



# CertIoT™

Objective Third-Party Cyber Security Certification for Connected Devices

DATASHEET

## Position Yourself as a Secure Manufacturer

Smart connected devices are becoming more and more common, surrounding us in our day to day lives. Unfortunately, many of these devices have not implemented the basic security building blocks, opening the door to emerging risks and attacks. Smart devices users, whether at home or business, should choose secure devices in order to keep their assets and networks safe. While users are looking for secure devices, the reality today is that they find it hard to determine whether a device is well designed with security in mind. VDOO CertIoT™ is here to change this reality and allow device manufacturers to prove to their integrators and users that they are doing the right thing and securing their devices.

## Certification Criteria Based on Your Specific Device

Standardization bodies, regulators and industry groups are working to define the criteria for properly cyber-secure devices. However, in many cases these criteria are too generic in an attempt to stay relevant for many different device types - comprised of different software and hardware components, resulting in vague, impractical requirements. In other cases, these criteria are too specific, trying to address a very small segment of device types and by this becoming irrelevant to other devices. To address this, VDOO CertIoT™ criteria are generated based on the device and its firmware version combination. This allows the manufacturer to specifically address the security requirements that should be implemented in the specific device, based on its type, hardware components, software libraries, and features. Complying with the specific security requirements of the device will allow its certification as proof to potential users that security was taken into consideration when creating or updating the device.

**VDOO Certificate**

Issued to: Acme Corp Ltd.

*This is to certify that on July 2018 The Product:*

**Acme IPC8961**  
Firmware Version: 2.x.4.3

Has been assessed by VDOO Threat Analysis Engine and verified to be secure according to security requirements derived from the device software and hardware attributes.

**Valid until:** July 2019

**Certificate Condition**  
The certificate is valid as long as no major changes have been made to the product or its firmware. Changes will be considered major in the following cases: New software or hardware components were added; The analysis process identified new attributes led to high or medium security issues.

*VDOO Connected Trust Ltd.*

**Certification No.**  
208065-433

## Help Your Customers Make a Conscious Buying Decision

Based on Vision™, VDOO's automated analysis solution, a device profile is created, including a clear definition of what needs to be done to secure the device. Once the manufacturer has completed the necessary security measures, the device is eligible for being certified. VDOO CertIoT™ proves that the necessary security measures were properly implemented in the device.



To clearly point out the device security as a competitive advantage to potential users, VDOO CertIoT™ comes with a kit containing the following: a deed that testifies which security measures were implemented, a digital seal that can be added to the product page on the manufacturer's website and physical seal that can be added to the device package. In addition, a digital certificate can be added to VDOO's ERA™, Embedded Runtime Agent, for signaling to other network solutions that the device is secure, allowing these solutions to make conscious security decisions.

### Global Standards Compliance Made Easy

While CertIoT™ prerequisite is the compliance with VDOO's device-specific security requirements, some device manufacturers are required to comply with specific industry regulation or guidance, complementing the device-specific requirements implementation. VDOO requirements are mapped to over 10 of the leading, most prominent security standards and regulations (and constantly expanding to more) to allow compliance readiness. Once the certification is achieved, CertIoT™ will include the list of the security requirements that were completed to comply with the necessary security level.

### Technical Process

CertIoT™ is the only VDOO product that requires completion of a preliminary step before it can be purchased – the device needs to be eligible for certification. VDOO's Vision™ automatic analysis solution or VDOO's manual security validation are used to point out the essential and important requirements that must be completed for certification eligibility. Using Vision™ is the most effective way to complete the necessary requirements, as it helps the device manufacturer to mitigate security gaps in a balanced, cost-effective way, including step-by-step guidance on how to implement the necessary requirements.

### Proprietary Research Approach

VDOO CertIoT™ was designed based on vast research of embedded device threats which includes the device components, hardware, OS, kernel, and software libraries, As well as aggregation of IoT malwares and exploits samples and huge database of embedded-systems vulnerabilities. This allows manufacturers to achieve reality of security by implementing the right security measures in the device.

CertIoT™ is a one-level certification: completing the necessary steps to secure your devices, leads to a certification. Devices that have completed the necessary requirements successfully will not be affected by top IoT malware types, such as Mirai, VPNFilter, Torii, Chalubo, and more. Manufacturers are recommended to achieve CertIoT™, first to secure their devices, and second, to prove it to the market and complement reality of security with the sense of security needed in a rapidly changing, security dependent market such as the IoT market.

### About VDOO

VDOO was established in 2017 to pioneer embedded systems security, with an end-to-end solution of security automation, certification, and protection. The VDOO founders' backgrounds include an endpoint cybersecurity startup acquired by Palo Alto Networks, as well as notable experience serving in the Israeli Intelligence Elite Unit. For additional information, please contact us at [info@vdoo.com](mailto:info@vdoo.com) or visit our website [vdoo.com](http://vdoo.com).

## Key Features



- Based on device-specific attributes
- Physical seal and digital signature
- Suitable to any device type

## Key Benefits



- Proves security implementation to market
- Enables the users to make smart decision
- Mapped to leading regulations & standards

## Related Products



- VDOO Vision™
- VDOO ERA™