

UL Solutions certifies EtherCAT's Cyber Resilience

UL certificates confirm the EtherCAT Technology Group's assessment and demonstrate that EtherCAT meets IEC 62443 / CRA requirements for Security Level 2 without modifications.

The report and certificates from UL Solutions, following testing in accordance with IEC 62443, confirm the ETG's statements: EtherCAT technology already meets the requirements for systems exposed to cyber attacks corresponding to Security Level 2 without any modifications. In its European version IEC 62443, the international standard for cybersecurity of industrial control systems, will also form the basis for the European Cyber Resilience Act. Furthermore, the investigations show that no hardware changes are necessary for higher security requirements—with targeted software enhancements, higher security levels can also be achieved based on the EtherCAT system.

UL mapped all 100+ System Requirements (SR) of IEC 62443-3-3 to three typical EtherCAT systems with different threat scenarios and evaluated the degree of compliance achieved by EtherCAT.

"We at UL Solutions were delighted to work with an industrial protocol which has security capabilities and enablement-by-design as well as hardware implemented security, which is second-to-none in the category of industrial protocols", says Alexander W. Koehler, S&S Principal Security Advisor for Cybersecurity at UL Solutions. "IT and OT-security have not been best friends in the past. IT security requirements have often been driven by typical short product lifecycles of office worker equipment, which contrast with industrial equipment with long lifecycles. In consequence there are still many products in the industrial field without or weak security built in, labelled as legacy products. EtherCAT is a positive exception here."

Dr. Guido Beckmann, Chair of the Technical Committee of the EtherCAT Technology Group: "The results of the extensive investigations confirm the ETG's assessment: EtherCAT already provides a high level of cyber security protection for industrial applications today. The tested and documented features and measures form the basis for the recommendations and specifications we are developing for manufacturers and users of EtherCAT devices."

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Press picture:



Link: www.ethercat.org/images/press/etg_012026.jpg

Picture caption: UL Solutions Presents Cyber Security Certificate for EtherCAT

From left: Martin Rostan, Executive Director, EtherCAT Technology Group

Torsten Förder, Cybersecurity Expert, Beckhoff Automation

Alexander W. Koehler, S&S Principal Security Advisor for Cybersecurity, UL Solutions

Sebastian Krug, Senior Key Account Executive, UL GmbH

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About the EtherCAT Technology Group:

The EtherCAT Technology Group is an international association of users and manufacturers in which users from various industries collaborate with leading automation providers to support, promote, and further develop EtherCAT technology. It was founded in November 2003 and has over 8,700 member companies from 79 countries.

About EtherCAT®:

EtherCAT is the Industrial Ethernet technology characterized by outstanding performance, low cost, flexible topology, and ease of use. EtherCAT was first introduced in 2003 and has been an international IEC and SEMI standard since 2007. EtherCAT is an open technology: everyone is invited to implement and use EtherCAT.

➔ Further information is available online at www.ethercat.org.

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