

PERFORMANCE
MADE
SMARTER

Your specialist in
Signal Conditioning Solutions
and Communication Interfaces

TEMPERATURE | I.S. INTERFACES | COMMUNICATION INTERFACES | MULTIFUNCTIONAL | ISOLATION | DISPLAY

PR
electronics



The background of the entire page is a black and white photograph of an industrial facility, likely a refinery or chemical plant. It features a complex network of large, metallic pipes, some with insulation, and structural steel beams. A prominent feature is a large, circular valve wheel on a pipe. The scene is set against a cloudy sky. A semi-transparent red rectangular overlay is positioned in the center of the image, containing the main text.

We give you **PERFORMANCE MADE SMARTER**

At PR electronics, we strive to always challenge the conventions in signal conditioning to enable process engineers everywhere to communicate with, monitor and connect process measurement points to their process control systems more efficiently and cost-effectively. Our devices are built

on core technologies with a history of proven performance and future-proof abilities. They deliver everything from excellent long-term accuracy, low power consumption, high reliability in any environment and unrivalled EMC immunity. Simply install and forget with **PERFORMANCE MADE SMARTER.**

Our purpose

is to create market-leading site standard solutions with high signal integrity and simplicity for our customers, concentrating on innovation in six core business areas: Temperature, I.S. Interfaces, Communication Interfaces, Multifunctional, Isolation and Display.

Our products are individually outstanding, but when our point-to-point temperature measurement devices, I.S. interfaces, backplanes, multifunctional signal devices and future-proof communication interfaces are combined, our solutions are truly unrivalled.

We will be

our customer's trusted partner for the best and most innovative signal conditioning solutions in the process and factory automation industries.

