Innovation *for system* *integration*

PR backplane

A user-friendly and reliable mounting solution between the DCS/PLC/SIS system and isolators/I.S. interfaces

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

PR electronics

A plug & play backplane concept
for system connection

Designed for Decentralized Control Systems (DCS), Programmable Logic Controllers (PLC) and Safety Instrumented Systems (SIS)

The backplane seamlessly integrates with various standard DCSs, PLCs and SISs. It is designed to greatly simplify installation and wiring in larger industrial process installations. As a flexible, space-saving solution, it can be used with all PR 9000 devices for I.S. and non-I.S. applications. Mounting multiple 9000 series devices into the backplane can reduce your time and cost, while simplifying spare parts management on site.

In addition to increasing availability and reducing panel footprint, the robust and reliable backplane meets or even exceeds the IEC 61132-2 standard for vibration and mechanical shock, and is approved for zone 2 applications.

Compatible with all PR 9000 products

The PR 9000 series offers you the widest range of multifunctional I.S. interfaces with the fewest variants. Each product is easy to use and service, and is fully SIL compliant.

- **AI, AO, DI, and DO signals coming from or going to hazardous areas**
- **Multifunctional I.S. barriers, isolators and converters**
- **I.S. devices for industrial signal conditioning and process control**
- **Analog (HART) and digital signals**
- **Mounting options: conventional DIN rail, power rail or backplane**
- **IEC 61508 fully certified (SIL capable) and implementable within SIL 2 and SIL 3 safety loops according to IEC 61511**

View more information about the 9000 series at prelectronics.com/isinterfaces

The 9000 series and backplane - a flexible solution with a variety of mounting options

The simple solution: A 9000 module as stand-alone on a conventional DIN rail with optional Local Operator Interface 4501 – onsite access to your process values.

9000 modules on PR power rail saving wiring and installation cost.

9000 modules with Remote Operator Interface 4511 – access to your process values while still preserving the analog signal – monitoring, simulation and configuration.

Backplane with 9000 modules and optional 4501/4511 interfaces – flexible, safe and easy connection of 9000 modules into standard automation systems.

The 7900 series is approved for many applications worldwide.

ⒺX ZONE 2 | IEC Zone 2 | IECEx Zone 2 ™ | c Ⓛ us LISTED | c FM us APPROVED | Ⓖ | EHI | C E

Fast and easy set-up
with your devices

HART
multiplexer
connection

Whatever your application, the PR backplane works as an integrated solution

Using the Plug & Play PR backplane solution allows you to easily connect your DCS/SIS or PLC to the interface layer. All our backplanes are designed to fit various system I/O card specifications, including connection and electrical aspects.

System redundancy is supported according to each DCS/SIS concept. For higher availability and reduced downtime, the backplane power supply is redundant as a standard feature.

Diagnostics are improved with the availability of a status relay providing an alarm for any loop, module or backplane failure, increasing reactivity for improved feedback to maintenance on site.

HART asset management is accessible through the HART connector, available as standard on all analog type backplanes. It has been designed for analog signals to allow connection to a HART multiplexing solution.

The optional 4501 Local Operator Interface brings new features to the interface layer including local display, simulation, and also configuration of temperature and universal devices.

By adding the PR 4511 to your set-up, you can benefit from fast and accurate communication backed by the stability of redundant data availability. Paired with the PR backplane, you can rest easy with a reliable system connection that optimizes installation, commissioning and maintenance.

