



THE STRONGEST LINK.

STAHL

AUTOMATION SOLUTIONS

For Class I Division 1 Hazardous Locations



PURGED AND PRESSURIZED HMI SYSTEMS

The operator stations from R. STAHL with device platform MANTA are geared towards the requirements of the pharmaceutical, chemical and life science industries.

R. STAHL integrates the right technology for every application – all MANTA devices are available as:

- Thin Client for modern networks with virtual workstation up to automation in the cloud.
- KVM system for point-to-point solutions.
- Complete PC solution.

Depending on the variant the MANTAs are suitable for hazardous areas of Class I Division 1 using Y purge. They are cleanroom-suitable, can display complex processes in brilliant image quality on 24" widescreens and have intrinsic safe glass touchscreens. For an extensive DCS operation, the MANTA operator station can be equipped with keyboards and various pointing devices, such as trackball, touch pad or joystick.



HIGHLIGHTS AT A GLANCE:

- Operator Station, 24" display
- Full HD 1920 x 1080 resolution
- Class I Div 1 certified
- Stainless steel enclosure NEMA 4X, acc. to GMP
- Optional resistive glass or foil touch screen
- Data is transmitted via Ethernet as 10/100Base-TX via CAT7 up to 100 m

SECURE – SIMPLE – RELIABLE

Our Thin Clients are equipped with our Remote HMI firmware. We have developed this "industrial grade" software and OS especially for the process industry. It has been designed as a closed system and is based on the Windows 10 IoT Enterprise LTSC operating system as opposed to a Linux-based system. The firmware is highly secure, easy to use and reliable. Based on Windows 10, the OS is intuitive to use by all levels of operators.





THE MOST FLEXIBLE SOLUTION FOR DIGITALIZATION

For more than 30 years, explosion-protected remote I/O systems from R. STAHL have been installed in hazardous locations all over the world. Applications include harsh field installations like the O&G offshore platforms or the LNG carriers to complex field installations in pharmaceutical or chemical industries.

With intrinsic safety integrated into the IO modules, the IS1+ can also be installed in control rooms, reducing floor-space & power consumption, in comparison to legacy concepts. Due to IS1+'s intrinsically safe system design, all modules and I.S. field circuits can be hot-swapped during operation even in explosive atmospheres.

The IS1+ Remote I/O is a state-of-the-art and cost-efficient digitalization platform for applications in hazardous locations.

We would be happy to assist you in configuring IS1+ solution, as per your requirement.



HIGHLIGHTS IS1+ AT A GLANCE:

- For installation in Class I Division 1, IS1+ components can be mounted in a NEMA 4X enclosure without purge.
- 100 Mbit/s Ethernet communication with EtherNet/IP, Modbus TCP and PROFINET protocols allows integration to major control systems.
- Easy integration into any plant asset management system with full HART 7 support and FDT/DTM.
- Customized field station design and engineering support by R. STAHL.

CASE STUDY

IS1+ remote I/O is used in many applications all over the world. From control room installations, over field stations in chemical or pharmaceutical plants up to assemblies for the harshest environments on oil&gas offshore platforms or onboard LNG carriers.

This example shows the application in a Class I Division 1 environment in a paint shop. Communication is to Allen Bradley PLC via EtherNet/IP. Besides the I.S. signals, also pneumatic I/O is covered by the IS1+ 8 channel solenoid valve modules.



MORE R. STAHL AUTOMATION PRODUCTS FOR CLASSIFIED AREAS

HMIs FOR DIVISION 2



- Operator Stations and Panel Mount HMIs for Class I, II Division 2 and Class I Zone 1 and 2.
- HMI platform for various environments.
- Harsh environments, e.g. oil & gas, chemical and pharmaceutical plants.
- Panel mount products for machines.
- Large global certified portfolio.

REMOTE I/O DIVISION 2



- Multiprotocol CPU: EtherNet/IP, Modbus TCP, PROFINET and PROFIBUS DP, adjustable by selector switch.
- For all field devices, intrinsically safe, non-intrinsically safe and pneumatics.
- Certified for NEC, CEC, ATEX, IECEx and more.

I.S. BARRIERS



Zener barriers – INTRINSPAK

- Wide portfolio.
- Protection by replaceable fuse.

Isolated barriers – ISpac

- Space saving: 2 channels on just 0,49" or 0,69" footprint.
- Time saving installation with pac-Bus or backplane solution.
- Functional safety SIL2/SIL3

CAMERA/CCTV SYSTEMS



- Analog and IP protocols available.
- ONVIF protocol.
- Class I Division 2; Zone 1 rated.
- NEC/CEC/ATEX/IECEx and more global certifications.
- Extreme temperature range.

NETWORK SOLUTIONS



Media converter / switches

- Fibre optic interface for use in Class I, II, III, Division 1.
- Installation in Class I, II, Division 2.
- Temperature range (-22 °F ... 158 °F).

Wireless/WiFi solutions

- Your preferred WiFi access point as a Class I, II, Division 1 solution.
- Full range of antennas.

ALARM AND SIGNALING



- Smallest CI Div 1 combination horn/strobe on the market.
- Lowest energy consumption on the market.
- 110 dB.
- 32 selectable tones.
- 2-stage alarm standard.
- Panel mount available.
- Most units in stock.



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