

eCLIQ System: The key to electronic locking

ASSA ABLOY

Technical Overview

The global leader in
door opening solutions

eCLIQ: The key to electronic locking

More durable, more secure and more efficient than conventional locking systems

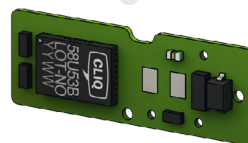
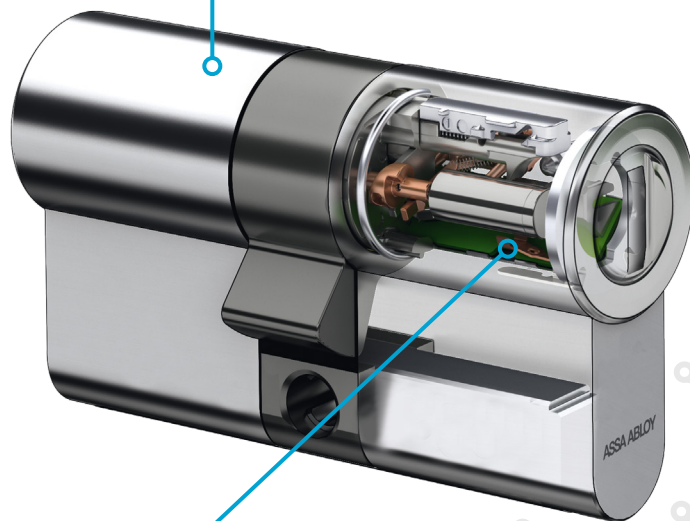
A completely electronic locking system, eCLIQ is based on the mechanical precision and microelectronic modules of ASSA ABLOY's CLIQ® technology.

Secure, reliable and uncomplicated, the powerful microelectronics in the programmable waterproof key and compact electronic locking cylinder together provide the strongest possible security.

eCLIQ solves the problem of lost keys. As each key is individually programmable, access rights can easily be deleted leading to higher security.



Cylinders are easy and quick to install, no cabling is needed.



New, future-proof CLIQ® chip generation with AES encryption and rapid processing speed with efficient energy management.

Compact, programmable, reversible, waterproof key with LED function display and acoustic.



The electronic contact between keys and cylinders transmits power and data securely.



