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Festo AX Energy Insights – Energy Efficiency to go



Highlights

- Continuous energy monitoring of compressed air and electrical power
- Automatic leakage detection with AI fingerprint and intelligent consumption analysis
- Works with sensors from both Festo and third-party: pressure, flow rate and electricity meters
- Simple visualisations and access via a browser
- Ensures transparency of consumption and helps to track optimisation measures

Added value from data: Festo AX Industrial Apps
Boost your company's productivity (OEE) and optimise your production based on data. Rely on intelligent technologies, proven tools and an experienced, competent partner.

Because data makes it possible to plan the unplanned.

Full transparency and early detection of leakages
The industrial app "Energy Insights" provides complete transparency of the pneumatic and electrical power consumption of machines and systems. Thanks to integrated AI-based leakage detection, leakages are automatically and reliably detected, so that it is possible to react quickly and save valuable energy. Studies show an optimisation potential of up to 50% in pneumatic networks.

Easy integration and quick start
The open sensor concept and flexible connection options of the app make integration into existing systems very easy. The various options for connecting the sensors as well as the integrated AI models make it quick and straightforward to get started with energy monitoring. This is how you can make an effortless start to your journey towards energy-efficient automation.

Benefits
- An increase of up to 50% in efficiency in the compressed air network is possible
- Transparent consumption
- Traceability of the effectiveness of optimisation measures
- Integration with maintenance management for sustainable improvements
- Flexible use from edge to cloud

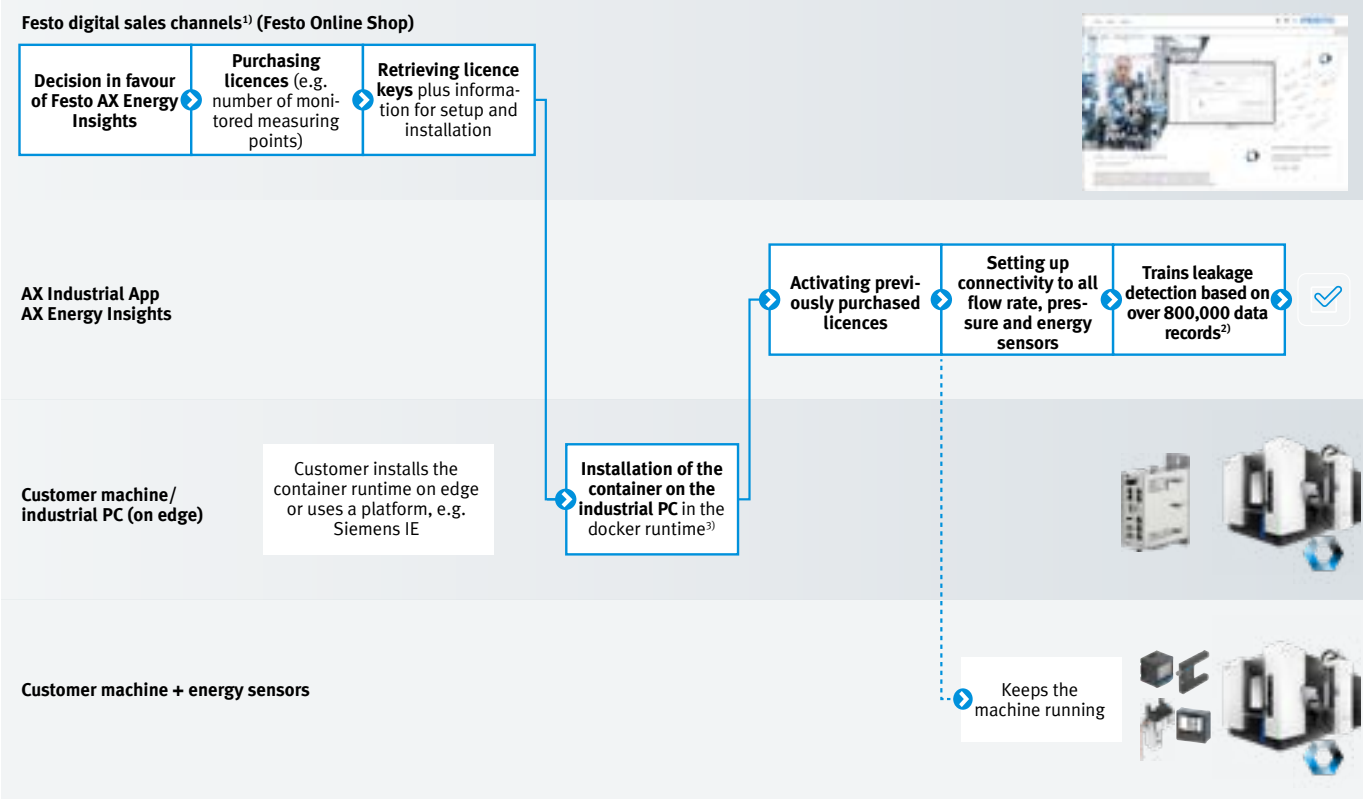
Additional information:

