BrightLock

Technical sheet

HAVR is developing tomorrow's access control systems. Today, we seek to make access management easier for companies and individuals while ensuring a high level of security. Centuries ago, locks were invented to keep people out. Nowadays, locks haven't changed but our needs have evolved. Our lives are changing, they are going faster and we are convinced that accesses cannot be limited anymore.

BrightLock technical specification

- THIRARD lock from Transit 2 model

- Euro profile Cylinder – Length 35-35 mm (also fits 30-35 mm)

- Power: 4 NiMH 1.2V batteries, 1900-2450 mAh

- Ideal operating temperature : 17 to 23 °C

- Limit temperature: -10°C to 55°C

- Ideal operating humidity: 50 to 60 % RH

- Limit humidity: up to 95% RH

- Warranty: 2 years

- Weight: 1.100 grams (packaged product)

- Dimensions: 41x153x120mm

- The light sequence is sampled at 50Hz

- Optical fiber receives the light sequence

- Motor Opening duration: 8s

- Motor Rotation speed: 15 rpm

- Data communication uses secure channels: WPA/WPA2, HTTPS

- WiFi specifications: 2.4 GHz, WPA/WPA2, 802.11 b/g/n, +20 dBm output power in 802.11b mode, CCMP (CBC-MAC), TKIP (MIC, RC4)

- A secure element ensures the integrity and security of internal RAM data and ROM storage.

- The BrightLock can handle 1.000 accesses simultaneously.

BrightLock certifications

- CE compliant

- Safety EN 15684 - Mechatronic locks

- *Certification granted by an european testing lab in Netherlands for Mechatronic Locks – ie locks that can be simultaneously mechanically and electronically unlocked and can be replaced by classic european cylinders.*

- *BrightLock had passed through a series of tests like cylinder mechanical durability and attack resistance tests, especially electrostatic discharges and Electromagnetic field attacks.*

- Radio Equipment Directive 2014/65/EU

    - *ETSI 301 489-1 (V2.1.1)*
    - *ETSI 301 489-3/-17*
    - *EN 61000-4-2:2009*
    - *EN 61000-4-3:2006*

- EMC directive 2014/30/EU

    - *ETSI EN 300 328 (V2.1.1)*
    - *EN 62311:2008*

- RoHS regulation 2011/65/EU

- Reach regulation EC No. 1907/2006

- Electrical Safety EN 60950-1 :2006

- IP54 – Water and dust resistance level

- IoT Qualified Security (in progress)

Mobile applications

- User accounts are required to use strong passwords.

- Users' devices are registered in order to shut down active sessions on lost or stolen devices.

- Generation of a new light sequence after each use. The light sequence holds more than 2^{70} possibilities.

- Mobile apps communicate via HTTPS to the server, and sensible data is encrypted using an RSA algorithm.

- Application use is protected using the OS's built-in systems.

- Application is available on iPhones running iOS 11 or more recent and Androids running Android 4.4 KitKat or more recent.

Dashboard

- Login process protected by strong password policy

- Communication with the API restricted to secured protocols

API

- Requests restricted through HTTPS only

- Double encryption layers of the database

- Database access restricted through whitelist system

- Strict Identity & Access Management (IAM)