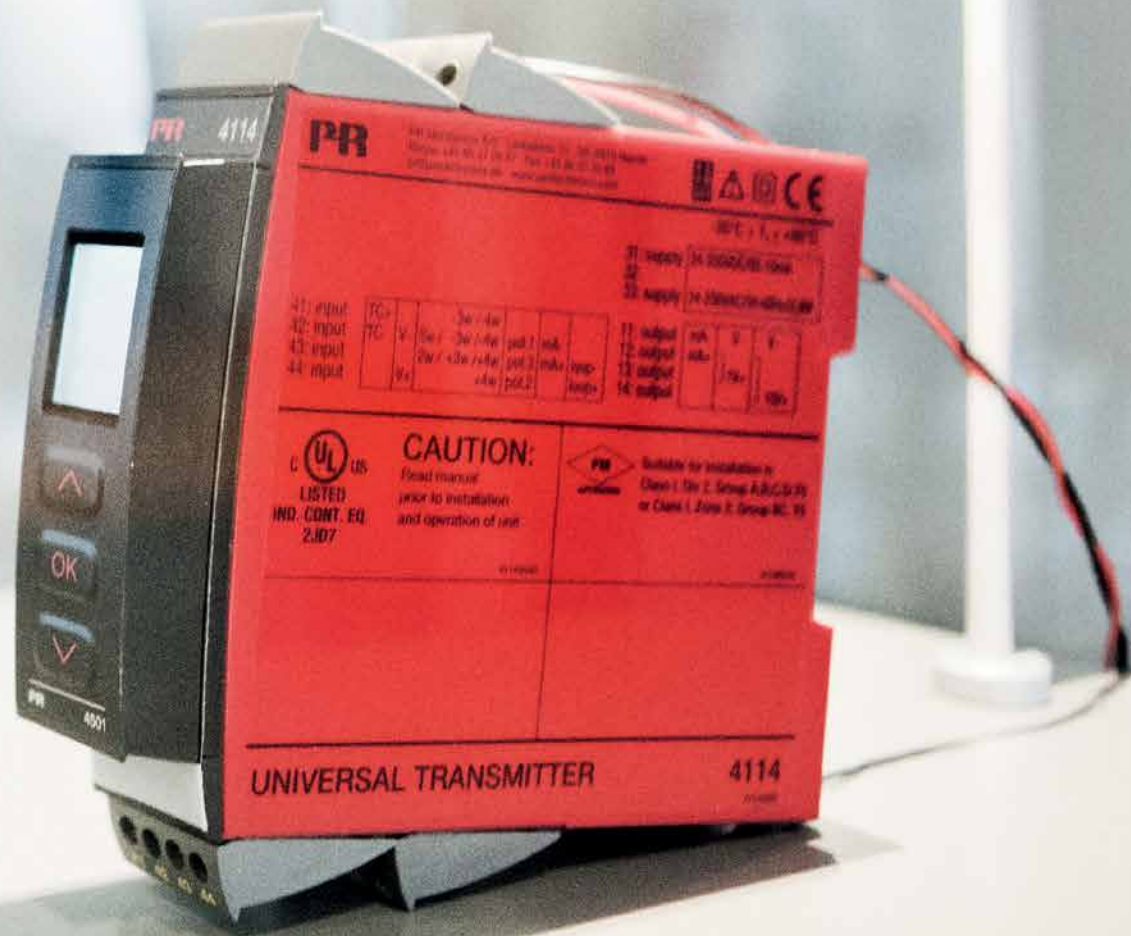


We provide

a wide range of benefits to our customers through innovative solutions and close collaboration:

- The highest signal integrity from your measurement point to control system
- Maximum uptime based on our Install and Forget® philosophy
- Easy and cost-effective deployment and monitoring with intuitive communication interfaces
- Site standard devices that are easily programmable to suit your specific application
