

## Solution Note

### PlantCruise by Experion<sup>®</sup> and SmartLine: Made for Each Other; Made for Your Plant



PlantCruise by Experion<sup>®</sup> with SmartLine<sup>®</sup> devices is the perfect fit for a wide range of plants, delivering efficient, safe, reliable operations.

Ubiquitous, intelligent field devices are helping plants eliminate process variable uncertainty. With better visibility, functionality and diagnostics, plants achieve greater efficiency, reliability, safety and security. With an integrated solution you can build on these benefits, enhancing situational awareness and employee productivity, while reducing start-up times and eliminating risks for new projects.

#### Be a Smarter Operator

Honeywell's flexible, scalable PlantCruise by Experion DCS tightly integrates with SmartLine field devices for more intelligent operations that bring a wide range of benefits:

- **Simpler**, quicker design engineering
- **More uptime** and fewer start-up delays
- **Safer operation** and better protection
- **Lower maintenance** costs
- **Improved quality** and profitability.

Using proven technologies, PlantCruise by Experion with SmartLine delivers innovative features in a simple-to-use, flexible and highly scalable package.

#### Leading Solutions

##### PlantCruise by Experion: Best-in-class Features at a Lower Cost

PlantCruise uses Honeywell's reliable, robust Experion PKS technology to deliver a DCS tailored to your business.

Proven, powerful features combine in an easy-to-use package that is simple to configure and control. Purpose built for each plant's specific requirements, PlantCruise offers a truly scalable,



Figure 1. The SmartLine transmitter family

and flexible solution. From a single controller and operator station or server, it can grow with you to offer a state-of-the-art DCS solution with the lowest possible lifecycle costs.

- Maximize plant uptime and improve plant reliability
- Optimize plant efficiency and increase scalability for future expansion
- Boost plant performance and agility to respond to business changes
- Make engineering and operations easier

- Enhance operator effectiveness and safety through Abnormal Situation Management (ASM) Consortium developed alarm management, display management and procedural operations
- Communicate effortlessly with third-party devices and drives
- Reduce your total cost of ownership.

### The SmartLine Family: Performance and Lifecycle Value

SmartLine transmitters (Figure 1) offer performance and stability to help you save process materials and improve product quality.

For pressure, levels, flows and temperatures, SmartLine transmitters are the most stable and accurate on the market. Clever features minimise your costs during installation, commissioning and calibration – as well as throughout the lifecycle. Universal transmitter wiring, cloud-based design tools and modular designs accelerate projects, reduce risk and cut costs.

Based on a common platform for ease of engineering and reduced training, SmartLine devices deliver performance and efficiency in a cost-effective package.

### Better Together: An Integrated Answer

#### SmartLine with PlantCruise for Enhanced Benefits

Supporting HART and FOUNDATION Fieldbus protocols, SmartLine devices work with a wide range third-party control systems. However, seamless integration with Honeywell's PlantCruise (Figure 2) unlocks extensive additional benefits.

With Honeywell PlantCruise and SmartLine, plants can boost the effectiveness of their operations teams, develop faster and more accurate engineering and cut their maintenance costs through a range of advanced features: Transmitter messaging, maintenance mode indication, tamper reporting, Field Device Manager health views, and Experion integration testing.

Users benefit from extended diagnostics, fast device identification in the field, and safer maintenance for a smoother operation.

#### Transmitter Messaging: Faster, More Accurate Work and Maintenance

Using the HART 7 protocol, plant operators with PlantCruise can send custom messages to any SmartLine transmitter to be displayed on its integral, enhanced graphics display.

Notifications, updates and alerts can all be read at the instrument location with no handheld or other host device. With the free-form message capability, central control room operators can send

comprehensive information to the device, alerting personnel of action required.

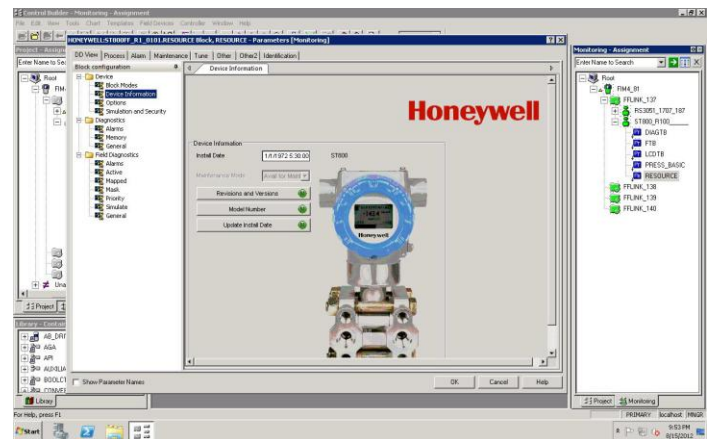


Figure 2. Experion with SmartLine: Experion Station summary



Figure 3. Transmitter messaging

SmartLine messaging (Figure 3) helps eliminate delays identifying the right device; reduces uncertainty over work required; accelerates start-up and commissioning times; increases maintenance efficiency; and reduces errors, improving plant safety.