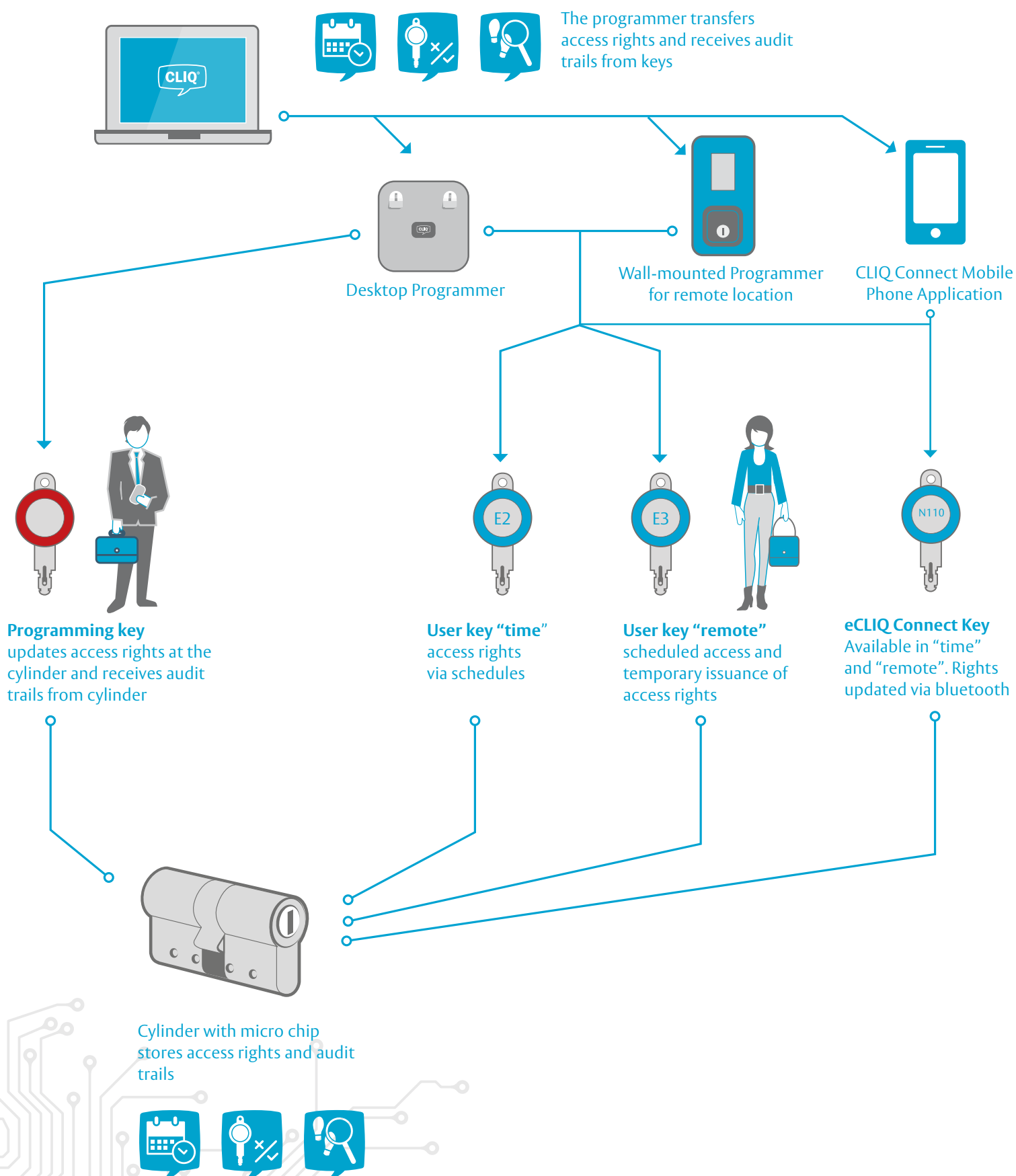
Keys and cylinders can be programmed with flexible access rights and schedules.



Fast, easy standard battery replacement in the key – no need for specialist tools.

Managing the eCLIQ system

Maximum flexibility to assign and revoke access rights



eCLIQ fits everywhere

Easy installation – no wiring required

The compact eCLIQ locking cylinder offers the highest levels of security. With the widest range of different cylinder types, the system is designed for every kind of use from the company entrance gate to securing the alarm systems, IT Server racks, doors and cabinets.

The system offers certifications for all areas of use, including external areas, ensuring building operators comply with regulations.

eCLIQ – total design flexibility

- Wide range of locking cylinders
- 200,000 cycles of maintenance-free use
- Easy installation, no wiring



Server racks
e. g. N532



Roller Shutter Doors
e. g. Cylinder N098



Outdoor containers
e. g. Padlock N315



Main Entrance
e. g. Double cylinder N531



Office Doors
e. g. Thumbturn Cylinder N534



Security Key Box
e. g. Cam lockcylinder N320

The eCLIQ locking system in action

Designed to deliver maximum flexibility and enhanced security for any organisation

Staff changes, short-term employment contracts and partnerships with external companies, are all part of day-to-day operations. Lost keys can easily find their way into unauthorised hands.

The eCLIQ locking system overcomes the challenge of constantly changing access rights. For maximum flexibility and convenience combined with the highest security, eCLIQ is the logical solution.

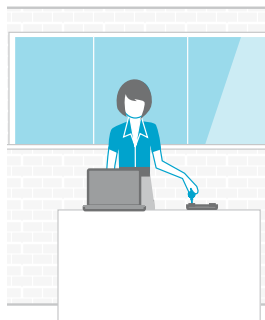
Examples

Administration on the go



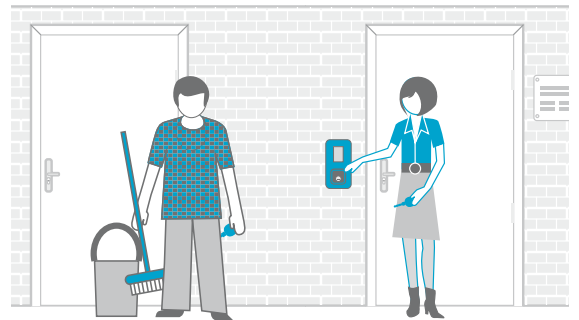
The administrator can manage the system via the CLIQ® Web Manager, anytime, anywhere – the only requirement is internet access.

