

RPI - Low Cost

High Reliability

The **Remote Process Interface** is an economical remote I/O system for connecting measurement signals between hazardous and safe areas. RPI uses a single field bus to connect conventional sensors and actuators to a process control system.

Inexpensive and Easy to Use

Instead of mounting the devices on a rigid motherboard assembly, the RPI modules simply snap onto a DIN rail. This configuration offers the following advantages:

- Saves space
- Modules can be placed at any location on the DIN rail

System expands easily by snapping on units as needed, no mounting accessories required

Standard 24 V DC supply eliminates the need for special power modules

Up to 500 I/O points per gateway

Software marshalling eliminates wiring expenses

A universal module for all temperature sensors such as thermocouples and RTDs

A single system for installation in a safe area or in a Zone 2/Div. 2 hazardous area

Field signals can be connected to instruments in the safe area or to those in Zones 0, 1 or 2 (Div. 1 or 2)

Each system is complete, no additional parts required

Reliable and Easy to Maintain

This system uses removable field wiring terminals manufactured to handle 2.5 mm² (14 AWG) and is certified for installation in Zone 2, Div. 2 locations. In addition to its reliability and ease of maintenance, RPI features the following:

- 4 limit alarms per device channel
- User-selectable I/O values during error conditions for signals to the field and to the process control system
- Wide ranging channel-specific diagnostics
- Simulation feature for all signals to the field and to the process control system, including error simulation

LCD and LED display of the operating status in accordance with NAMUR NE 44

A single push-button provides hardware configuration into a gateway

Software programmable in accordance with VDI/VDE 2187

Replacement units simply snap in, no configuration necessary

Redundancy at all levels:

- Internal backplane bus is serially redundant
- Optional redundant external bus and gateways, no motherboard or additional hardware required
- Optional redundant power connection

HART functionality

Modular-mounting technology enables expansion and supports non-RPI systems such as those necessary for ESD signals

To the Process

To the DCS

ABB

Foxboro

AEG

Honeywell

Allen-Bradley

Intellution

Elsag Bailey

Siemens

Fisher-Rosemount

Wonderware

... and many more