Supported by the transmitters' standard set of Device Descriptions, Electronic Device Description Language, or Device Type Managers, messages can be created and deleted by any handheld, PC or host-based configuration tool. In addition, specific screens provide message input and reset capabilities. Messages sent to the transmitter remain in memory and display until they are reset or replaced by a new message.

### Maintenance Mode Status: Safer Operations

In any plant, repair work should only be performed when transmitters and associated loops are in their proper maintenance modes. Maintenance on devices in active control loops can upset the process, trigger alarms, and result in lost production, equipment damage or unsafe conditions.

To keep your operation safe and efficient, SmartLine HART and Foundation Fieldbus transmitters used with PlantCruise feature a powerful maintenance mode indicator. Only when the operator or system sets proper modes will the transmitter message read “Available for maintenance” on the integrated graphics display. For new projects this also lets you know what is active and not active, advising everyone of the transmitter status.

### Tamper Reporting: A New Line of Defence

Risks from inadvertent configuration changes to instruments are well recognised in industrial settings. Write protection features to stop unauthorised changes are a common feature with software and hardware (jumper or switch) methods both widely used.

SmartLine HART transmitters employ a hardware jumper and software write protection for the highest levels of safety. Furthermore, to protect against not just inadvertent alterations but deliberate and harmful or unauthorised changes to configurations, SmartLine features a tamper reporting function for HART enabled devices.

With tamper reporting, operators are advised of successful or attempted changes to configurations or the write protection jumper or software settings. An alert allows operators to quickly identify instruments affected and take any necessary action to safeguard the process, plant and personnel.

### FDM Area Health Views: At-a-Glance Intelligence

PlantCruise and SmartLine bring enhanced benefits for users of Honeywell’s Field Device Manager (FDM) asset management system. With FDM Plant Area Health Views, users can set up hierarchical screen displays providing quick and easy views of the health of various areas in the plant or process.

FDM Plant Area Views help users quickly identify plant assets operating inefficiently due to sub-standard or failed devices, boosting your reliability and efficiency.

### Tight Integration: A Single Source for Lower Risks, and Faster Results

Honeywell tests multiple units of all protocols and configurations with PlantCruise, as well as related configuration tools such as Multiple Communication Configurator (MC Toolkit), SmartLine Configuration Toolkit (SCT 3000) and FDM.



Figure 4. Field Device Manager Plant Area View

With SmartLine and PlantCruise, operators benefit from trouble-free integration and a single supplier for all their DCS and instrumentation needs. We’ll help you achieve faster start-ups, with up to eight man-weeks of onsite effort saved on a typical 2,000 analogue point-based control system. We also make sure you enjoy trouble-free, seamless integration first time, every time throughout the lifecycle.

With PlantCruise and SmartLine, plants get more from their smart devices for a more efficient, reliable, safer and profitable operation:

- More efficient maintenance with instrument messaging for quick identification of devices and required work
- Safer operations with the maintenance mode indicators and tamper reporting
- Fewer inefficiencies and reliability issues with FDM Area Views for better asset management
- Faster, risk-free configuration, first time, every time with robust integration testing.

## A Perfect Fit from a Trusted Partner

A pioneer in process control and instrumentation, Honeywell technologies are employed in the world's most demanding industrial applications to improve process safety, reliability and efficiency.

You can rely on our proven, advanced solutions to reduce operating and maintenance costs, improve reliability, and increase production efficiency. Our extensive product portfolio is backed by comprehensive pre- and post-sales support to drive business success today and tomorrow. With more than 8,000 technicians and unmatched expertise we work for customers day-in, day-out, in 67 countries around the world.

Speak to us today to find out how we can meet your requirements and find a perfect fit solution for your business.

### **For More Information**

To learn more about how Honeywell's integrated answers can improve plant performance, visit our website [www.honeywellprocess.com](http://www.honeywellprocess.com) or contact your Honeywell account manager.

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