- Day-to-day delivery

Since 1974 we have been dedicated to perfecting our core competence of innovating high precision technology with low power consumption. With a dedicated R&D center that is integrated with our lean production facility at our headquarters in Denmark, we are today one of the leading companies within signal conditioning.





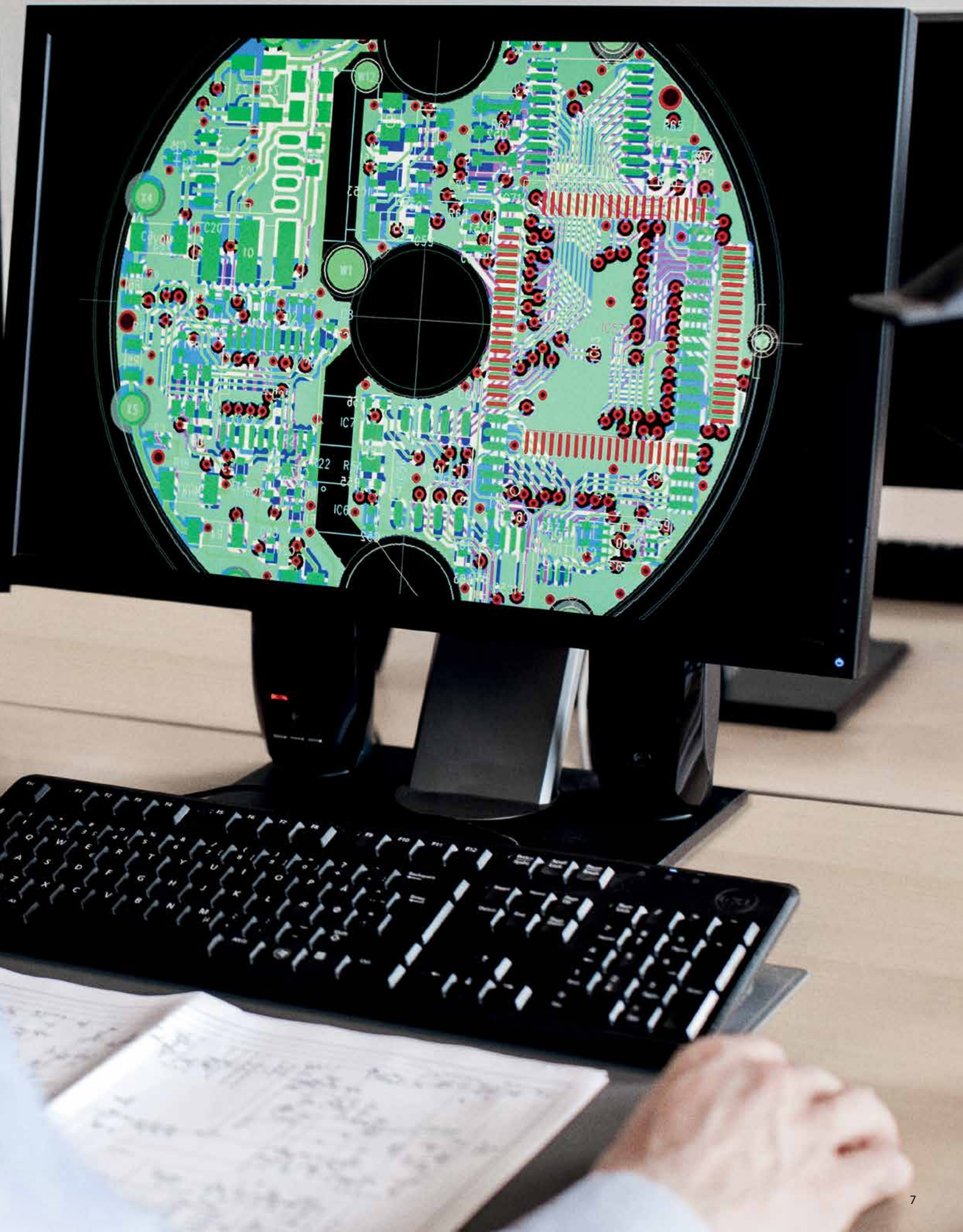
Designed and manufactured *for exceptional performance*