Administration on site



The receptionist programmes and supervises the issuance/return of the visitor key (E3) with the CLIQ® Web Manager.

Employee on site



For doors with a lower security level, users such as cleaners can have access with no time limitation

For doors with a high security level such as the entrance, access rights for the user keys (E2 or E3) are updated daily from the wall programmer. If a key is lost, access is denied after 24 hours ensuring higher security.

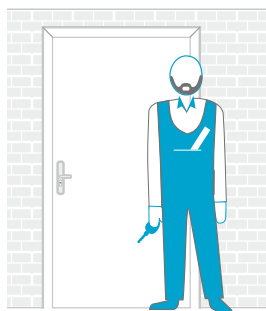
More durable, more secure and more efficient than conventional locking systems, eCLIQ provides enhanced protection for all sizes and types of property delivering the greatest flexibility in the issuance of access rights.

Employee on the go



An employee loses her key and informs the administrator. The administrator revokes the access rights of the key in the software and updates the cylinders, quickly solving the problem.

Employees or contractors on site or out in the field



Security staff use CLIQ® Web Manager and the programming key at a different location to modify authorisations for the locking cylinder or read out audit trails.



For remote locations, users can receive time-limited access rights with their keys (E3) using the mobile programmer and mobile phone.

eCLIQ system components

Keys

- Compact key design ensures stability for problem-free, long-lasting operation
- Protected against temporary immersion in water (IP67)
- Reversible key: Always fits, regardless of which direction it faces when inserted in the cylinder
- Available in three versions (E1 basic, E2 time and E3 remote)
- Optical and acoustic signaling for access entitlements, time zones and battery status
- Integrated standard battery (CR2032 lithium cell) for approximately 30,000 cycles (service life of around 3 years). Battery replacement in the key does not require tools.

Programming key

The red programming key is used to transmit changes in authorisation and event logs between the software and locking cylinders. The key also authorises the use of the software.



User key E1, E2, E3

E1 basic
for simple access authorisations, programming only for Desktop programmer

E2 time
with time-restricted access authorisations and event logs

E3 remote
with time-restricted access rights and event logs plus temporary issuance of access rights



Connect Key

Communicates with a smartphone or tablet using Bluetooth®. Get authorisations and time changes using the CLIQ Connect app.



eCLIQ system components

Cylinders

- High-security protection against manipulation and intelligent break-in attempts
- Integrated microchip for storage of locking authorisations and event logs
- Use in environments with demanding ambient conditions (Temperature range: -25°C to +85°C)
- Maintenance-free up to 200,000 cycles (includes integrated lubricant reserve)
- Central key channel and low core overlap for problem-free installation in combination with security fittings and other locks
- Optional enhanced drilling protection
- Emergency mechanism with user key

Cylinder

The cylinders automatically register all programmed access entitlements and locking processes.



Authorisations

1,000 memory cells for individual keys and groups (each containing over 65,000 keys)

Locking functions

up to 1,500 keys

Event memory

up to 750 events

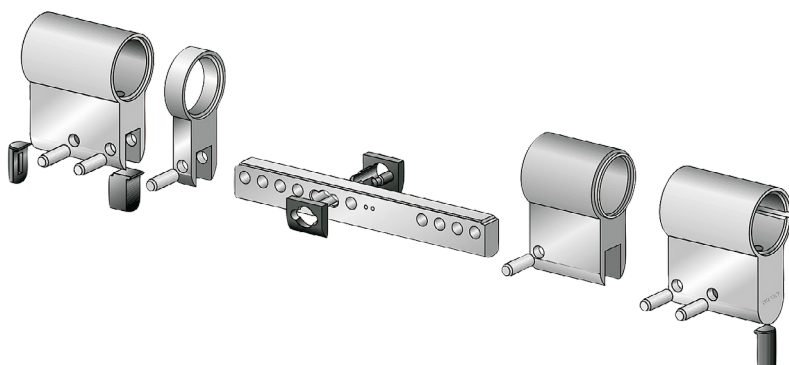
Optional dust and rain protection cap

Outdoor cylinders designed for all weather conditions, e.g. on gates. The cap ensures IP55-rated and fits all cylinder types.