Product page GASA-EI-CTR-...
> www.festo.com/AX

Online Shop/App World
> Festo AX Energy Insights

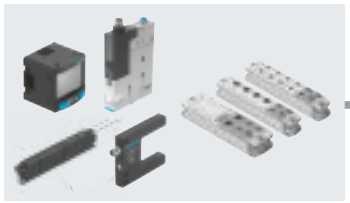
How to install Festo AX Energy Insights

The container technology used runs Festo AX Energy Insights on industrial PCs, servers and virtual machines. The scope of delivery includes a browser-based dashboard for every measuring point with all details and a summary of all important data, including trend analysis.



1) Festo Online Shop (formerly: Festo App World) or third-party ecosystem
2) Training data: corresponds to about 2 days of energy data from production
3) Could be completed before purchase, e.g. to prepare machines for AX IE

Topology and dashboards

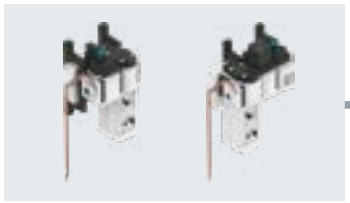


Connecting analogue or IO-Link® sensors via CPX-AP-I (Ethernet/IP), or with Modbus TCP

Modbus

Node-RED

NodeRED flow



MSE6-E2M / MSE6-C2M

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Festo-specific

Festo AX Data Access



Existing sensors and I/O modules from third-party providers

PLC-specific

Customised system integration via PLC and OT/IT middleware



The open sensor concept enables extensive integration into existing or new structures

Data from sensors from different manufacturers can be integrated. Festo offers a wide range of pressure and flow sensors. Our energy efficiency modules from the MSE6-E2M and MSE6-C2M series are ideal for connection and also supply pressure and flow rate. The connectivity included greatly simplifies commissioning with these modules and it can be completed with just a few clicks.

The Festo AX Industrial Intelligence portfolio



Festo AX projects
Detect complex or specific, individual problems before they occur with the help of artificial intelligence and machine learning. Find out about failures, wear or loss of quality at an early stage and take proactive action. For both large and compact production processes.



Festo AX solutions
We offer standardised AI solution packages for more complex systems or functional assemblies that can be adapted to your specific application with little effort. And the best thing is that you get them at a fixed price for various applications such as welding guns, dosing applications or complete handling solutions.



Festo AX Industrial Apps
“Plug-and-play”: download the app and get started! We offer the Festo AX Industrial Apps as a standardised solution that you can connect yourself. Some of the available apps can be used for monitoring electric and pneumatic actuators, the overall power consumption or MQTT data access to all our fieldbus products.



Festo AX Smartenance
Smartenance is a Computerised Maintenance Management System (CMMS) software that simplifies maintenance and servicing management. It enables maintenance as well as malfunctions to be planned and processed efficiently and transparently, with integrated information and spare parts management for all Festo products.



Festo AX Asset Type Packages
The special thing about Festo AX: we offer flexible, standardised and simplified AI for your devices and assets. Asset Type Packages encapsulate the AI model and data interface for new assets and provide everything you need for monitoring, including the AI model and dashboard. They are then easy to scale, allow auto-onboarding and therefore large-scale, fully automated rollouts for new devices.



Automation App Award
Festo AX Industrial Apps won the coveted award in the "Industrial IoT" category in 2025. The award celebrates outstanding software solutions that provide innovative approaches that advance the automation sector, and offer an impressively high user value, intuitive operation and maximum added value for the industry.