

# iloTView

*Secure Cloud Enablement*

## SMAR's System302 Industrial Internet of Things Software Solution



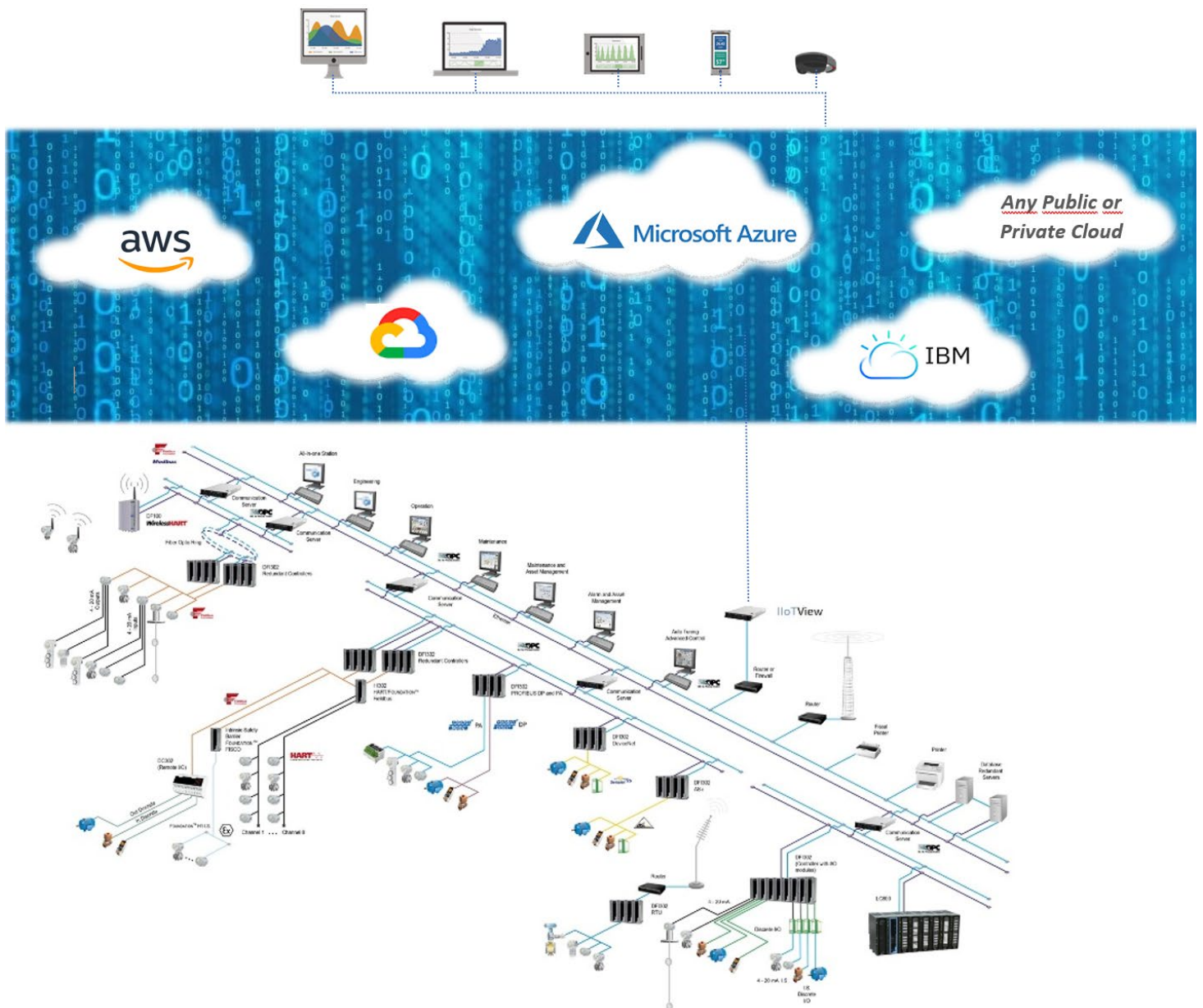
Leverage Your Industry 4.0 Applications with Secure,  
Real-Time Communications to the Cloud

