



PROCESS AUTOMATION

VISUNET SOLUTIONS

RUGGED HMI FOR THE OIL & GAS INDUSTRIES

Automation is our world. Perfect application solutions are our goal.

A willingness to take entrepreneurial risks, a pioneering spirit, and a firm belief in their own inventive powers – these were the assets that Walter Pepperl and Ludwig Fuchs started out with when they opened their Mannheim radio repair shop in 1945. Their invention of the proximity switch a few years later proved their strength. It was also the starting point in a successful history defined by close customer relationships as well as innovative automation technologies and procedures.

Then as now, our focus is squarely on the individual requirements of each customer. Whether as a pioneer in electrical explosion protection, or as a leading innovator of highly efficient sensors – the intensive communication with our customers is what allowed us to become the leader in automation technology. Our main objective is combining state-of-the-art technologies and comprehensive services to optimize our customers' processes and applications.

For more information, please visit our website: www.pepperl-fuchs.com



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VisuNet – insightful solutions

It takes more than a drill bit to drill a well; it takes knowledge, experience, and the right equipment. Our technologies are driven by real process demands, and our experience in the energy sector is unmatched. VisuNet HMI workstations and displays are safe, reliable, and meet the demanding operational needs along the entire energy supply chain.

Demanding environments require innovative visualization solutions

Every VisuNet HMI solution is built upon our commitment to innovation and process safety. We are more than just a vendor, we are partners in your process.

Changing your mind about what is possible

When it comes to industrial HMIs, quality and performance are non-negotiable! The harsh conditions encountered while exploring for fossil fuels are extremely problematic for drilling equipment as well as for control and monitoring equipment. Visualization systems are subject to moisture and extreme temperatures.

Reliable performance

Driller controls and displays must be able to withstand huge temperature swings, variable humidity, and vibrations. Rig monitors are in constant contact with processing chemicals and drilling mud and need to stand up to rig-floor operations. Our VisuNet solutions were developed for precisely this kind of extreme environment: built to perform reliably under the abysmal conditions aboard open sea and land drilling rigs or the scorching sun of a fuel storage tank farm.







Dependable connectivity between the control room and the doghouse or custody transfer station

Process systems on oil rigs are islands of automation. These individual automation solutions may be provided by a single original equipment manufacturer, or more often, by multiple OEM suppliers with expertise in that particular piece of equipment. The information from these systems is monitored from a drillers console, from the drilling platform with a remote rugged workstation, or remotely in another part of the world. Rugged, safe, and reliable, VisuNet designs are optimized for displaying real-time continuous logging information locally or remotely.

Solution Engineering Center

Off-the-shelf products do not always meet the exact requirements for every application. We offer a variety of configurable options and features to create the exact panel or pedestal mounted solution for your application. Don't see the exact options that you require? VisuNet-engineered HMI solutions are a simple way to get the exact HMI you need. Pepperl+Fuchs can engineer a solution that fits your application and budget. Our standards for quality, craftsmanship, and value, along with our hazardous location expertise, make Pepperl+Fuchs the right choice for your next industrial HMI.



VisuNet offers products for every stage of the supply chain – upstream, midstream, downstream.

UPSTREAM APPLICATIONS

- Mud logging
- Sludge suppression
- Top drive control
- Leakage detection
- Separator systems
- Compressor controls
- Condition monitoring
- Chromatograph readout
- Blowout prevention
- Safety systems
- Mud shakers
- Choke control
- Christmas tree
(Wellhead, three-phase separation)
- Wellhead production