INNOVATION

More than 10% of our revenue is dedicated to setting new, cutting-edge standards for products within our specific field of expertise. Our dedication to signal conditioning enables us to push the envelope beyond the competition, allowing us to deliver best-in-class products, and launch numerous new products and patents every year.

PERFORMANCE

Performance starts by enabling engineers to efficiently manage their processes using easily deployable, intuitive and highly accurate devices. Even in the most extreme conditions, our proven technologies perform consistently and maximize uptime. Day in and day out.





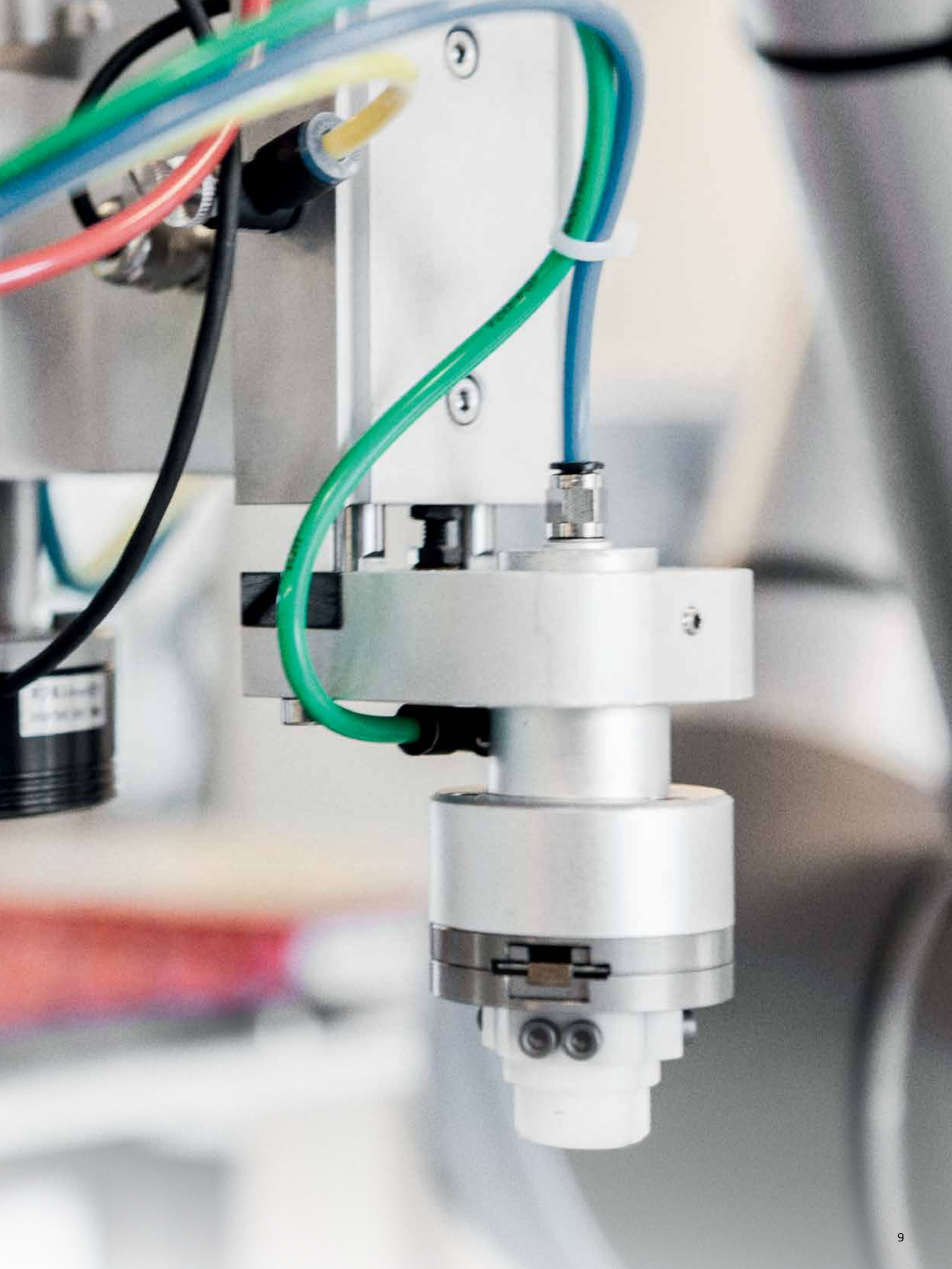
Quality is the standard, *flexibility the advantage*