### **iloTView**

*Publish data securely to the cloud; Visualize on any device, anywhere; Remotely monitor and control assets; Perform analytics at the edge; Integrate with existing equipment; Store and forward historical data.*

# SMAR's IIoT (Industrial Internet of Things) Solution

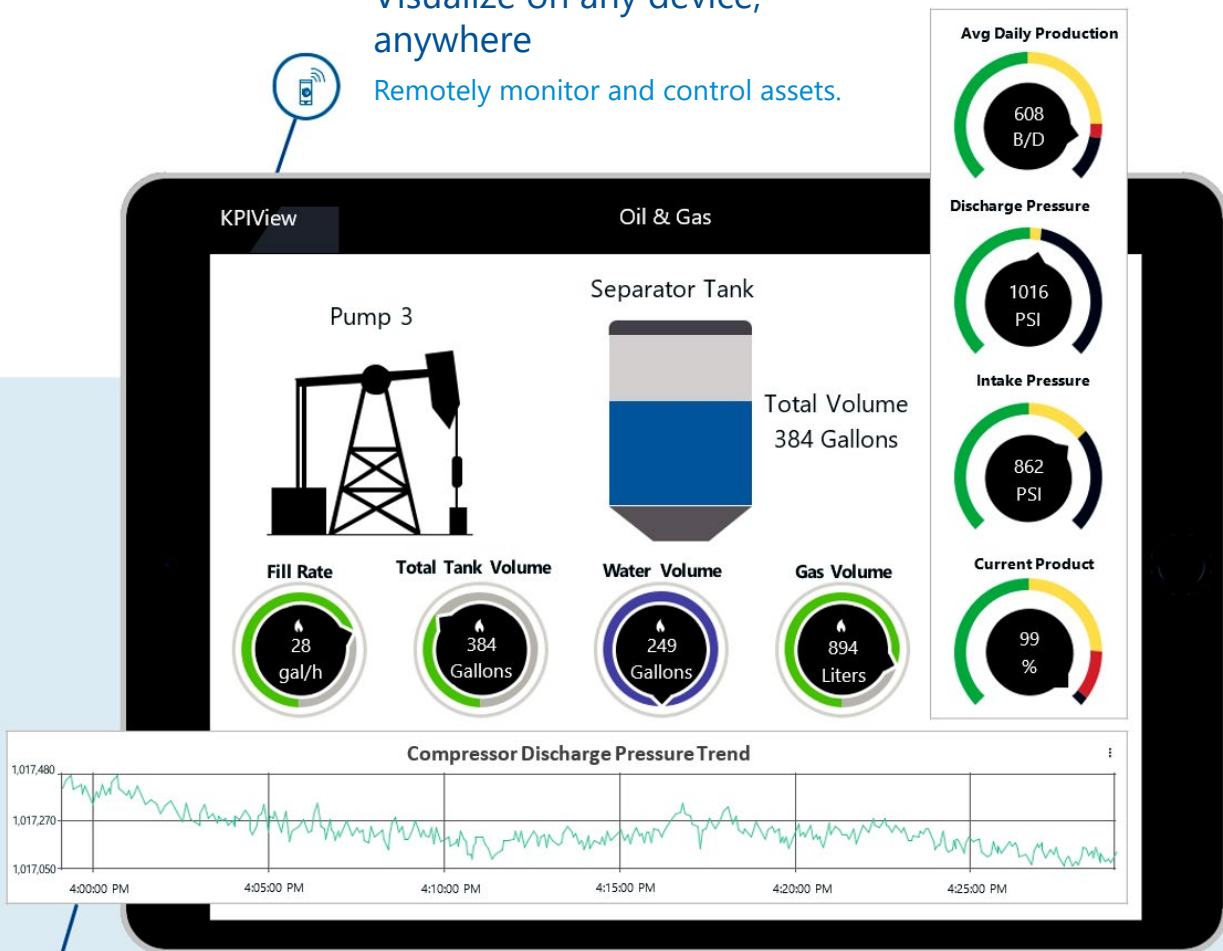
iloTView combines SMAR's IIoT software technology with its analytics, and mobile solutions running in the cloud. SMAR offers manufacturers and facility managers several **key IIoT technologies**, including connectivity to assets, secure cloud communications, local storage, buffering, data collection, and built-in real-time visualization. Analytics at the edge enable faster decision making by leveraging fault detection technology to significantly **reduce costs** and **improve operational efficiency**. Users can connect to virtually any automation equipment through supported **industry protocols** such as OPC UA, Modbus, BACnet, SNMP, Web services, and classic OPC tunneling.



