

# SmartLine Transmitters and Experion Control System Increase Plant Safety

## Solution Note

Honeywell's SmartLine transmitters, particularly when combined with the Experion control system, help prevent potentially dangerous mistakes while also increasing maintenance engineers' effectiveness.

In the process industries, even routine maintenance, conducted incorrectly, can expose plant personnel, the environment and surrounding community to harm. Mistakes when adjusting, maintaining or replacing field devices can result in damaging and potentially dangerous disruption to the process.

Errors are easy to make:

- Pulling the wrong transmitter for maintenance
- Performing the wrong maintenance activity on a field transmitter
- Failing to ensure a transmitter, loop or associated loop is in the proper mode for maintenance
- Applying unauthorized or inadvertent configuration changes to field devices
- Failing to see diagnostic messages



Together, SmartLine® and Experion® help tackle some of the most common human errors that are the primary cause of abnormal, and potentially harmful situations in process plants.

The transmitters' advanced displays and messaging features enable engineers to identify the right devices to work on and conduct the correct activity in a safe manner. With SmartLine, when configuration changes are made to a device, configuration alerts are available to the control room allowing fast detection and potential corrections to be made.

## FEATURES & BENEFITS

- Tamper alerts prevent un-authorized changes to transmitter configuration either from the field or the control room.
- Write-protection options allow compliance to site safety practices.
- Transmitter messaging allows real-time communication between the Experion control system and the SmartLine instrument, increasing operator efficiency.
- Additional transmitter diagnostics identify the instruments ready for maintenance, increasing safety, improving process performance and reducing downtime.
- SmartLine transmitters can be set into maintenance mode, automatically from the Experion control system. This prevents work being done on a wrong transmitter or working on the transmitter in the wrong state.



### **Tamper Alerts**

Unauthorized transmitter configuration changes can impact the process and its safety. For this reason, almost all transmitters available in the marketplace have write protection capabilities to help prevent such changes. However, this protection can be reset. To help prevent unwanted configuration changes, SmartLine instruments offer additional protection with their tamper alert feature.

With the tamper reporting feature enabled, operators can be advised of attempted or successfully completed configuration changes as well as any changes made to the SmartLine write protection jumper or software setting. If a change is attempted or successfully completed to an instrument, the operator will be alerted. The operator can then take any necessary actions to ensure the process, the plant, and personnel are properly protected.

### **Maintenance Mode Indication**

Used with Honeywell's Experion control system, SmartLine transmitters provide additional protection for maintenance technicians by clearly displaying maintenance modes. Only when operators place the transmitter and associated control loops in the proper mode for maintenance, will the device display the "Available for Maintenance" message. Device displays will rotate through process variable and diagnostic screens, including the transmitter messaging screen and the maintenance mode screens. As a result, technicians can be sure at a glance that they are working on the right transmitter, undertaking the correct action, and that the device and associated loops are in the right mode for safe maintenance: three levels of safety to keep workers, the plant and environment protected.

### **Transmitter Messaging**

SmartLine's unique transmitter messaging feature allows the operator to send messages to the transmitter's advanced display. The messages, which are also stored in the transmitter's memory, allow

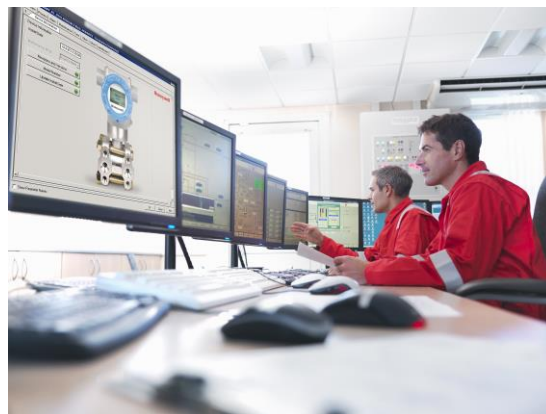
control room operators to communicate through the device to field engineers in real time without the need for a handheld. This dramatically reduces human error and the time for field engineers to identify the right device.

Transmitter messaging thus helps with device identification in the field for increased safety. Safe maintenance modes are also confirmed through maintenance mode indication. These together identify the right product, the right maintenance activity and a safe mode to perform maintenance.



### **Take Advantage of SmartLine with Experion**

SmartLine transmitters with the Experion control system combine smart features and proven measurement with award-winning control system expertise for a safer operation. Simple and intuitive for this next generation of process automation professionals, but powerful and intelligent, they promote safer maintenance and a more effective workforce.



## SmartLine Transmitter Family

The SmartLine Pressure, Temperature, Level and Multivariable Transmitters deliver total value across the entire plant lifecycle, from construction to operations to maintenance.

**Smart Performance:** SmartLine accuracy, stability and response time result in tighter process control, improving product yield and quality.

**Smart Design:** SmartLine's innovative modular design reduces complexity by allowing quick on-field replacement of parts without taking transmitters out of process and thereby reducing downtime, maintenance costs and spares inventory. SmartLine's universal terminals reduce costly wiring errors, troubleshooting and re-work by allowing loop wiring to be reversed. Rich advanced display and local configuration capabilities enable field operators to more efficiently perform tasks, solve problems and avoid errors with no need for a handheld device.

**Smart User Experience:** Smart messaging, maintenance and safety features as well as unique integration with Honeywell's Experion control system reduce design and operator errors and enable faster intervention to avoid process upsets.

## SmartLine Support Services

This product comes with worldwide, premium Technical Assistance Center (TAC) support services, which are part of the Total Care Field Instrumentation Services. The TAC services, along with the services provided by the local distributor, are designed to help customers improve and extend the usage of their field instrumentation, providing a safer, more reliable and more efficient operation.

Honeywell's Total Care Services bring 30 years of experience in terminals and the expertise of over 1,000 contracted customers around the world. Backed by the Honeywell Operating System, our support teams deliver greater in-depth domain and product expertise. We'll provide the right solution to critical issues—the first time—for a safer, more reliable and more efficient operation.

## For More Information

To learn more about how Honeywell's SmartLine transmitters together with Experion can improve plant and process safety, visit [www.smartlinewithexperion.com](http://www.smartlinewithexperion.com) or contact your Honeywell Account Manager, Distributor or System Integrator.

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