

Highlights

MASTERING ENCRYPTION KEYS

Standard readers and master encryption keys can be customized by using programming badges and software. Keys stored in the cards can be diversified to protect the master key.

VERY SECURE

Connected to specific modules (RS485), the EVOLUTION KB reader can operate in «transparent» mode (encryption keys are not stored in the reader).

ADAPTED TO YOUR CORPORATE IMAGE

The EVOLUTION KB reader has a removable case that can be customized at an extra cost. Backlighting can also be adjusted according to the environment.

Main features

- Well-known, public algorithms (TDES, AES, RSA, HMAC-SHA-256...) are used for secure data reading
- Output formats : DataClock/Wiegand or RS485 (AES128 encryption)
- Signal & pullout prevention (accelerometer) transmitted via the TIL remote modules
- The biometry feature requires a specific programming kit. This feature supports DESFire cards, and is also compatible with the operation in «transparent» mode
- IP65 polycarbonate case, resistant to water jets and dust
- Cases are available in different colors. 360 different colors can also be used for backlighting

EVOLUTION KB READERS



Biometric sensor also available

Enhanced control and flexibility

The EVOLUTION KB is a contactless access control reader integrating a 12-key keypad.

It can be used for identification purposes by reading RFID supports and/or by entering personal key codes.

One single EVOLUTION KB reader can operate in multiple mode. For instance, allowing badge reading for a group of employees and managing key codes for a group of users (visitors, temporary users...).

Reinforced security can be implemented by using both badge reading and key codes.

Reinforced authentication can be provided via the available fingerprint sensor on the lower part of this model.

As the whole EVOLUTION series, several versions of this model are available. The different models can read UID numbers or secure data (files or sectors) stored in protected areas.

A Bluetooth range is also available for smartphone reading (see specific datasheet).

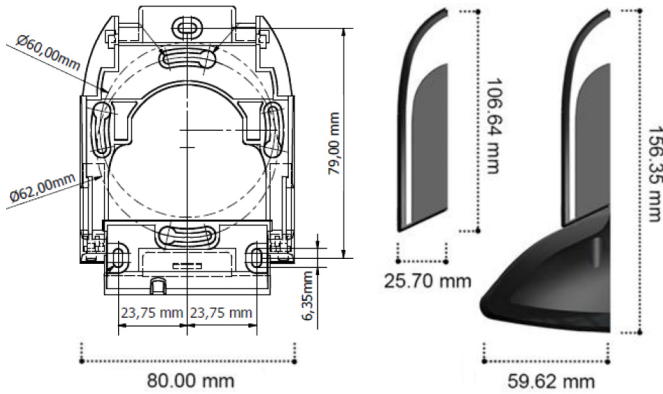
READERS IN THE 13,56 MHZ EVOLUTION SERIES

EVOLUTION IN	EVOLUTION XS	EVOLUTION ST	EVOLUTION KB	EVOLUTION TL

EVOLUTION KB READERS

Dimensions

Front and side views



Product references

UID reading MIFARE / MIFARE+ / DESFire EV1

- LEC05XF2240-NB0 : EVOLUTION KB (UID) keypad-reader, RS485, output terminal, black
- LEC05FX2240-NB5T : EVOLUTION KB (UID) keypad-reader, RS485, output terminal, black

Secure readers SSCP V1 MIFARE / MIFARE+ / DESFire EV1

- LEC05XF4240-NB5: EVOLUTION KB secure keypad-reader, RS485, output terminal, black
- LEC72ST0440-NB5 : EVOLUTION KB keypad-reader + biometric sensor, RS485, output terminal, black

Secure readers SSCP V2 MIFARE / MIFARE+ / DESFire EV1, qualified ANSSI

- LEC05XF5240-NB5 : EVOLUTION KB secure keypad-reader, RS485, output terminal, black
- LEC72ST0540-NB5 : EVOLUTION KB secure keypad-reader, + biometric sensor, RS485, output terminal, black

Bi-frequency Bluetooth + MIFARE / MIFARE+ / DESFire EV1 secure reading

- See specific datasheet

Technical details

- **Power supply** : 7 to 28 VDC
- **Average consumption** : 130 mA
- **Emission frequency** : 13.56 MHz – ISO14443 A & B, ISO18092 (NFC). Chips: MIFARE® Ultralight & Ultralight C, MIFARE Classic, MIFARE Plus, MIFARE DESFire EV1 & EV2, NFC, SMART MX, CPS3, Moneo, iCLASS, PicoPass.
Bluetooth Series : see specific datasheet
- **Max. distance between module & reader** : 100 m (Wiegand/Dataclock) to 300m (SSCP V2)
- **Communication interface** : Data/clock ISO2, Wiegand, SSCP V2 or RS485 with AES128 encryption
- **Connection** : 10 point snap-on terminals
- **Protection** : Pullout detection (accelerometer) + possibility of removing keys
- **Dimensions** : 107x80x26 mm
- **Mounting** : Surface or panel mount (center distance 60 mm)
- **Reading distance** : Up to 6 cm with Mifare Classic badges, 4 cm with DESFire EV1 badges
Compatible with any support types, including metallic surfaces (no spacer needed)
- **Parameterisable signaling** :
 - » 2 controllable RGB LEDs. 360 colors available. Set up via configuration badge
 - » Integrated buzzer (driven by NG / V3 control units only)
- **Materials** :
 - » ABS-PC UL-V0 (black)
 - » ASA-PC-UL-V0 UV (white)
- **Resistance / sealing** : IK10 (excluding biometric sensors), IP65 (excluding connectors)
- **Operating temperature** : -20°C to +70°C, or -10°C to +50°C with biometric sensor
- **Humidity** : 0 to 95%
- **Weight** : 0.225 kg (excluding the biometric module)

Secure reading configuration

- Customers not requiring the management of encryption keys (secure reading) will be provided with ready to use readers -configured by TIL TECHNOLOGIES.
- Customers requiring the management of encryption keys (secure reading), will be provided with a programming kit to encode IDs and configure readers. TIL TECHNOLOGIES will be providing readers requiring configuration.

Sales Contact : sales@til-technologies.com