The digital enterprise infrastructure

Solutions facilitating safety, security and efficiency
Factory Automation

Integrated safety and security for the digital enterprise

The technical evolution is moving ahead quickly—from an abstract trend to a specific concept with complex details, the concepts of Industry 4.0 and IoT are a reality. The increasing complexity of smart factories, adaptive production systems and new business models also bring an entire set of safety and security related issues that need to be considered.

Throughout the digital transformation process, UL is your partner on all levels of factory automation, including cybersecurity of the network, system and operational levels of the plant. We offer comprehensive security solutions to help assure that smart production is running more effectively, safely and securely.

Cybersecurity to mitigate risk

Critical infrastructures or asset owners can mitigate cyber risks in new or retrofit installations by specifying control systems be tested or certified as per IEC 62443 or UL 2900-2-2.

Leverage UL’s cybersecurity expertise and integrity to gain transparency and validation of supply chain security for a more secure and robust operating environment. Cybersecurity starts on the component level, and UL can help any industrial control system (ICS) manufacturer or system integrator earn customer confidence in the cyber readiness of both their organizational safety practices and system security.

Create brand differentiation and strengthen product preference with UL’s practical and scalable cybersecurity advisory, testing and certification solutions. Through the implementation of criteria within IEC 62443, Industrial Communication Networks – Network and System Security, or UL 2900-2-2, Standard for Software Cybersecurity for Network-Connectable Devices, it is possible to reinforce brand trust through cybersecurity market leadership.

Functional safety on a system level

Focusing on the functional safety at an early-stage of the design process allows flexibility and a reduced need for redesign, and accelerates market acceptance and future cost savings. With rapid advancements in digital technology driving product design and development, the significance of functional safety to product success continues to become an essential part of a safer and more secure factory automation environment.

EMC compliance in the factory automation environment

In today’s factory automation environment, smart devices communicate wirelessly and UL’s EMC / EMF expertise regarding the compliance of components helps drive the safety of the production line and its operators.

Safety on a plant level

Trust UL with safety evaluation, certification and inspection of products and components that are for factory automation. From small to large components within factory automation, such as controls, sensors or robotics, we support suppliers to the digital enterprise by helping to ensure compliance with global requirements.

Empowering Trust with Integrated Safety and Security for the Digital Enterprise

UL drives global research and standards to continually advance to meet the needs of the digital factory automation environment. This program addresses safety-related risks to help ensure that customers have optimized the operability of the digital enterprise.

Early adoption of UL safety and security solutions provides a global competitive advantage in the marketplace. You can reinforce brand trust and market leadership by substantiating organizational safety practices and system security with the trusted independent authority in safety and cybersecurity.

UL’s global network of technical experts and state-of-the-art facilities, along with our longstanding relationships with regulatory authorities, partner laboratories and industry technology leaders, helps all stakeholders receive the compliance credentials they need to compete in a more complex global supply chain.

Our Commitment – Your Benefit

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- Contribute to growing efficiencies
- Increase production and flexible mass production
- Reduce/eliminate downtime and manufacturing disruptions

REDUCE COST

- Effective condition monitoring solutions
- Big data generation, analytics, contribution to the manufacturing processing systems
- Preventive/predictive maintenance and repair

MITIGATE RISK

- Eliminate the loss of intellectual property
- Avoid the loss of data
- Avoid environmental damage
- Minimize life and health risks

Single Source Provider – UL meets all your compliance needs and, by combining the security and interoperability services, contributes to increasing reliable production.

Knowledge You Can Trust – our experienced staff will advise you from the initial design stage of product development through testing and production. Our experts can assist you in understanding the certification requirements for your specific markets.

Speed & Efficiency – our cost-effective systems and state-of-the-art facilities cut through the red tape and help accelerate your time to market.

Global Reach & Access – our global network of expert engineers helps you understand the various national and global requirements for your specific market application.
The digital enterprise infrastructure

- Smart Manufacturing
- Intelligent Energy Management
- Mobility
- Smart Buildings
- Connected Technologies
- Medical/Life Science
- Government/Regulatory
- Logistics & Supply Chain
- Finance
- Consumer