Make your Operations more accessible and efficient with the power of IoT

Visualize on any device,  
anywhere

Remotely monitor and control assets.

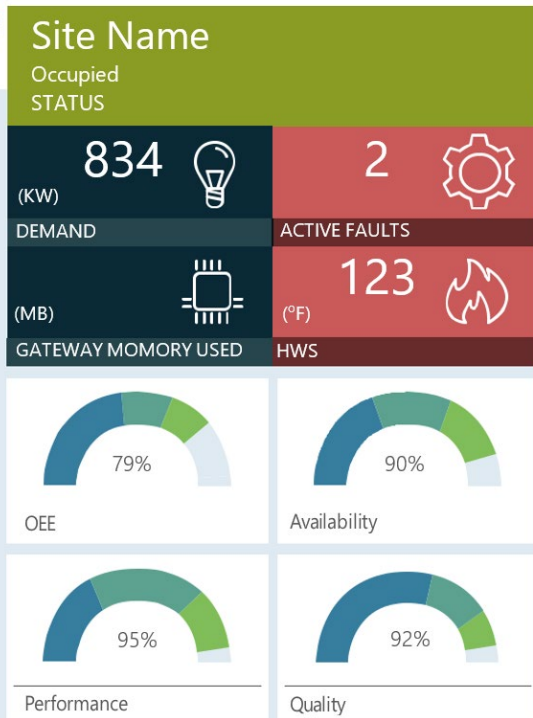


### IoT Hyper Collector

Stores and buffers historical data based on schedules and triggers and automatically merges that data with SMAR HistoryView in the cloud.

## Cloud Enablement

IloTView connects your [factories](#), [buildings](#), and [equipment](#) through secure TLS encryption and popular cloud platforms, such as [Microsoft Azure](#) and [Amazon Web Services](#). Access your data from [anywhere](#) through pub/sub architecture for real-time visualization of KPI data at the edge. IloTView delivers an efficient, [secure connection](#) to the cloud through bi-directional AMQP for Microsoft Azure, as well as MQTT, REST, and WebSockets for third party cloud providers. With SMAR in the cloud, your data is [more intelligent](#) than ever.

