



Enterprise Sensor Integration

Your Gateway to the Industrial Internet of Things (IIoT)

Global Services

ESI: Enterprise Sensor Integration

Accelerating IIoT Digital Transformation

As a powerful digital platform for manufacturing and supply chain operations, ESI solves critical integration challenges for our customers and accelerates IIoT digital transformation across their operations. It works by connecting, automating, tracking and analyzing data and processes through a single interface. The award-winning technology empowers organizations with unmatched situational awareness and huge savings due to:

- Improved inventory control and asset loss prevention
- Comprehensive standardization of processes
- Big Data analytics for faster, better decisions
- Improved productivity with automated processes that reduce labor and manual inputs
- Dynamic visual applications providing real-time asset visibility and historical usage data
- Real-time alerts that improve safety and ensure compliance

ESI solves connectivity challenges due to the growing number of disparate sensor technologies that speak different languages. It provides a single “sensor agnostic” platform for managing data, regardless of hardware and sensor types or brands. ESI can operate in the cloud or on dedicated on-premise servers.

Through data fusion, ESI seamlessly integrates data from Radio Frequency Identification (RFID) tags; passive and active GPS-enabled WiFi tags; Ultra Wideband (UWB) sensors, embedded hardware; device/application data; and complex servers, supporting ERP, MRP and MES integration.

This ensures end-to-end visibility for equipment, tool sets, parts and shop stock. It also tracks work-in-progress, calibration due dates, temperature levels of composite materials and chemicals, and much more.

ESI is proven to process up to 10 million sensor reads per week and save organizations millions each year. At Boeing, ESI has been rolled out across 27 major manufacturing sites comprising over 300 buildings.

The technology integrates multiple ERP, logistics and procurement systems – along with sensor and RF tags – through a common interface. Now, thousands of users can view various maps, zones and corresponding assets, kits and assemblies on a single integrated platform.

[Boeing Global Services](https://www.boeing.com)
www.boeing.com



Above: ESI in action at the Everett Plant (prior to COVID restrictions)

At Boeing, ESI saves millions of dollars annually through decreased assembly time, automated asset receipt/payment, enhanced inventory management, and improved productivity, quality and safety.

For BAE Systems, ESI-enabled RFID solution tracks and manages over 200,000 assets, 30,000 parts and 6,500 work orders. The award-winning solution has significantly accelerated manufacturing processes while improving quality. The automated material replenishment has transformed its supply chain, enabling a “just-in-time” inventory flow.

From manufacturing to supply chain operations, ESI will accelerate digital transformation and grow your bottom line.