

The ISA Secure IIoT Component Security Assurance (ICSA) Certification

What is the ICSA Certification?

In September 2022, ISA Secure [announced the IIoT Component Security Assurance \(ICSA\) certification](#), developed by ISA Security Compliance Institute (ISCI) member companies and inspired by recommendations published in an ISCI and ISA Global Cybersecurity Alliance (ISAGCA) co-sponsored study, "[IIoT Component Certification Based on the 62443 Standard](#)." The study addressed the urgent need expressed by asset owners for an industry-vetted IIoT certification program, with the goal of determining the applicability of the ANSI/ISA 62443 series of standards (adopted by the International Electrotechnical Commission as IEC 62443) and existing certifications to IIoT devices and gateways.

The study results determined that the standards ISA/IEC 62443-4-1, ISA/IEC 62443-4-2, and the ISA Secure certification [Component Security Assurance \(CSA\)](#) that assesses conformance to these standards were suitable for use in securing IIoT devices and gateways, covering 90% of the desired criteria for IIoT certification. For the additional 10% of criteria desired, the ICSA certification adds several new requirements and modifications, including:

- A restructuring of the ISA/IEC 62443 capability security levels by creating two certification tiers instead of four levels.

- New certification requirements, including functional requirements and security development lifecycle requirements that address unique characteristics of the IIoT component environment.

- Removing as certification criteria, a small number of existing ISA/IEC 62443-4-2 requirements not applicable for IIoT components.

- Refining methods for assessing conformance to ISA/IEC 62443-4-2 requirements by focusing on addressing challenges specific to the IIoT environment (i.e., IIoT-specific use-cases).

What are the Benefits to Obtaining the ICSA Certification?

The ICSA certification, issued by trusted ISO 17065 accredited certification bodies (CBs), is specifically designed for IIoT products and certifies to the industry-leading [ISA/IEC 62443 series of international standards](#). Those who obtain the ICSA certification can demonstrate independent confirmation of their IIoT products' cybersecurity capabilities and stand out from their competition.

The ICSA "Core Tier" certification meets all of ISA Secure's CSA level 1 requirements and most of its level 2 requirements as specified in ISA/IEC 62443-4-2. The ICSA "Advanced Tier" certification meets most CSA level 3 and level 4 requirements as specified in ISA/IEC 62443-4-2. ISCI established a formal process under which CSA or ICSA certificate holders can achieve both certifications with only minimal additional effort.

The ICSA certification has been created in accordance with commonly accepted security practices for IIoT. As this technology will likely change over time, ISCI will update certification guidance periodically, rather than maintain overly prescriptive certification requirements.

How Do I Get the ICSA Certification?

Formal [ICSA product certification specifications](#) have been posted to the [ISA Secure website](#) and [ISA Secure's certification bodies \(CBs\)](#) are ready to accept IIoT devices and gateways for certification.

To learn more about the ICSA certification, please view our complimentary webinar.