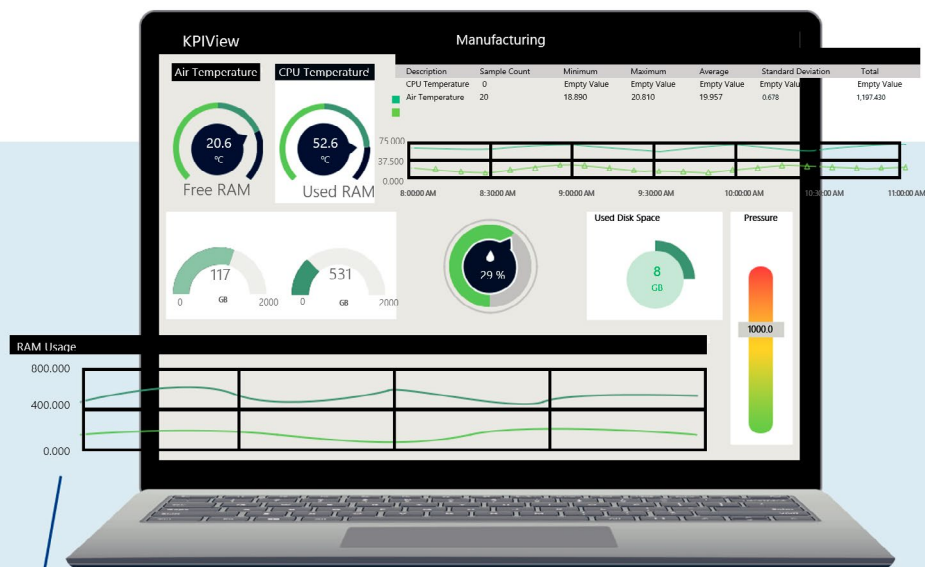


Leverage cloud services and applications for **maximum efficiency**, security, and scalability. Scalable provisioning and device management services enable rapid deployment, lifecycle management, and device and application updates.

## IIoTView Integration

SMAR' IoT solution takes **maximum advantage** of Microsoft's Azure cloud services to provide **global visibility, scalability, and reliability**. Users can leverage standard SMAR apps in the cloud such as PROCESSVIEW64, HistoryView, AnalyticsView, and more.

Optionally integrate Microsoft Azure services such as **Power BI** and **Machine Learning** to provide greater depth of analysis.



### IoT System Health

Built-in diagnostics dashboard for IIoTView software applications and IoT hardware device performance information.

