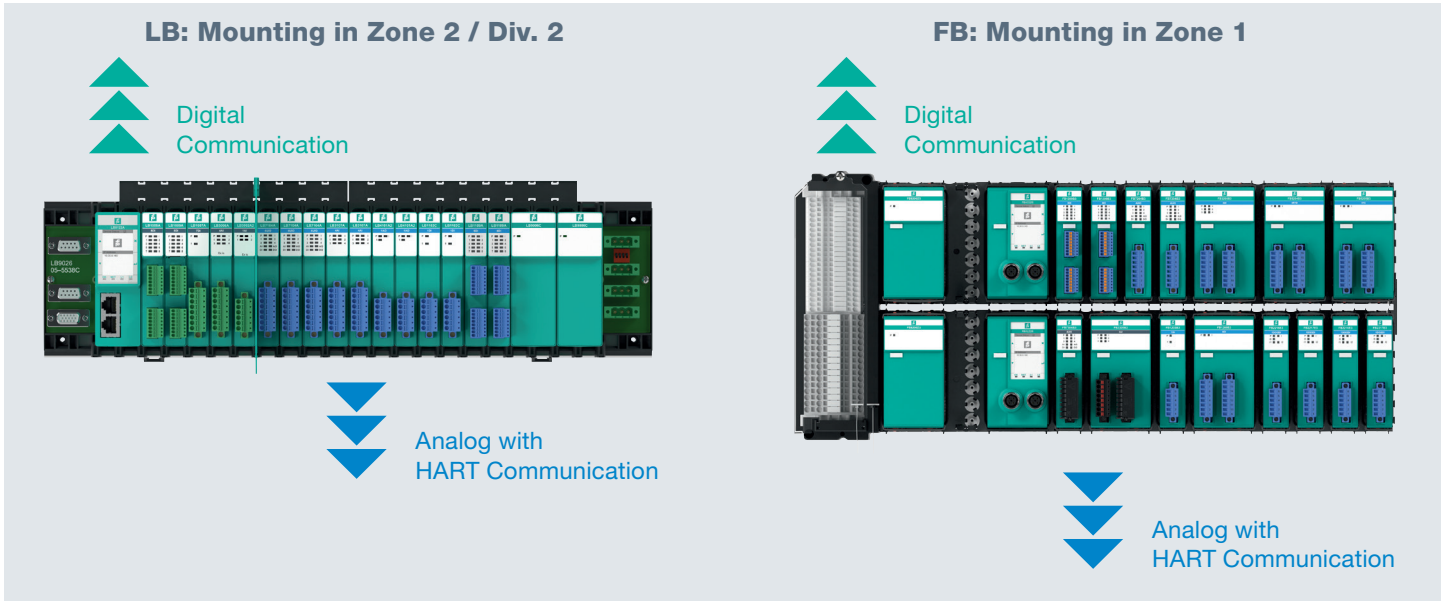
Remote I/O Modules for the Efficient Modernization of Control Systems

At a Glance

- Digitalization without replacing field devices
- Modular design, various combination possibilities
- Quick and easy installation
- Mounting in Zone 1, Zone 2, and Division 2
- A comprehensive portfolio for a wide range of applications

Your automation, our passion.

PEPPERL+FUCHS



The Application

The measurement and control technology will be replaced once or twice during the service life of a process plant, giving users the opportunity to replace the control technology with new, cutting-edge devices. For example, a bus system can be installed in place of conventional, one-to-one wiring that is time-consuming to maintain. Digital communication improves plant operating efficiency by making concrete use of the higher volume of information available, transferring data accurately, and enabling remote configuration and diagnostics. Investments in existing analog field devices are protected and optimally utilized.

The Goal

Restructuring should be as fast, smooth, and cost-effective as possible. Downtime should be as short as possible.
Last but not least, it is important to maintain well-functioning field devices so they can continue to be used in the process. The challenge is integrating many different devices with analog and discrete sensors and actuators into a new communication infrastructure and connecting them to the new control system.

The Solution

The remote I/O systems from Pepperl+Fuchs bridge the gap between the existing technology framework and the new control system. They are available as LB and FB systems for measurement and control engineering tasks in all hazardous areas, zones, or divisions. These systems establish a digital connection to conventional sensors and actuators via various protocols, such as 4–20 mA devices, temperature and NAMUR sensors, and solenoid valves.

The I/O modules of the remote I/O stations can be easily plugged into a backplane even during operation.
They offer economical energy management and low power dissipation modules with intrinsically safe and non-intrinsically safe outputs that can be operated side by side. You can use 1-channel modules for single loop integrity, multi-channel modules for high packing density, or a combination of both.

The Benefits

Remote I/O technology reduces investment costs associated with plant upgrades by: Keeping the existing technology framework of field devices; outdoor installation, usually in place of the subdistributor; retaining field wiring; and offering routing tailored to the signals, which results in a smaller footprint.
The ability to retrofit individual modules makes it cost-effective to make minor changes and expansions. The remote I/O systems are supplied certified, pre-wired, and ready for connection, minimizing the time and cost required to install and register the products on site.

For more information, visit: **pepperl-fuchs.com/px-rio**