

# The Common Criteria Certification and EAL 4-6+.

ICT's smart credentials are evaluated for the security level they can protect against. But what does this mean and what benefit do they bring to you?

## The evaluation.

The Common Criteria for Information Technology Security Evaluation (Common Criteria) for MIFARE DESFire smart cards.

## The meaning and benefit.

Common Criteria is a framework that technology companies must have their claims evaluated against. This process assures that evaluations for the specification, implementation, and evaluation of a security product have been conducted in a rigorous, standardized, and repeatable way at a level that corresponds with the technologies target use environment. If the evaluation is successful, the vendor achieves the Common Criteria certification.

Part of the Common Criteria are the Evaluation Assurance Levels (EAL), which are a grade given in relation to how the product addresses the Common Criteria Framework. There are seven levels overall, each more stringent than the last.

MIFARE DESFire EV1 smart cards are methodically designed, tested, and reviewed, reaching an EAL4+ grade. While EV2 cards are even higher rated at EAL5+. Both EV1 and EV2 versions are available as standalone DESFire, or multi-technology DESFire and 125kHz credentials to assist with transition from older proximity card technology to more secure smart cards.

The evaluations ensure that the Advanced Encryption Standard (AES) used in the DESFire cards meets the requirements for high-security premises like government facilities and critical infrastructure facilities. The AES-128bit encryption uses a cryptographic module to encrypt the data on the device. With  $2^{128}$  possible combinations, it would take a super-computer over 2.6 trillion years to crack the code. This encryption standard is one of the highest available and ensures your people and property are protected against card cloning and data theft.

## Target applications.

Any place and vertical can benefit from a robust unified access control and security solution, including:

- > Government facilities
- > Utility facilities
- > Airports and transport hubs
- > Correctional facilities
- > Banks and financial institutions
- > Residential buildings and dorms
- > Mixed-use facilities
- > Commercial buildings
- > Office buildings
- > Warehouses and factories