QUALITY

We have been increasing our knowledge and experience in signal conditioning since 1974, which is how we can give our customers extremely high quality devices backed by thorough technical documentation and a 5-year warranty. Our Install and Forget® philosophy ensures that all our products are individually designed and validated to exceed the most demanding failure rate assessments - to deliver reliable performance validated by history and designed for the future.

FLEXIBILITY

Individually, our devices accept a wide range of inputs and provide a wide range of outputs, which means that one device can be used for many different applications. They require little training, reduce installation time and simplify spare parts management, making our devices easily deployable as your site standard. Our devices can be accessed and configured in seconds using the detachable Local Operator Interface (LOI), which eliminates the complexity of having to use a PC to configure the devices. The detachable Remote Operator Interfaces (ROI) provide all the functionalities of the LOI but adds Modbus or Bluetooth digital communications, so your control system can be easily connected to your devices.



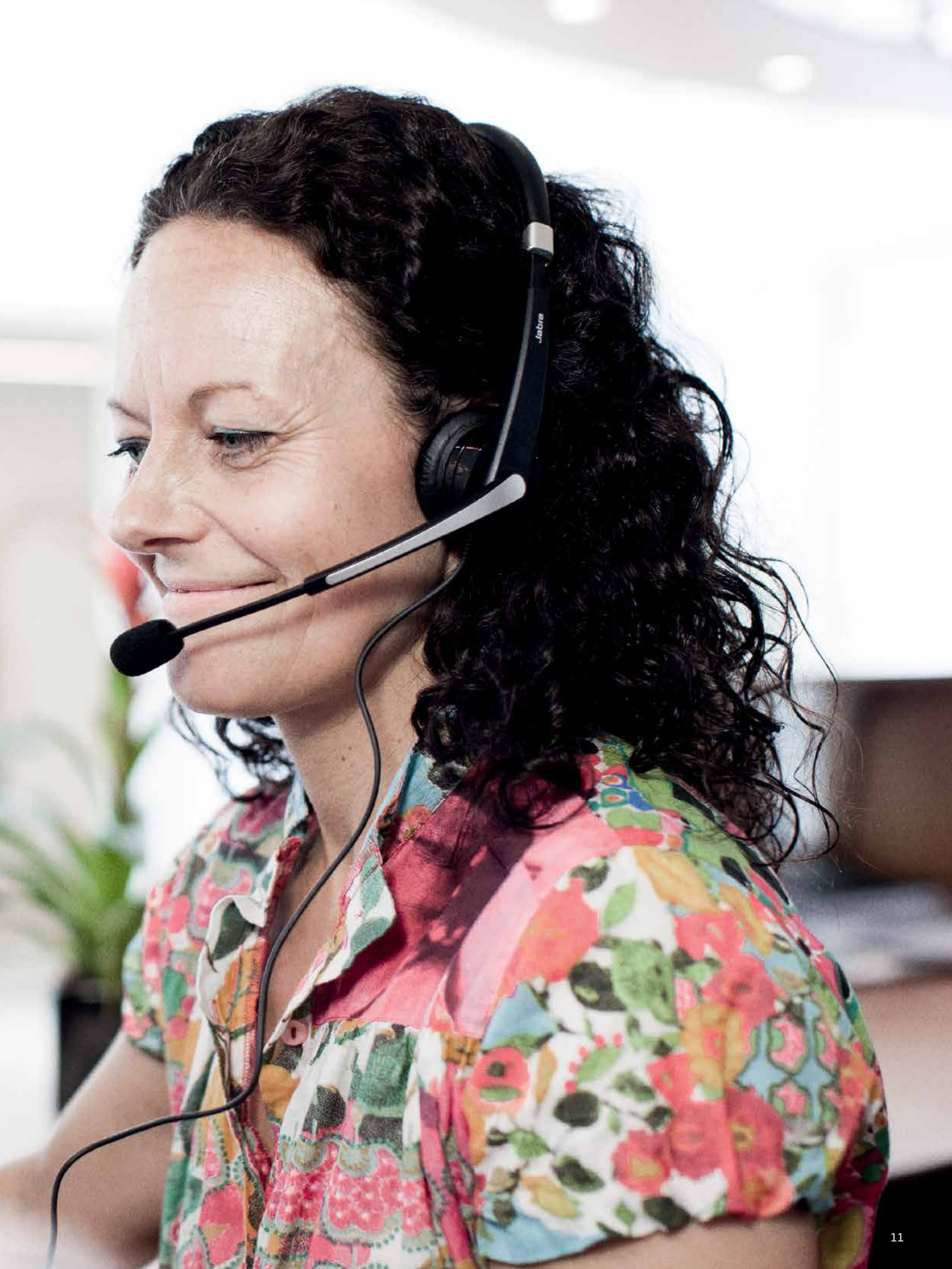
We are committed *to helping you succeed*

PEOPLE

Every red box represents the years of experience and dedication of our people - from developing innovative and smarter products, to guiding our customers in selecting the right units, all the way to personally validating every single product before it leaves our factory. We recruit people who share our values and contribute to making PR an inspiring place that is both challenging and rewarding. A place that never stands still and is on call 24/7, so that customers can benefit from our local presence and unique global expertise.

PARTNERSHIP

We believe in reliable, long-term partnerships without barriers. With an open mindset and a willingness to listen and learn, innovation at PR electronics is driven by inputs from our partners. Listening to their feedback and solving their challenges is what ensures we develop the right products, at the right place and at the right time. We build our relationships with personalized pre- and post-sales technical support as well as day-to-day delivery.



Your markets *are our fields of expertise*

Make reliable, accurate signals a part of your industry

Our dedication to R&D and understanding of our customers' needs have given us expertise across a wide range of industries, with widely different needs for process control and signal conditioning. Whatever your industry, we are committed to helping you find a solution that fits best with your process, while improving uptime and decreasing costs.



Energy

"We have used several different signal conditioning modules and the modules from PR electronics are the only ones that have never failed. Our 573 temperature transmitters (PR type 5331) have been running without faults for more than ten years now."

*Poul Henning Olsen, Electronics Mechanic,
DONG Energy*



Water & Wastewater



Chemical

"The biggest benefits of using products from PR electronics are the ease of use, the size, the availability and the technical support we get."

