Operating and Monitoring Systems

Pls contact Stahl@unitconcept.com for more details and pricing

Operating and Monitoring Systems

HMI products and solutions of the EXICOM series have been designed for worldwide operation in hazardous areas, rough ambient conditions, cleanrooms and onboard ships. Be it in the form of a 7" Operator Panel or a 24" widescreen terminal, we offer safe high-tech in all shapes and sizes: KVM systems, Thin Clients, Panel PCs, Operator Interfaces and peripherals.

The KVM Systems and Thin Clients are ideal for all major distributed control systems: their simple yet safe way of establishing a connection takes into account international norms, and they easily meet the standards required by FDA, GMP and GAMP.

The powerful Panel PCs operate either stand-alone or as part of client-server solutions, the Operator Interfaces with their integrated visualisation software can communicate directly with automation systems. The peripherals can be used with PCs in the safe area and as accessories with other HMI series in hazardous areas.

And of course we also provide our HMI systems as individual, customized solutions.

- HMI products with worldwide certifications for hazardous zones and divisions, constant updates to meet international norms and directives.
- Various device platforms with all relevant communication technologies to suit the many different intended purposes and ambient conditions.
- Largest portfolio of explosion-protected HMIs - ranging from a 7-inch Operator Panel to a 24-inch WU Operator Station.

KVM Systems - SERIES 600

KVM systems extend the keyboard, video and mouse interfaces of a workstation from the safe area to the industrial hazardous area. R. STAHL provides the HMI MANTA platform for the pharmaceutical, life-science and fine chemical industries, and the HMI SHARK platform for rough ambient conditions and the oil and gas industry. Our KVM DVI3 transmission unit supports all distributed control systems.

In HMI technology, KVM systems are ideal for operating a workstation from an on-site operator station. The KVM terminal communicates directly with the PC in the safe area via the KVM box. The KVM systems of the MANTA platform have been developed specially for the process industry and meet the universal and hygienic requirements for GMP areas. SHARK devices, available with screen sizes 15" and 21.5", have been designed for rough ambient conditions, are temperature-resistant (-40 °C to +65 °C) and weather-proof and can withstand the most adverse conditions.

- KVM systems for the extension of digital video signals to up to 10 km with fibre optic and up to 150 m with CAT7
- Future-proof HMI: update possibilities for future hardware platforms
- Simple and safe connection to DVI or VGA and USB (plug-and-play)

Thin Clients – Series 500

R. STAHL's Thin Clients are HMI products for the remote control of PCs or virtual workstations, for example via Ethernet and WLAN. The MANTA platform was developed for the pharmaceutical, life-science and fine chemical industries, and the EAGLE platform for machine operation and logistics. The SHARK platform is particularly suitable for rough ambient conditions and the oil and gas industry.

R. STAHL's Thin Clients are the most modern type of process visualisation in virtual networks. Each Thin Client, via IP addressing, provides flexible access to process automation, MES, ERP and other functions, providing a wide range of information on site. Software installation, upgrades and administration are carried out centrally and thus cost-effectively - they can easily be carried out during ongoing operations. Data communication uses Ethernet or WLAN via various protocols such as RDP and VNC. Our innovative REMOTE HMI FIRMWARE has been developed for process automation. It acts as an extra safeguard for data communication, supports redundancy concepts, simplifies administration and contains powerful diagnostic functions.

- Flexible access from one operator station to one or more virtual or real workstations in a network
- Uncomplicated commissioning of Thin Clients due to driverless "plug-and-play" on the host system
- Maximum security and easy parameterisation with our proprietary REMOTE HMI FIRMWARE

Panel PCs – Series 400

R. STAHL's Panel PCs - an industrial computer and monitor in one device for operation in hazardous and safe areas, tailored to meet the requirements of various industries. The EAGLE series was designed for universal application and machine building, the SHARK series for the oil and gas industry and for extreme ambient conditions, and the MANTA series is ideal for the pharmaceutical, chemical and life-science industries.

R. STAHL provides state-of-the-art PC technology in fanless, modular and industrial design Because these HMI systems consist of carefully selected components, they fulfil the highest requirements - permanent functionality in temperatures ranging from -40 °C to +65 °C, shock, vibration and seawater-proof, sunlight readable displays, multi-touch screen,

GMP-compliant fronts and operator stations, state-of-the-art dual and quad core processors, Dual Ethernet and many more. These systems can be stand-alone or installed as part of a client-server system. They communicate with automation systems and distributed control systems via Ethernet, WLAN or serial interfaces, and have additional interfaces for peripherals such as keyboards, pointing devices, RFID readers, barcode readers for material inventory or EM-STOP switches.

- Robust Panel PCs hazardous areas zone 1, 21, 2, 22 and Division 2, as well as for safe areas
- Modern dual and quad core processors up to Core i7
- Comfortable HMIs with modular panel mount devices and operator stations for flexible configuration

Operator Interfaces – Series 200/Series 300

R. STAHL's Operator Interfaces or Operator Panels are HMI devices with integrated software for visualising and operating machinery and for logistics and tankfarm automation. The EAGLE platform devices can be universally used and in machine operation, the

RAPTOR platform devices are suitable for extreme ambient conditions, such as in the oil and gas industries or in the pharmaceutical, chemical and life science industries.

Because R. STAHL's Operator Interfaces with EAGLE and RAPTOR device platforms consist of carefully selected and validated components and make use of state-of-the-art technology, they fulfil the highest requirements - permanent functionality in temperatures ranging from -40 ℃ to +65 ℃, shock, vibration and seawater-proof, and, of course, explosion-protected. We provide these compact HMI systems with GMP-compliant fronts and operator stations, as well as with various displays ranging from 7" widescreen to 15" XGA. Serial interfaces and TCP/IP Ethernet interfaces are provided to connect all major automation devices. Thus, an ideal solution is provided for all applications.

- Robust Operator Interfaces for hazardous zones 1, 2, 21 and 22 and Division 2.
- HMI-SERIES 200 and 300: visualisation systems under Windows Embedded Compact 7, MOVICON 11 CE or SPSPlus RT
- Modular panel mount devices and operator stations for flexible configuration

Peripheral Devices Barcode & RFID Readers/Scanners

R. STAHL's barcode scanners and RFID readers capture data in hazardous areas and transmit these to explosion-protected HMIs or PCs and automation equipment in safe areas. The barcode scanners are robust industrial hand-held scanners for accurate data capture; the RFID readers can be used as panel-mount devices for access control.

In hazardous areas barcodes have become the standard method of registering material and its uses, as well as recording access to operating stations. For both applications R. STAHL provides professional solutions which can also be operated separately from our Human Machine Interfaces (HMIs). The IDM barcode readers are available as a fixed-cable version and as a Bluetooth scanner for 1D and 2D barcodes. Our RFID readers for access control to HMIs, machinery and premises use the Mifare protocol. The corresponding chips with individual access data are available in the form of cards or key fobs.

- Barcode scanners and RFID readers for installation in hazardous zones 1, 2, 21 and 22.
- Robust, industrial HMI devices for connection to EXICOM operating devices, PCs or automation devices.
- Comfortable and safe material inventory, access control, etc