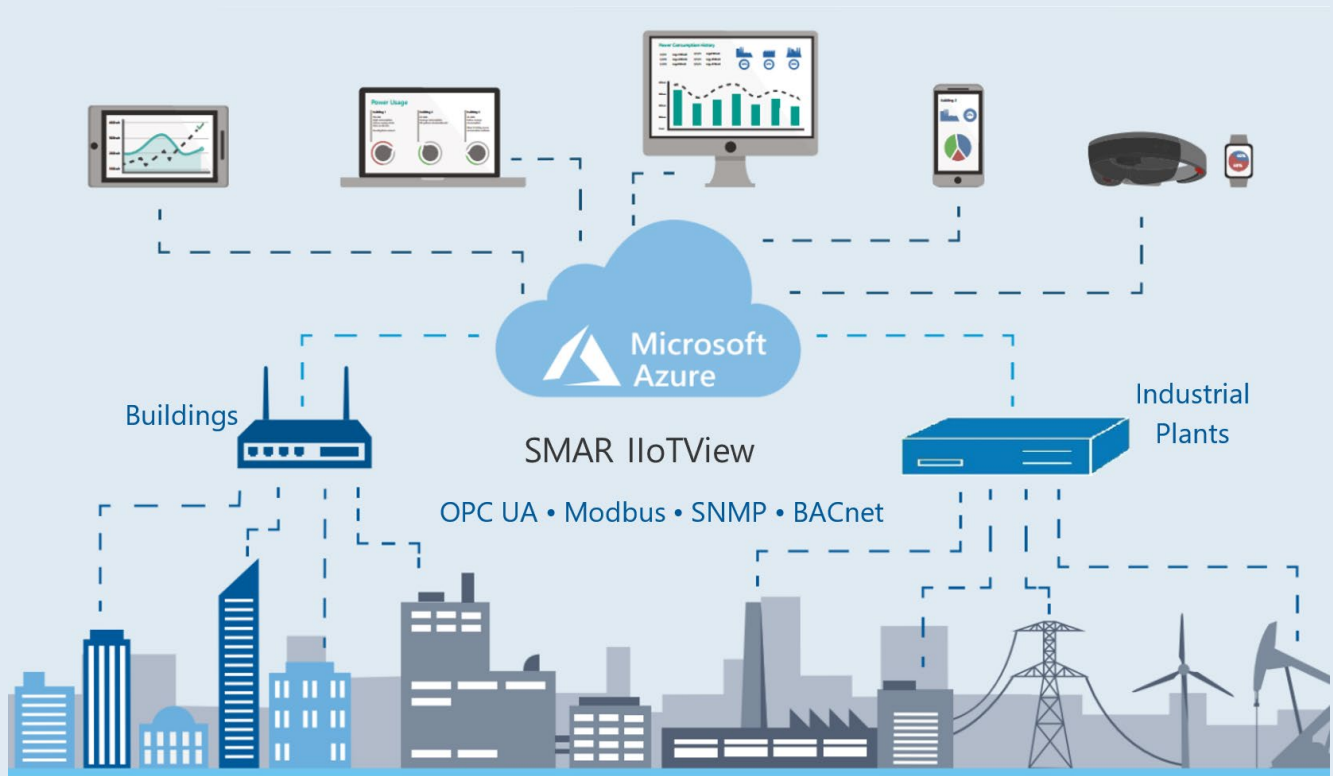


## Cloud Connectivity

TLS encryption with x.509 certificates is leveraged to [securely transport](#) IIoTView data. Supported [industry protocols](#) include OPC UA, BACnet, SNMP, Modbus, and classic OPC tunneling.

## Gateway Technology

Gateways integrate devices, sensors, and other equipment to publish messages to the cloud independently from the subscribers. Built-in software modules [decrease latency](#), provide edge data processing, and [empower edge analytics](#) with on board FDD and workflow technologies with [real-time visualization](#) of KPI data.

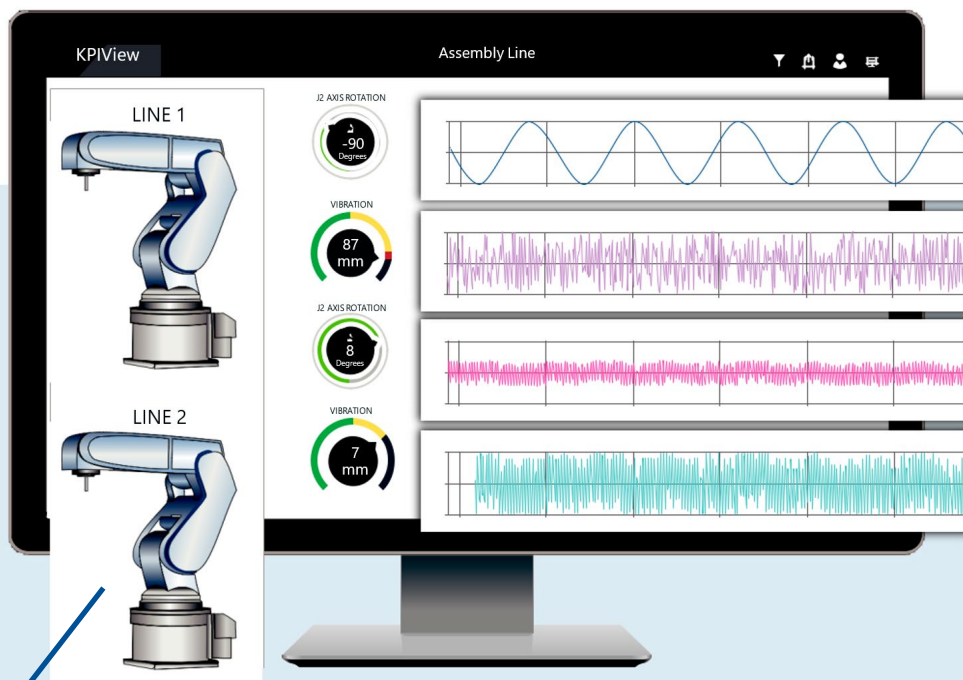


Cloud SCADA systems can be backed up [securely off site](#); your [data is safe](#) from equipment damage or natural disasters.



## IoT Analyzer

Provides edge analytics with built-in fault rules and workflow technology. Stores and buffers FDD analytics data and automatically merges it with SMAR AnalyticsView in the cloud.