MIDSTREAM PRODUCTION

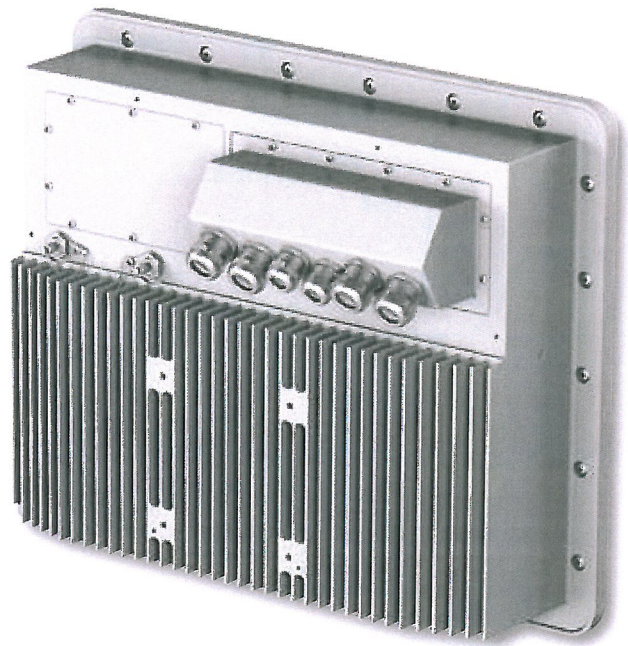
- Compressor and pumping stations
- Tank and terminal storage
- Gas plants/fractionation plants
- LNG production
- Bitumen production

DOWNSTREAM

- Refining
- Petrochemical production
- LNG gasification
- Tank and terminal storage

VisuNet products – addressing the

The VisuNet product portfolio contains a highly focused series of modular HMI displays and workstations for monitoring and controlling processes under harsh industrial conditions. Whether you need a panel PC, flat panel display, or remote network monitor, VisuNet HMI solutions deliver reliability. Each VisuNet solution is engineered to meet your toughest demands while still being flexible enough to easily network to SCADA systems and PLC hardware, or network as part of a larger virtualization (client-server) architecture.



VisuNet XT

VisuNet XT is a completely enclosed HMI that outperforms the abysmal conditions aboard open sea and land drilling rigs. A virtually indestructible display for monitoring and control, it's suitable for the rig floor or anywhere an extremely rugged panel PC is required. VisuNet XT is a Zone 2/Div.2 operator workstation with an Intel® i7 quad Core™ processor. Its 15" (38.1 cm) or 19" (48.3 cm) high-bright, LED backlit LCD panel provides high performance with a glove-friendly touchscreen.

- Portable and field maintainable
- Passive liquid cooling dissipates heat without a cooling fan
- Optically bonded LCD offers clear resolution under any light conditions
- Operating temp: -40 °C to +65 °C
- Sunlight readable display

needs of your industry



VisuNet EX1

VisuNet EX1 is well-suited to harsh industrial conditions experienced in the petrochemical or oil & gas industry. EX1 is specifically designed for operation in Zone 1 and 21 (ATEX and IECEx) hazardous areas. It is an extremely versatile 304 stainless steel/IP66 workstation or panel mount solution that meets the rigorous requirements in the field or on the rig.

- Rugged and chemically resistant housing
- Flexible mounting options
- Easily customized to fit your application
- Operating temp: -20 °C to +50 °C
- 15" (38.1 cm) or 19" (48.3 cm) flat panel display

VisuNet – the products

VisuNet IND

The low-profile slimline housing is ideal for a driller's console. The unit is completely sealed and fanless. Low power consumption allows the unit to conserve energy and dissipate very little heat when idling. Components are shock and vibration resistant and suitable for 24/7 operation:

- ATEX Zone 2 and Class I, Div.2
- Available in 15" (38.1 cm), 19" (48.3 cm) and 22" (55.8 cm) widescreen
- Extended temperature range: -20 °C to +50 °C





