# **IIoT with Advanced Communication Protocols**

Gain an edge with better intelligence



### Enhancing productivity with data exchange, capacity and speed.

- IIoT (Industrial Internet of Things) involves major machinery that generates massive amounts of data, needing big data management, cloud computing, machine learning and more to process such volumes of information in a useful way.
- IIoT environment uses more precise sensors and more location aware components to create smart factories, use predictive trends and optimize operations.
- HART is the global standard to exchange digital information to smart devices via analog wires.
   Each revision enhances its capabilities and can "absorb or umbrella" the previous version. A system that will be relevant for years to come.
- Another communication protocol we offer that enhances IIoT is FOUNDATION Fieldbus.
   A growing protocol for plant or automation environments. It is popular in process oriented applications.

**Topworx** 



# Challenged with finding the path to improved productivity?

Many companies are faced with finding cost-effective ways to share critical plant-floor data enabling more detailed, timely information to aide in decision making.

We offer solutions to ensure you have the information at your fingertips for continuous improvement.

#### **IIoT plus HART**



- IIoT plus HART is a long term investment. Each revision is not wasted, as the new one builds on the previous one to impact your bottom line positively.
- Our HART product linked to IIoT can translate into an intricate and complex set of diagnostics, preventive measures and trend monitoring to reduce scheduled down time and avoid unexpected shutdowns.
- An LCD in the device allows local installation and set parameters without third party device, saving time and allowing more control for the operator to optimize the device.
- Compatibility with our GO Switch as a discrete on/off signal through Hart 7 or as a separate signal, which brings confidence in monitoring and continuous system statistics for improvements on IIoT.

- Offers a 5-point calibration that can be set at different parameters for more accurate position feedback. Precise measurement has a big impact in the long term to measure trends in IIoT that accumulate over time and translate into time, money or resource savings.
- Overtime, data and alerts will help on IIoT to collect clusters and be proactive compared to past statistics. The user will analyze trends and evaluate actions needed to optimize cycles.
- A multi-drop mode of operation for Hart 7 is one of the most important factors as it allows for up to 62 field devices to be connected and each one can be a data collector that feeds a system. All types of information can be sent in burst mode allowing faster speed at a higher frequency.

#### **IIoT plus FOUNDATION Fieldbus**



- A global leader in Process Control Networks FOUNDATION
   Fieldbus is another communication protocol we offer with our solutions at TopWorx. Control valves, temperature, pressure and flow instruments are just a few of the components that generate big data for this protocol to process and help with faster and better decisions.
- FOUNDATION Fieldbus can be combined with GO switches in our DX series to provide features in digital communication, position sensing and monitoring. It comes with local LEDs for visual indication, calibration buttons, remote configuration and works with single/double and normal/reverse actuators. A smart tool to enhance decision making.
- FOUNDATION Fieldbus can be used in Process Control
  applications, Intrinsically Safe areas and more importantly
  where Advanced Diagnostics feed an IIoT habitat of inputs to be
  analyzed for better outputs. Although heavy process oriented, it
  works in many industries including Oil and Gas, Pharmaceuticals,
  Chemicals, Power Generation and Food and Beverage.