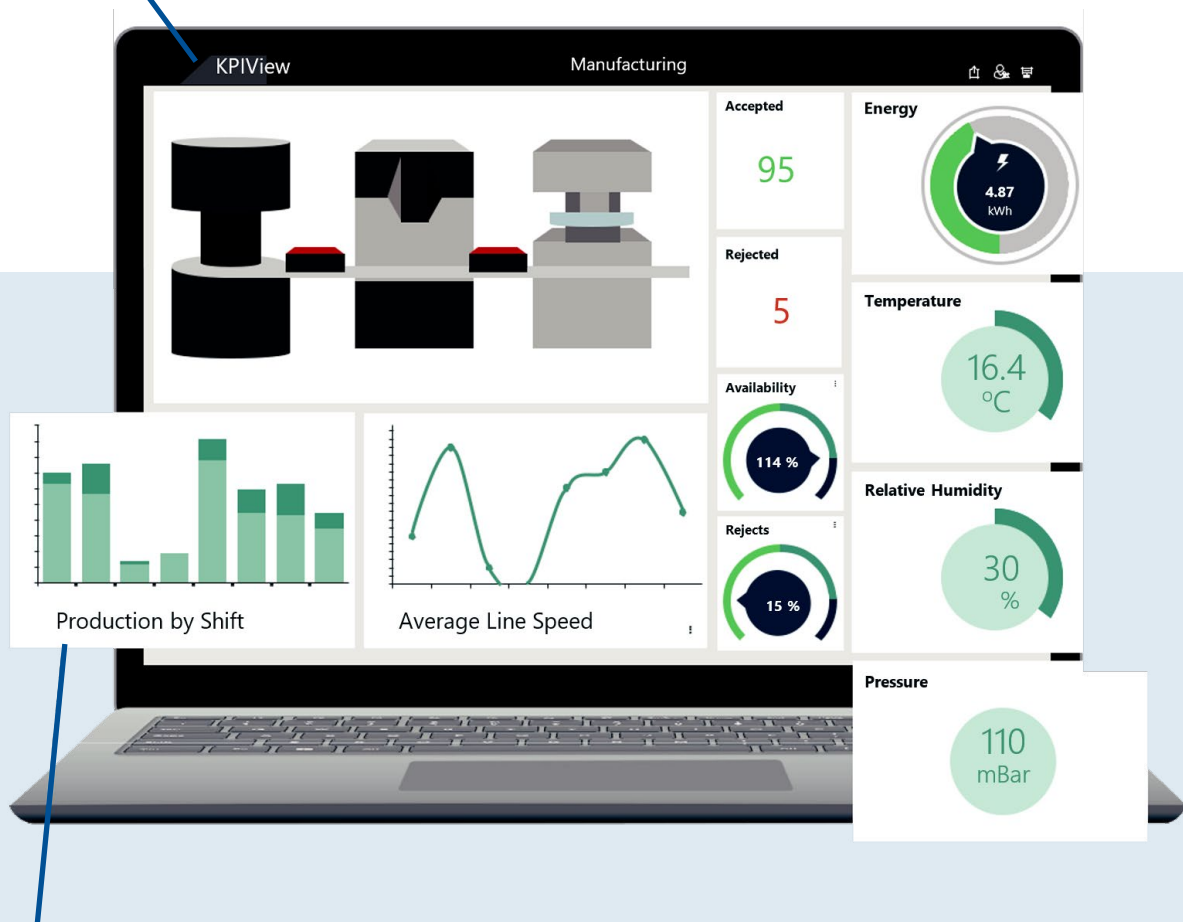
## IoT Cloud Connector for Secure Data Transfer

Publishes real-time data from field devices via AMQP to the Azure IoT Hub or via MQTT to other cloud platforms and 3rd party business systems.



## IoT Visualizer

On-premises visualization of IIoTView data using SMAR KPIView app. Download the app from the Apple, Google, or Microsoft Stores.



## IoT Communicator for Universal Connectivity

Bidirectional real-time communication to sensors and other field devices via popular standard protocols such as OPC UA, BACnet, SNMP, Modbus, and OPC Tunneling.

## Industry Challenges and Opportunities

Are you looking to improve your business processes, financials, and decision-making? What if a new technology could make the invisible, visible, and enable you to make better informed decisions in operating your buildings or factories? The Internet of Things (IoT), driven by Industry 4.0 initiatives, introduces the ability to reduce costs, increase your operational efficiency, and improve sustainability, all in one end-to-end solution.