VisuNet Panel Mount Displays

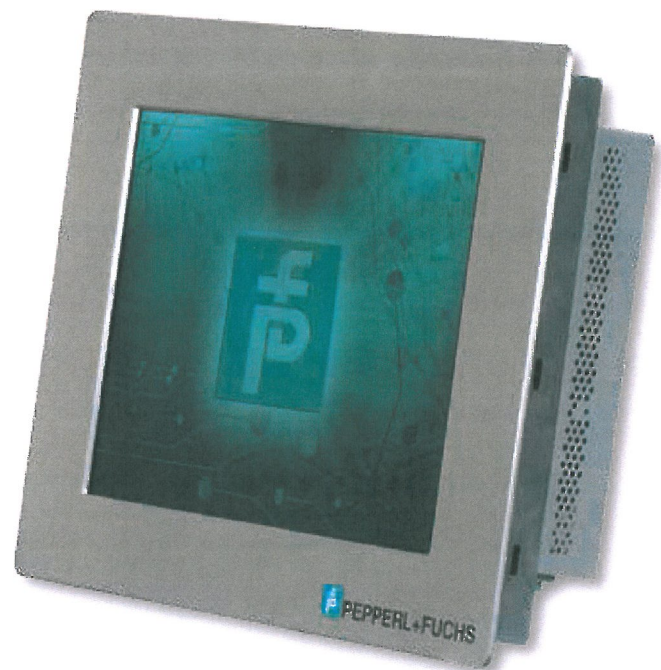
VisuNet panel mount displays are designed for high availability and longevity under harsh indoor/outdoor conditions. Each industrial-grade display is manufactured for 24/7 operation. The shock-absorbing gasket makes monitors resilient to mechanical abuse.

- Available in 10" (26.4 cm) to 22" (55.8 cm) widescreen displays
- Globally certified for Class I, II/Div.2 and ATEX/IECEx Zone 2
- Extended temperature range -20 °C to +50 °C

VisuNet Panel Mount Solutions

Each VisuNet panel mount solution is manufactured for extreme environments, and the shock-absorbing, gasket-panel PC is resilient to mechanical stress. The unit features an Intel® Core™ 2 or ATOM™ processor and is fanless for added reliability. Low power consumption allows the unit to conserve energy and dissipate very little heat when idling.

- Available in 15" (38.1 cm), 19" (48.3 cm), and 22" (55.8 cm) widescreen
- Class I, II/Div.2 and ATEX/IECEx Zone 2
- ATEX and IECEx Zone 1/21
- Extended temperature range: -20 °C to +50 °C



From the polar ice caps to the equator, performance for extreme demands





From the blistering heat and humidity of the rain forest and the subzero temperatures of an Alaskan oil field, to the dirt, grime, and grit of a mud shaker on a drilling site, the conditions you encounter couldn't be more adverse. Reliable technology and a trusted partner are the keys to success.

Made for your extreme challenges

Rugged HMIs have replaced many hydraulic gauges, recorders, and counters used for drilling wells. Visualization provides greater detail compared to hydraulic gauges. It's been instrumental in improving the efficiency of the drilling operation and in proliferating drill-by-wire. From direct data acquisition to remote monitoring on the drilling floor, VisuNet HMI solutions deliver in the field and in the doghouse.

Globally certified designs for use around the globe

Downtime is costly! Severe mechanical stress is the norm for oil and gas facilities. Displays and workstations have to compensate for strong vibrations, and EMI need to meet MIL specs for shock and vibration. From the design of the lightweight, sleek enclosures, to state-of-the-art heat dissipation, every VisuNet system is designed to address the hazardous location visualization needs of the energy exploration, extraction, and refining industries.

Staying in touch. The world over.