DCS/PLC/SIS connections
(redundancy supported)

HART asset management

The PR backplane offers HART multiplexer access for asset management of all HART equipment including monitoring, status, re-calibration and configuration.
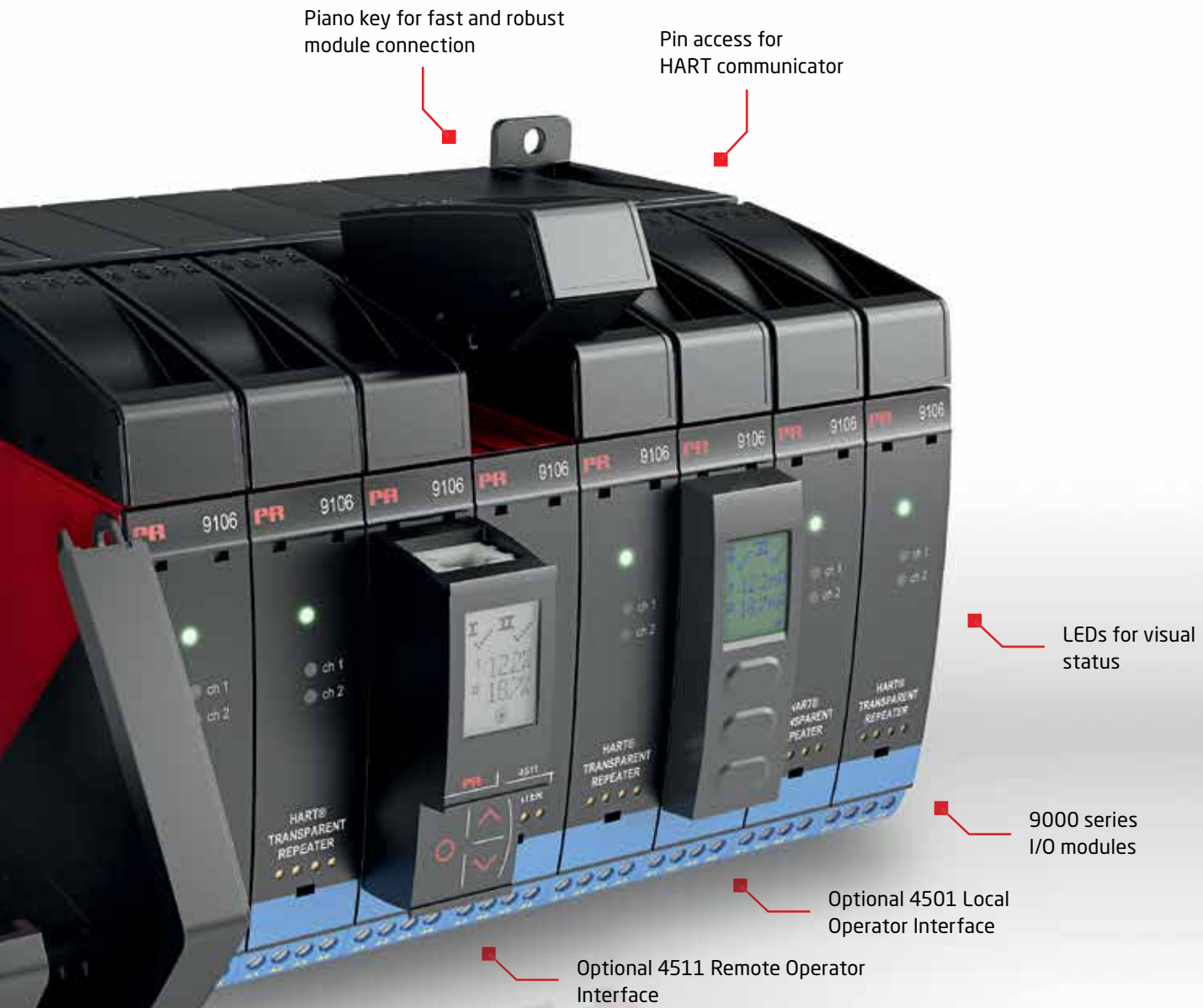
HART
multiplexer

PC/tablet
Asset Management Software

Piano key for fast and robust module connection

Pin access for HART communicator

LEDs for visual status

9000 series I/O modules

Optional 4501 Local Operator Interface

Optional 4511 Remote Operator Interface

Flip-down cover for improved protection

Remote asset management

Enable digital access and diagnostics of process values while preserving the analog signal.