Mark Coburn, Senior Design Engineer, Boulting Group Ltd



Oil & Gas



Metal & Steel



Marine



Pharmaceutical



Factory Automation



Cement



Pulp & Paper



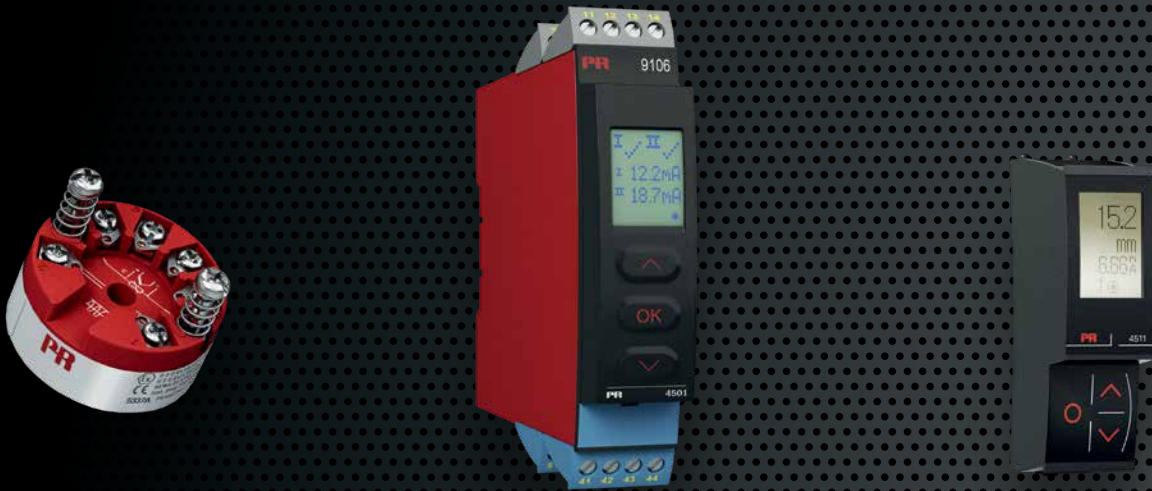
Food & Beverage

6 Product Pillars

to meet your every need

Individually outstanding, unrivalled in combination

With our innovative, patented technologies, we make signal conditioning smarter and simpler. Our portfolio is composed of six product areas, where we offer a wide range of analog and digital devices covering over a thousand applications in industrial and factory automation. All our products comply with or surpass the highest industry standards, ensuring reliability in even the harshest of environments and have a 5-year warranty for greater peace of mind.



TEMPERATURE

Our range of temperature transmitters and sensors provides the highest level of signal integrity from the measurement point to your control system. You can convert industrial process temperature signals to analog, bus or digital communications using a highly reliable point-to-point solution with a fast response time, automatic self-calibration, sensor error detection, low drift, and top EMC performance in any environment.

I.S. INTERFACES

We deliver the safest signals by validating our products against the toughest safety standards. Through our commitment to innovation, we have made pioneering achievements in developing I.S. interfaces with SIL 2 Full Assessment that are both efficient and cost-effective. Our comprehensive range of analog and digital intrinsically safe isolation barriers offers multifunctional inputs and outputs, making PR an easy-to-implement site standard. Our backplanes further simplify large installations and provide seamless integration to standard DCS systems.

COMMUNICATION INTERFACES

We provide inexpensive, easy-to-use, future-ready communication interfaces that can access your PR installed base of products. The detachable 4510 Local Operator Interface (LOI) allows for local monitoring of process values, device configuration, error detection and signal simulation. The next generation, our 4511 and 4512 Remote Operator Interfaces (ROI) do all that and more, adding remote digital communications via Modbus or Bluetooth, while the analog output signals are still available for redundancy.

With 4511 and 4512 you can further expand connectivity with the devices using our PR Process Supervisor (PPS) application. The PPS app is available for iOS and Android.



MULTIFUNCTIONAL

Our unique range of single devices covering multiple applications is easily deployable as your site standard. Having one variant that applies to a broad range of applications can reduce your installation time and training, and greatly simplify spare parts management at your facilities. Our devices are designed for long-term signal accuracy, low power consumption, immunity to electrical noise and simple programming.



ISOLATION

Our compact, fast, high-quality 6 mm isolators are based on microprocessor technology to provide exceptional performance and EMC-immunity for dedicated applications at a very low total cost of ownership. They can be stacked both vertically and horizontally with no air gap separation between units required.



DISPLAY

Our display range is characterized by its flexibility and stability. The devices meet nearly every demand for display readout of process signals, and have universal input and power supply capabilities. They provide a real-time measurement of your process value no matter the industry, and are engineered to provide a user-friendly and reliable relay of information, even in demanding environments.



High signal integrity *from measurement point* *to control system*

TEMPERATURE

From the temperature measurement point to your control system, PR delivers the most reliable range of head and panel mounted temperature transmitters and sensors. They are all designed for high EMC immunity, low temperature drift and high accuracy.

