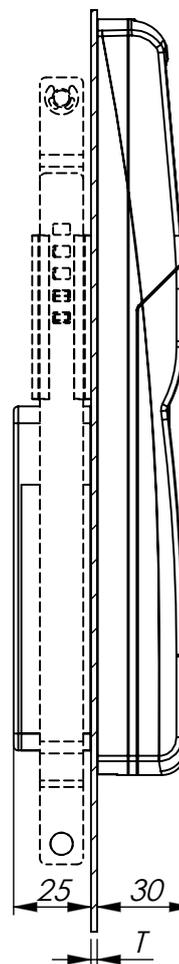
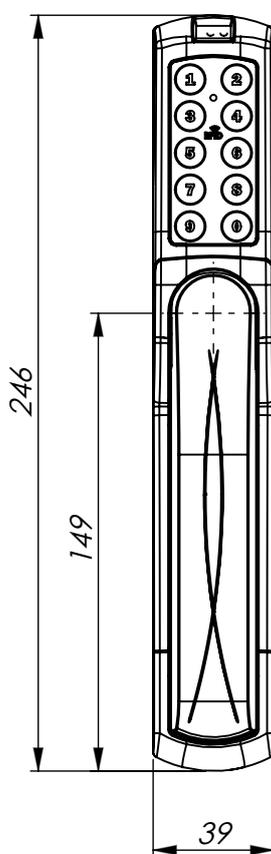




**Material:**

- Battery box and center dish: Glass fibre reinforced Polyamide PA6GF30.
- Handle and upper and lower dish: Zinc, die-cast, powder coated.
- Pivot shaft: Zinc, zinc plated.
- Motor shaft: Steel.



The latest state of the art electronic is used in these electronic swing handles. Allows for years of usage with only two standard batteries\*, thanks to the ultra-low power components utilized.

The Electronic Swing Handle is developed in two versions.

- 1) Stand-alone, battery operated\* with limited features.
- 2) Cloud-connected, using mobile keys, with web-based administration tools.

Both versions have a keypad, RFID reader, OLED display, input for door monitor switch and optional Bluetooth and/or USB connection.

**1. Stand-alone (Offline) version**

You can choose access via RFID, PIN-code or a combination of both. Designed to be used with batteries lasting for years of operation\* means quick and simple installation without need for wiring. The stand-alone variant is intended mainly for single installations with limited requirements on administration and maintenance. All administration is handled using a smart-phone app via a Bluetooth connection. The user database, audit trail and event logs can only be managed in close proximity to the lock. The USB connection serves mainly as a means to provide backup power in case of depleted batteries. Number of users in database: 100. Number of events in audit trail: 1000.

**2) Cloud Connected (Online) version**

The cloud connected version is intended for professional access control applications with requirements for easy administration and maintenance as well as easy integration with 3rd party access control systems via API services provided by the Industrilas Cloud Service. All communication is secured via TLS 1.2 encryption. The connected version is primarily intended for mobile key access, using a mobile phone as a trusted access token. If the lock goes offline due to network problems, all events are stored locally and will be updated when online again.

A patent pending blocking of the rotating pivot shaft guarantees a high security level. A door monitor switch can be connected to the handle, as well as external power supply. It's primarily designed to be used with Industrilas latching systems with gear box and flat rods.



### Power supply

Battery operated: 2 x CR123A (Lifetime 2 years or 40 000 operations).  
 External power supply: 12V DC, max 100 mA (50 uA standby).

### Supported card technologies

Supports standard 13.56 MHz RFID standards ISO14443A, ISO14443B and ISO15693. (E.g. Mifare Ultralight, NFC Forum, Mifare DESfire, Mifare Classic, Mifare Plus). Reads UID only (supports 4, 7 and 10 byte UID's).

### Features

- Operating modes for offline version: 1) Card only, 2) Card + PIN, 3) PIN only
- External sensor for door position.
- Real time clock with calendar.
- Number of users: 1 00 (offline-version), unlimited (online version).
- Event log with last 1 000 events stored locally in swing handle. Online version continuously upload events to database. All events are time-stamped.

### Security

The security aspects of swing handle are mainly dealt with by the Vinnter SAA Service. It involves the below functionalities:

- End-to-end TLS 1.2 encryption from the unlock request to the end-point lock.
- Unique certificate tokens are generated and encrypted for each access request.
- "Things", e.g. a lock, are "owned" by a party which is the only one allowed to access or grant access to another party.
- Access to management systems through web page or app is TLS 1.2 encrypted and protected by accounts with enforcement of complex password policies.
- Log entries are stored in a block-chain, making it virtually impossible to review without the correct authentication.
- Log storage is performed with block-chain security techniques.



### References, Accessories:

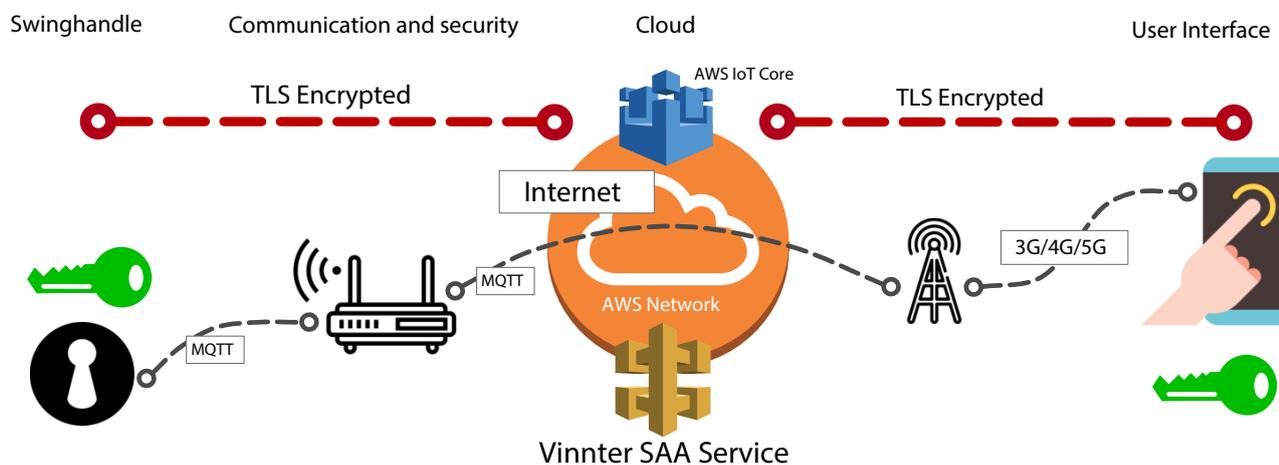
- Latching systems: Page 1-008.04 to 1-008.25.

### Notes, Tests:

\* = Battery Operated: 2 x CR123 Lithium.

Cut-out, version B: Page 1-001.01

## Secure access solution



Generated per access by the Vinnter SAA Service