eCLIQ also available with transponder

Key with integrated RFID chip for integration into control of transponder-based systems, e.g. access control systems.



Flexible modular system

Euro Profile cylinders are available standard in 30/30mm or 35/35mm. Larger cylinders are available upon request.

eCLIQ system components

Management software

eCLIQ system offers two management software versions for programming and management of access rights and schedules for keys, doors and users.



PC application
Desktop version

CLIQ® Manager

- One / or several eCLIQ locking systems
- User-friendly MS Outlook-based menu structure
- Clear list of users, keys and cylinders
- Locking authorisation setup and changes
- Function shown in matrix lock chart or door plan view
- Import functions for users and locking system data for key and cylinder audit trail
- Supports working with several programmer keys
- Hardware/Software requirements: MS Windows compatible PC, Pentium IV-1, 5 GHz, 50MB free hard disk memory, 512 MB RAM/ MS Windows XP/ VISTA/ Windows 7



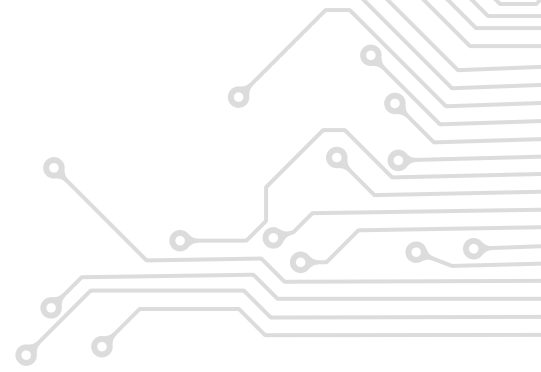
Web Application
System Management
from any location

CLIQ® Web Manager

- Internet application for multiple administrators, used on the client through a standard web browser accessed by the client
- Ideal for managing very large locking systems as well as locking systems spread out over multiple locations
- Enhanced search functions, intelligent assignment and filter functions
- Improved design and “step-by-step” user guidance (requires less training)
- Simple installation and administration through platform-independent design
- Central server and data storage completely network-compatible client/server design – ASSA ABLOY offers Software as a Service Hosting
- Web service interface (. Xml) for communication with third-party applications
- Network connections, 128-bit SSL encryption plus the security afforded by software certificates on client and server

eCLIQ system components

Programmer



The programmer permits changes to times and authorisations (depending on key type) as well the read-out of audit trails.



Desktop Programmer
Used locally and centrally

Desktop programmer

- Communication interface for secure data transmission between CLIQ® Manager and programming key
- Programming of user keys (E1, E2, E3) and reading station for the audit trail memory in the user key (E2+E3)
- Access rights in the software (e.g. time zone, summer/winter time) are uploaded to the user keys and programming key
- USB port



Wall-mounted programmer
Used locally and decentrally (e.g. at entries)

Wall-mounted programmer

- Programming of temporary access of user keys (e.g. valid for 24 h)
- Programming tasks run automatically with optical and acoustic signals
- Battery alert service
- Power supply via 12 – 24 V mains connection or “Power over Ethernet”
- Outdoor version for areas required to be vandal proof (protection rating IP65 and IK09 - vandal proof)
- Mini USB connection for data exchange over cable
- Waterproof (protection from drips)



Mobile programmer
Location independent and used directly at the key carrier

Mobile programmer

- Permits changes to times and authorisations for user keys (E3) as well as the read-out of audit trails
- Receives programming changes to the user key via mobile or PC
- Acoustic and optical signals for operating status and activity progress
- Data transfer to the mobile via Bluetooth and to the PC via USB, no software installation on the mobile programmer
- Battery alert service
- Power supply from standard batteries (4 x type AAA)
- Mini USB connection for data exchange over cable
- Waterproof (protection from drips)