Backplane with
8 x PR 9116 universal transmitters and
8 x PR 4511 communication enabler
The backplane is connected to a
PR gateway and a wireless router

www

PC/tablet
Asset Management Software

Save on panel
space and costs

Optimize your panel space for increased performance and easy maintenance

The PR backplane can be installed horizontally or vertically, giving you the flexibility you need to optimize your panel space. You can fit more inputs / outputs (I/Os) onto your panel than with conventional integration, saving more than 30% space.
Less space also translates into

fewer costs. Plus, with PR devices designed for low power consumption, you will also benefit from increased energy savings.
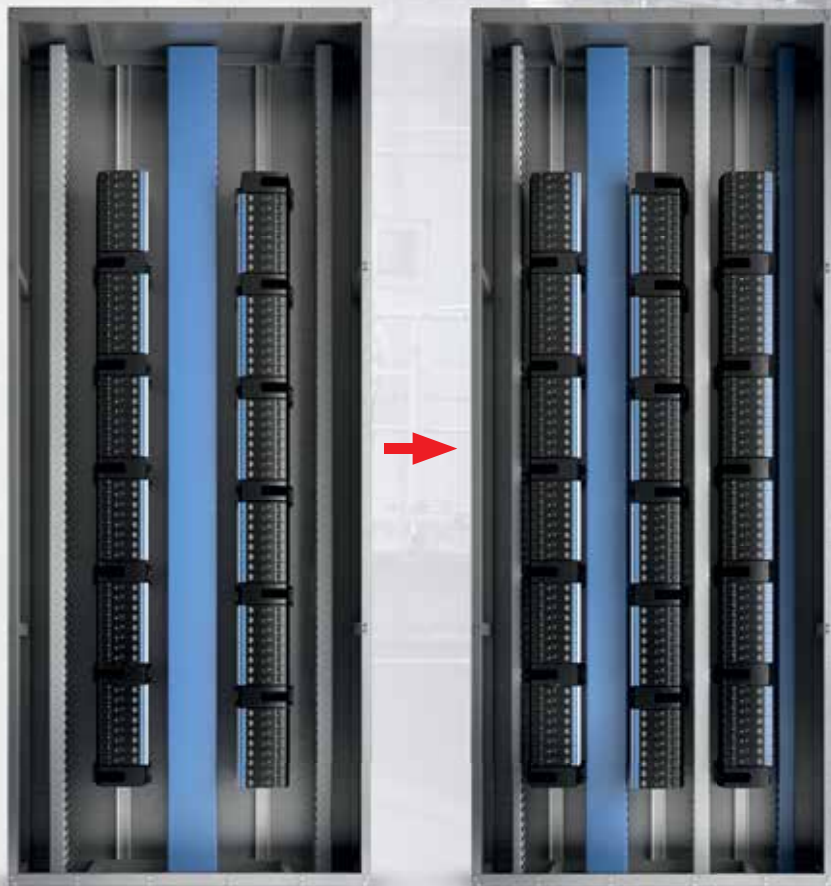
The 9000 series can be mounted on a conventional DIN rail for easy and simple mounting, or with the backplane

for innovative system integration and improved spare parts inventory.

Designed to simplify wiring and installation, it offers an easy, snap on/off feature for device replacement with the choice of 8 or 16 I/O module slots configurations for high channel density.

30% more I/O

The left panel shows a set-up with conventional integration. The right panel shows a set-up with optimized integration. With the PR backplane you can fit more inputs/outputs (I/Os) onto your panel than with conventional integration, saving more than 30% space.

**Benefit today from
PERFORMANCE MADE SMARTER**

PR electronics is the leading technology
company that specializes 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 that communicate, monitor
and connect our customers' process
measurement points to their process
control systems.

Our innovative, patented technologies
are derived from our extensive R&D
facilities and our thorough under-
standing 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.

1044EN_w02(1623)