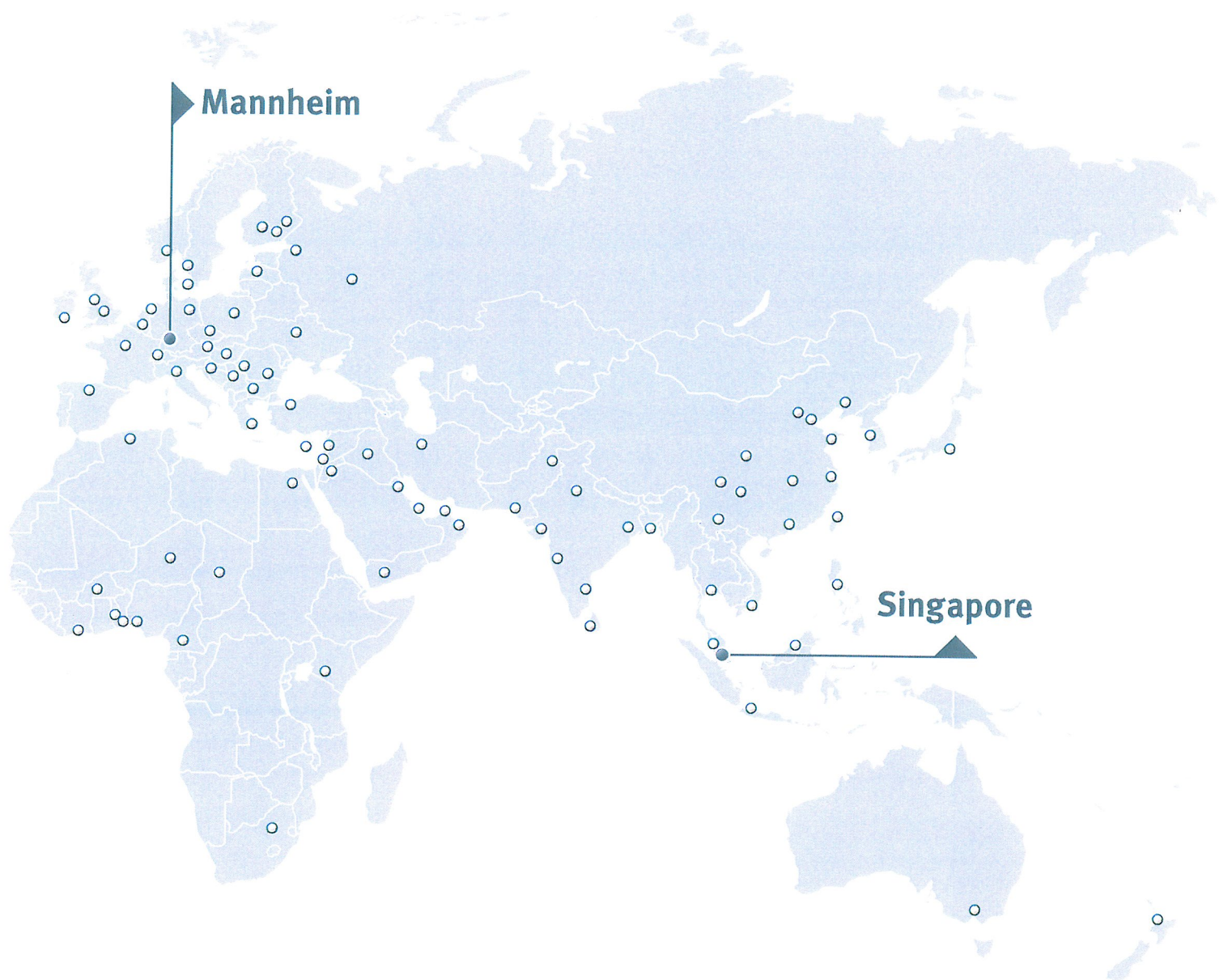
Good customer relationships need care and attention. They are an indication of genuine interest, trust, and a cooperative spirit: the foundation of Pepperl+Fuchs' strengths. No matter where you might be, we are always nearby. And we speak your language – in more than 140 countries the world over.



At home on all continents

Our customers are at the center of all our activities. Our worldwide network ensures that we provide them with the best possible service and support. Our world headquarters in Mannheim services Europe through a network of more than 40 affiliates. Asia is handled by our office in Singapore, with more than 1000 employees in manufacturing, service, and sales. And our North American headquarters in Twinsburg, Ohio, is responsible for a comprehensive network of offices and sales partners in the USA, Canada, Mexico, and South America.

No matter where in the world you may be, Pepperl+Fuchs is right nearby – and always there for you.



YOUR DEMAND. OUR CHALLENGE.

PROCESS INTERFACES

- Intrinsic Safety Barriers
- Signal Conditioners
- FieldConnex Fieldbus Infrastructure
- Remote I/O Systems
- HART Interface Solutions
- Level Measurement
- Purge+Pressurization Systems
- Industrial Monitors+HMI Solutions
- Explosion Protection Equipment
- Process Interface Solutions
- Wireless Solutions

INDUSTRIAL SENSORS

- Proximity Sensors
- Photoelectric Sensors
- Industrial Vision
- Ultrasonic Sensors
- Rotary Encoders
- Positioning Systems
- Inclination and Acceleration Sensors
- AS-Interface
- Identification Systems
- Logic Control Units
- Cordsets



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