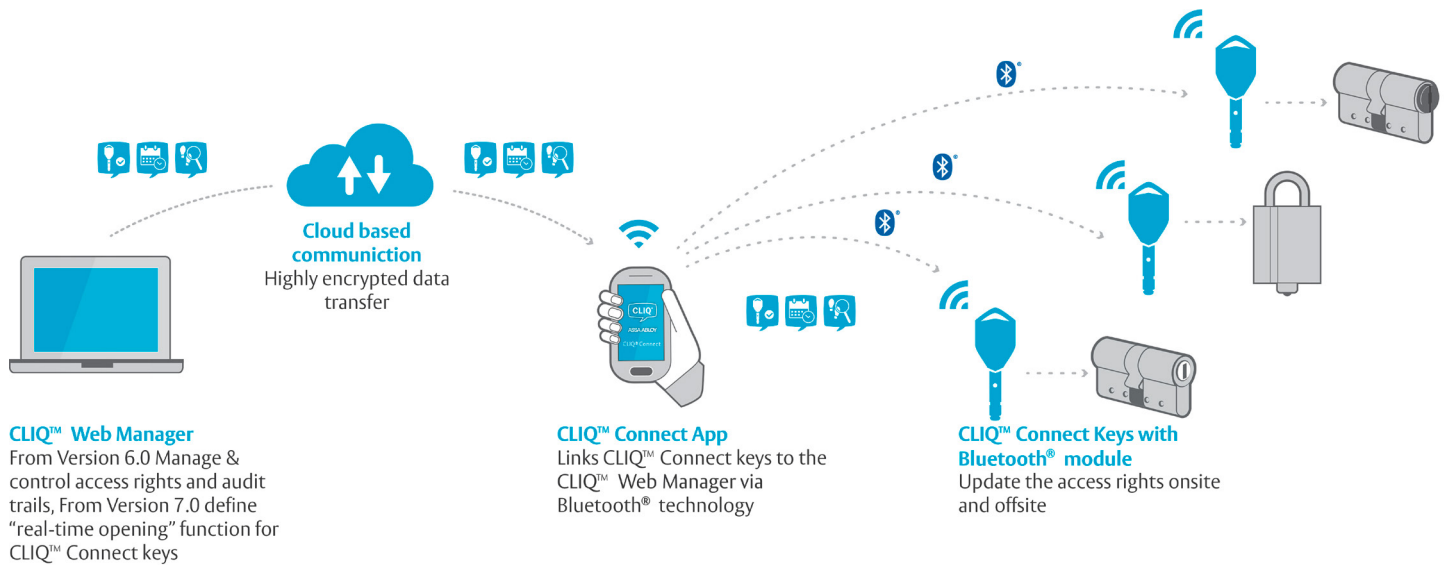
CLIQ Connect
Key update from any location using mobile phone or tablet

