

## Technical Note

### SmartLine Transmitter Polarity Insensitivity



SmartLine Transmitters deliver a new level of efficiency and safety throughout the plant lifecycle either when operating stand-alone or when integrated with a process control system. For example, with polarity insensitivity, SmartLine help reduce start-up times.

#### Polarity Insensitivity

##### Overview

Today, labor costs can be one of the highest cost and riskiest factor when implementing a project. Opportunities to save labor costs can often make the difference between an economically successful or unsuccessful project implementation. With Honeywell's SmartLine transmitters, customers experience the benefit from installation and start-up labor savings resulting from polarity insensitivity.

##### SmartLine Polarity Insensitivity

**Polarity Protection:** Almost any two-wire instrument available today incorporates circuitry which protects the instrument when wired incorrectly. If connections are made with the wrong polarity the instrument will be protected against damage, but will not function properly. By simply removing the wires at the transmitter or the field marshalling terminal box and reversing their polarity, instruments with polarity protection will begin to function properly.

**SmartLine Goes One Step Further:** With SmartLine products users get additional benefit. SmartLine instruments are not only polarity protected, they are polarity insensitive. This means when you connect to a SmartLine device not only is the instrument protected against reverse polarity, it will actually perform properly and to specification without the need to re-wire.

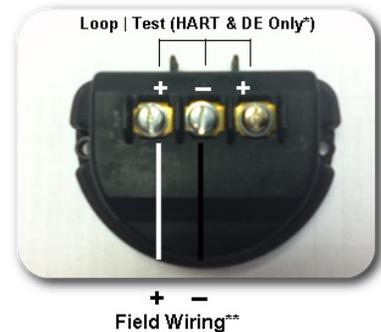
**Consider the Potential Savings:** Particularly with large installations where multiple contractors may be employed to install and or wire the instruments Polarity Insensitivity can save time and related cost. Often, multiple contractors may be employed and this can mean different standards or materials resulting in some instruments wired according to one contractor's

standard which can vary from others. The result may mean that a portion of your plant instrumentation is wired incorrectly.

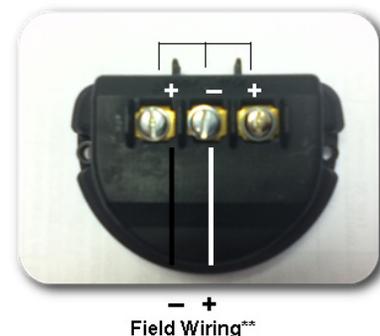
Of course polarity protected devices prevent any loss due to damage, but with SmartLine instruments no additional work is required meaning you can avoid all the rework associated with returning to the field and reversing the wiring connections. Depending on the number of instruments, this can represent a substantial time savings for your plant maintenance personnel.

#### With SmartLine Pressure Transmitter

This way

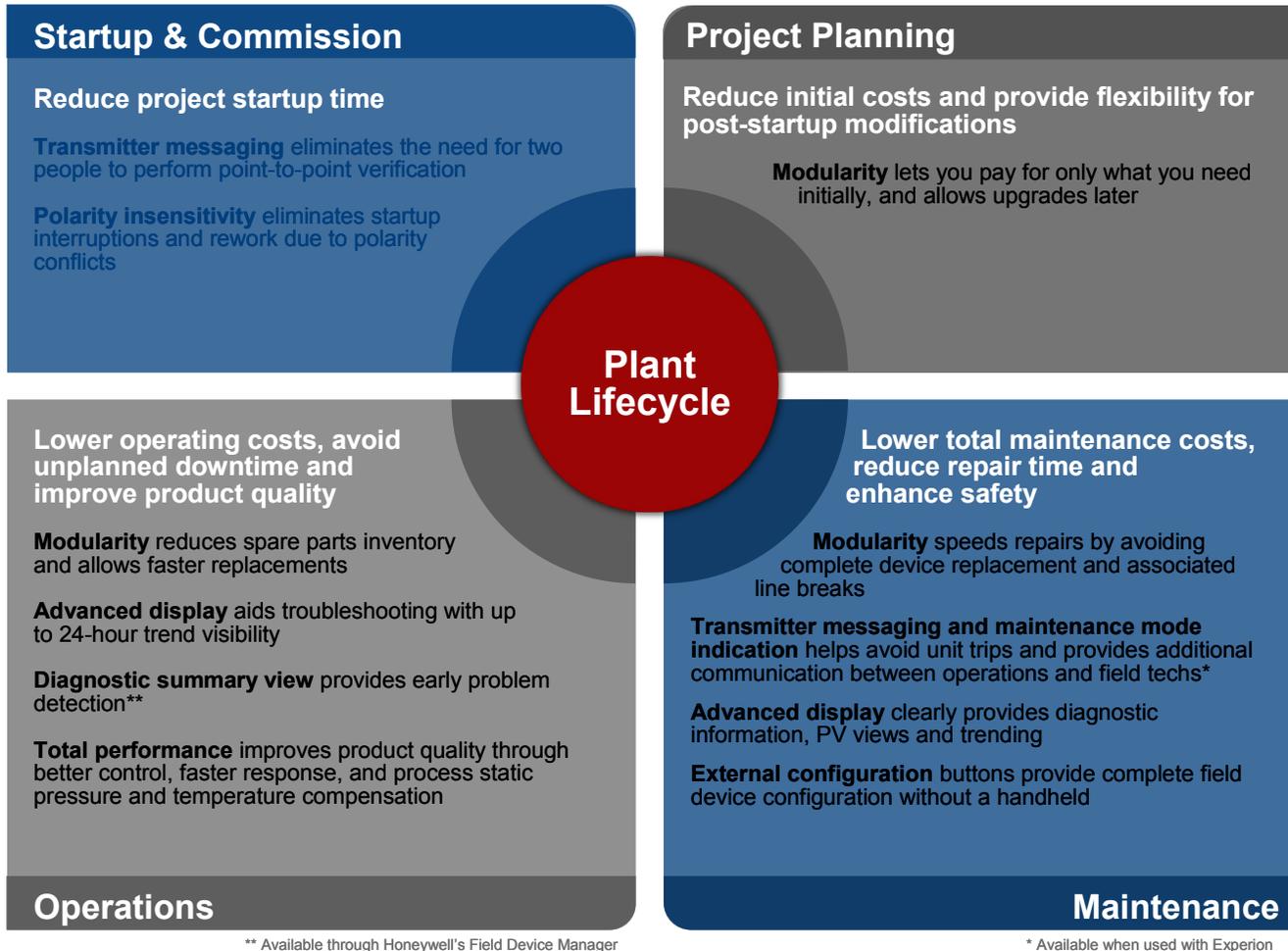


This way



Review other SmartLine product and integration plant lifecycle savings opportunities, delivered through:

- Modular Design
- Advanced Display and HMI Technology
- Maintenance Mode Indication
- Transmitter Messaging
- Tamper Reporting



### For More Information

Learn more about how Honeywell's SmartLine Pressure Transmitters deliver value across the entire plant lifecycle, visit our website [www.honeywellprocess.com](http://www.honeywellprocess.com) or contact your Honeywell distributor or account manager.

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