# Device Certificates

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Secure connectivity has never been more important.

Cryptera's Device Certificate solution enables seamless, secure cloud connectivity for your devices.



## HIGHLIGHTS

### Security

- Managed key storage with back-up
- FIPS Level 2 HSM CA key storage
- Audited key storage facility in the nordics
- Secure API
- Centralized secure logging
- Authenticion, access control and key policies

#### Features

- Issue x.509 certificates with CA functionality
- ECDSA and RSA
- Easy to use with simple APIs
- Enables secure device to cloud connectivity (e.g. AWS, Azure)
- Enables scure device onboarding in the field (JITP and ZTP)
- Includes tools and guidance for secure manufacturing

#### Compliance

- Aligns with IEC 62443-4-1/4-2 and ETSI EN 303 645
- Advice on upcoming EU legislation (CRA & RED)



## **OVERVIEW**

Data fuels the digital economy, and connected devices deliver lots of it. To deliver data you can trust, and to avoid leaking sensitive data when sending it from a connected device to the cloud, you need encryption, integrity and authentication.

All of this can be achieved by using digital certificates. Introducing the use of certificates in connected devices can be hard and requires expertise across multiple domains if you want to gain the full benefits of scaling your device fleet.

Cryptera gets you all the way from manufacturing to the cloud when integrating device certificates for cloud communication.



Cryptera's Device Certificate solution provides device certificates as a service and secure key storage using Cryptera's KeyServer.

This integrates easily with device onboarding solutions for cloud IoT services such as Azure IoT hub and AWS IoT with the use of Azure DPS or Just-in-time provisioning using AWS.

Additionally, we help you integrate this into a manufacturing setup, enabling you to add certificates to your devices in a secure and scalable way.



## **SUPERIOR KEY STORAGE**

The KeyServer Device Certificate solution provides you with a private certificate authority (CA) and protected API access for issuing digital (x.509) certificates, leveraging secure key storage while providing ease of access for you.

Prev	ents key abuse
$\rightarrow$	API access is protected with authentication and access control
Prot	ects against key leakage
$\rightarrow$	Keys are stored in FIPS 140-2 Level 2 approved HSMs in a secure and audited key storage facility in the nordics
Prev	ents loss of critical keys
$\rightarrow$	Encrypted back-up is performed continuously

KeyServer also provides advanced access control concepts that anchor authentication within the hardware security module. This means that even Cryptera does not have access to your keys stored in the hardware security module.

#### About Cryptera

For more than 30 years, Cryptera has supported customers across virtually every sector and continent with over two million world class security solutions installed worldwide. We are experts in the fields of encryption, certification and secure provisioning. We offer a full span of solutions comprising of hardware, software and services to protect sensitive information using cryptographic methods and secure processes.

With in-house manufacturing, R&D and support functions, Cryptera has a vast experience to ensure that solutions meet various regulatory compliances and standards. Our team of engineers and experts can help you to create robust device security with the highest security measures, to safeguard your connected devices.



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