Our wide range of devices converts industrial process temperature signals into analog and/or digital outputs, and our internal self-calibration capability even eliminates the need for routine calibration in most applications. The transmitters have all relevant approvals for applications worldwide and comply with NAMUR NE 21, 43, 89 and 107 guidelines.



COMPLETE TEMPERATURE SOLUTION

We combine our transmitters with sensors from our strategic partners around the world to offer you a complete, one-stop integrated solution, starting at your temperature measurement point. Combined with our range of I.S. interfaces and isolators, we are uniquely positioned to offer you the complete solution from measurement point to control system.



Full SIL 2 assessment guarantees *a safe and reliable process*

I.S INTERFACES

We don't take any shortcuts when it comes to safety in hazardous areas. PR pioneered compliance to IEC 61508 standards, and with our comprehensive range of power rail mounted analog and digital I.S. interfaces, you can rest assured that you will easily meet IEC 61511 site standards.

Our strong expertise within functional safety and agile design processes give us a strategic advantage when designing devices that meet SIL 2 requirements. Many of our intrinsically safe SIL 2 units are multifunctional, allowing a few units to be used in a wide range of applications. Plus, all of our devices can be installed in the safe area or in zone 2/div. 2.



PR BACKPLANE

For larger installations, the PR backplane greatly simplifies installation and wiring while seamlessly integrating with standard DCS systems. The 8 or 16 device backplane provides high channel density and the unique design offers an easy snap on/off feature

for device replacement. It enables LOI or ROI with our standard detachable communication interfaces, and connects your segment to an industrial Ethernet or wireless router through a gateway.



Better asset management *with detachable interfaces*

COMMUNICATION INTERFACES

Our modular approach to digital communications and asset management makes it easy and cost-effective to upgrade new and existing PR I.S. interfaces or multifunctional unit installations. Our communication interfaces enable you to monitor process values, device configuration and signal

simulation - either locally or remotely via Modbus/RTU, Ethernet or wireless connection. This approach to asset management offers inexpensive future proofing of your installed base to new communication protocols.



LOCAL OR REMOTE ACCESS TO YOUR PROCESS DATA

- 1) 4510 - LOI (Local Operator Interface) connectivity on your new and existing PR 4000 and 9000 devices to locally monitor process values, device configuration and perform signal simulation.
- 2) 4511 - Modbus communication enabler. Get easy, remote access to your process values - by enabling existing and future PR 4000 and 9000 devices for digital communication.
- 3) 4512 - Bluetooth communication enabler. Enable Bluetooth communication and data logging on all your PR 4000 and PR 9000 units.
- 4) PPS - PR Process Supervisor - monitoring of process values, device configuration and signal simulation. For iOS and Android.



We are near you, *all over the world*

Our trusted red boxes are supported wherever you are

All our devices are backed by expert service and a 5-year warranty. With each product you purchase, you receive personal technical support and guidance, day-to-day delivery, repair without charge within the warranty period and easily accessible documentation.

We are headquartered in Denmark, and have offices and authorized partners the world over. We are a local

business with a global reach. This means that we are always nearby and know your local markets well. We are committed to your satisfaction and provide **PERFORMANCE MADE SMARTER** all around the world.

For more information on our warranty program, or to meet with a sales representative in your region, visit prelectronics.com.



A black and white photograph of industrial machinery, possibly a factory or laboratory setting, with prominent red motion blur streaks overlaid across the scene, suggesting speed and dynamic activity. The machinery consists of various pipes, tanks, and structural elements.

Benefit today from *PERFORMANCE MADE SMARTER*

PR electronics is the leading technology company specialized in making industrial process control safer, more reliable and more efficient. Since 1974, we have been dedicated to perfecting our core competence of innovating high precision technology with low power consumption. This dedication continues to set new standards for products communicating, monitoring and connecting our customers' process measurement points to their process control systems.

Our innovative, patented technologies are derived from our extensive R&D facilities and from having a great understanding of our customers' needs and processes. We are guided by principles of simplicity, focus, courage and excellence, enabling some of the world's greatest companies to achieve PERFORMANCE MADE SMARTER.

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