## Ideal for Any Industry

For over four decades, SMAR industrial automation software solutions have met and exceeded real customer needs in multiple industries, including:

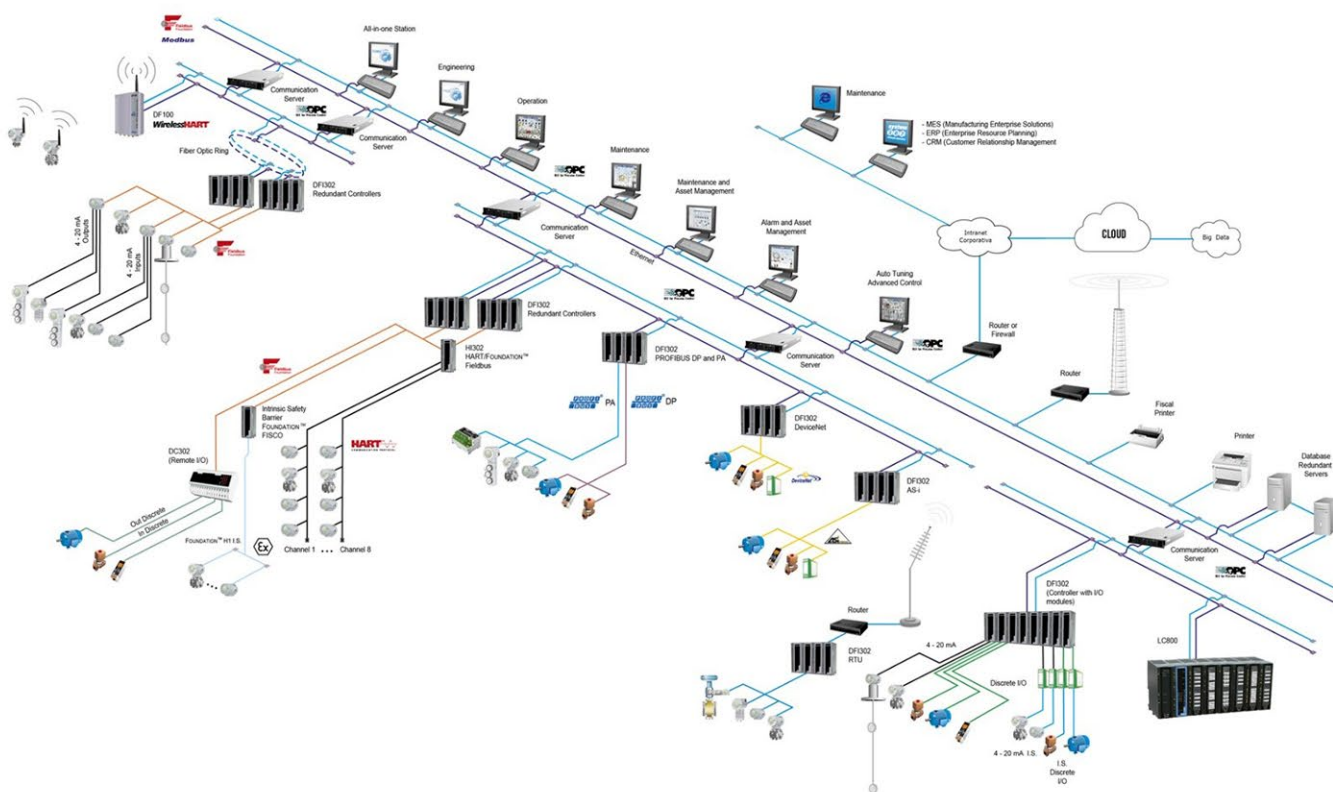
- Oil & Gas
- Sugar & Alcohol
- Petrochemical
- Pharmaceutical
- Chemical and Biotechnology
- Pulp & Paper
- Food and Beverage
- Water and Wastewater
- Mining & Metals





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**system**  
**302**

Open Digital Ecosystem

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