ex d/Ex m Solenoid Valves

- Wear-free switching by means of electronic relays
- Application: Connection and operation of non-intrinsically safe solenoid valves (Ex d or Ex m) in Zone 1 at an intrinsically safe digital output module Series 9475 of IS1 system using Ex e/Ex i converter
- Switching capacity up to 250 V AC / 1 A
- Very compact design, 12 mm wide
- Installation in Zone 1



converter Ex e / Ex i
Type 9174

For further information on the product go to www.stahl.de. Enter the WebCode:

WebCode 9478A