CLIQ® Connect Application

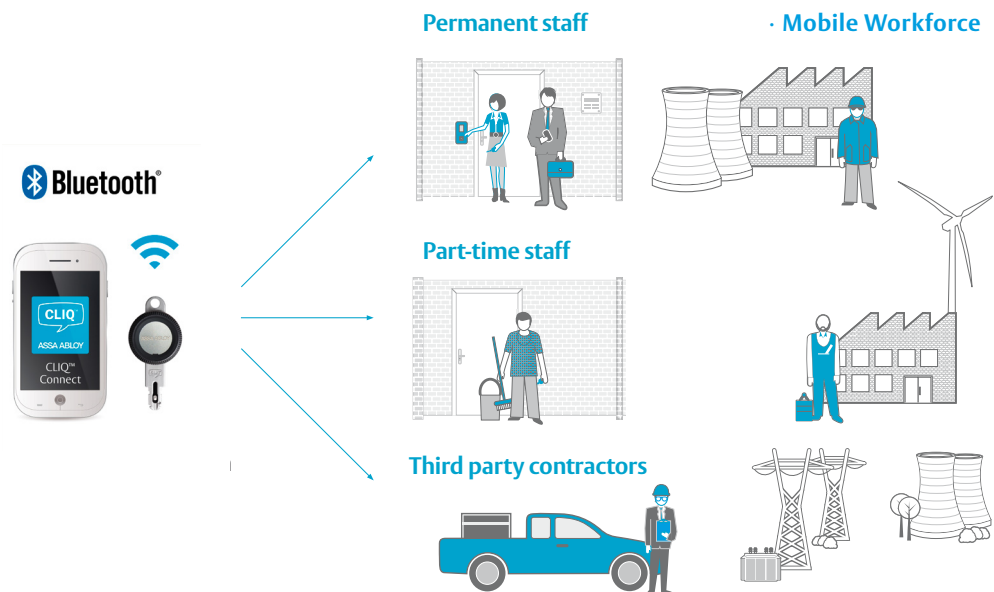
- Mobile phone application allowing for key updates via Bluetooth
- Improved design and “step-by-step” user guidance (requires less training)
- PIN validation function

Enhanced Security Features with eCLIQ

CLIQ Connect



CLIQ Connect enables the Bluetooth®, mobile phone-based connection to the system, ideal for remote environments or campuses with multiple environments. CLIQ Connect works with the CLIQ Web Manager, and provides a smartphone app. This communicates to the key, updating access rights and validating keys off-site. CLIQ Connect also provides for real-time authorisation of a user in the field.



Why choose CLIQ Connect:

- Cost efficient and easy to use
- Users can update keys without a Remote Programming device at hand
- Increased flexibility, as key holders are independent from administrators
- Saves time and reduces risks by enabling easy traceability
- No additional software or maintenance



Increased flexibility as key holders are independent from administrators



Save time and reduces risks by enabling easy traceability of mobile workforce



Environment friendly solution



Secure locking system, perfectly adaptable to changing demands



No additional software maintenance or installation



Works in environments with demanding conditions



Leverage the benefit of your existing CLIQ system already in place.



Utilize existing mobile technologies



Security Features

- Added security via pin validation
- Has Bluetooth® technology incorporated
- The pin code allows the user to validate the key without WiFi / GSM
- The app pairs with the CLIQ Connect keys, transfers audit trails from the key to the CLIQ Web Manager, and supports Online Open Security.
- Lost keys will be blocked immediately when using Online Open
- Securely encrypted communication

CLIQ Connect Key

- Communicates with a smartphone or tablet using Bluetooth® (BLE)
- Get changes to authorisations and time settings using the CLIQ Connect App
- The key has around 10,000 closing procedures by 1,000 Bluetooth® connections
- Key memory capacity 1,500 cylinder/cylinder groups
- Option for direct programming of authorisations without approaching cylinder
- Saves programming procedures

Enhanced Security Features

Online Open

Create an Offline System with the characteristics of an Online Access Control

- Instant revocation of key access
- Real-time transfer of audit trails
- Online Open requires a smartphone, CLIQ Connect App and an online connection
- Ideal for use in high security doors, and rooms that require special clearance (e.g: medicine stores, chemical labs) or where real-time on-site authorisation is needed for sub-contractors

Pin Validation

The pin validation provides a secondary layer of security - ensuring that the person with the key is the correct user. Your smartphone requires you to input your valid pin code prior to the key unlocking the door

- Two-factor authentication
- Biometric identification for IOS devices is possible
- Works offline

Sequence Locking

Sequence Locking is a system in which a second authorisation key is required - ideal for use where a supervisor needs to approve access or 2-level authorisation is required

- Factory setting (i.e: not manipulable)
- Authorisation access - the 4 eyes principle improves accountability
- Supports HSE processes for hazardous environments

Enhanced Sequence Locking

Enhanced Sequence Locking provides the same features as above, but also requires a pin validation, ensuring both user and authoriser are the correct and authorised individuals.

Ideal usage environments:

- Controlled access to safe deposit boxes
- Transportation and logistics
- Cash in transit environments
- Special high-value equipment
- High-voltage areas

