

## Highlights

### MASTERING ENCRYPTION KEYS

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

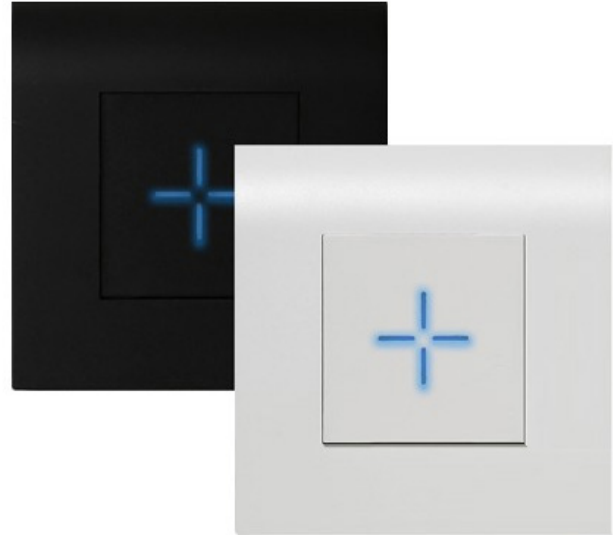
### SECURE

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

## 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
- Installation on surface or panel mount (electrical box axis distance : 60 mm, indoor use only)
- Backlighting for clear visibility in the darkness. 7 different colors available via the programming card
- Standard cases available in different colors

# EVOLUTION IN READERS



## Design built-in readers

The EVOLUTION IN is a fully programmable contactless reader supporting multiple protocols.

It is also compatible with the whole Mifare® ID family: Ultralight, Ultralight C, Mifare Classic, Mifare Plus, DESFire and DESFire EV1.

Specially designed to fit into an electrical flush-mounting box, its standard case can be replaced by any ARNOULD ESPACE or LEGRAND MOSAIC cover. You can choose discrete or strong design.

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.

The modular nature of the EVOLUTION series offers the required flexibility to extend, to upgrade the security level, or to perform technological migrations across your sites.

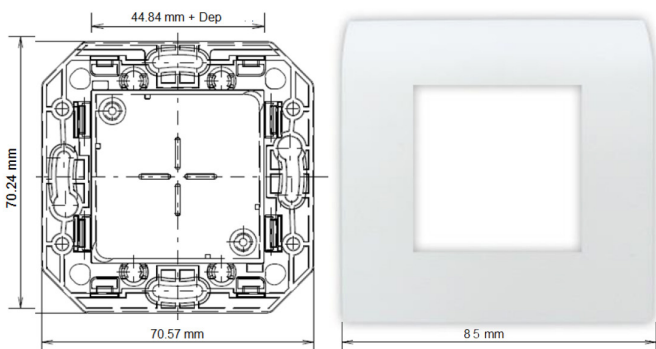
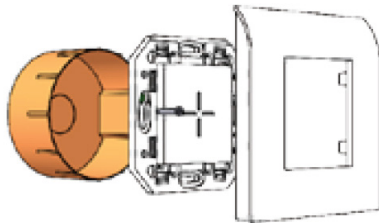
### READERS IN THE 13,56 MHZ EVOLUTION SERIES

EVOLUTION IN	EVOLUTION XS	EVOLUTION ST	EVOLUTION KB	EVOLUTION TL
				

# EVOLUTION IN READERS

## Dimensions

Default standard case :  
85 x 85 mm  
Backlit unit :  
45 x 45 mm



External dimensions may vary for compatible cases (ARNOULD or LEGRAND brands).

Please check the manufacturer documentation for further information.

## Product references

### UID reading MIFARE / MIFARE+ / DESFire EV1

- LEC05XF0900-BB0 : EVOLUTION IN (UID) reader, Wiegand/Dataclock multiple format, output terminal, white case
- LEC05FX0900-BB5T : EVOLUTION IN (UID) reader, RS485, output terminal, white case

### Secure reader SSCP V1 MIFARE / MIFARE+ / DESFire EV1

- LEC05XF4100-BB5 : EVOLUTION IN secure reader, RS485, output terminal, white case

### Secure reader SSCP V2 MIFARE / MIFARE+ / DESFire EV1

- LEC05XF5100-BB5 : EVOLUTION IN secure reader, RS485, output terminal, white case

## Technical details

- Power supply : 5 to 24 VDC
- Average consumption : 100 mA
- Emission frequency / IDs : 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
- Max. distance between module & reader : 100 m (Wiegand/Dataclock) to 300m (SSCP V2)
- Communication interface : Data/clock ISO2, Wiegand or RS485 with AES128 encryption
- Connection : 8 point snap-on terminals
- Protection : Pullout detection (accelerometer) + possibility of removing keys
- Dimensions : Central unit 45x45 mm + Decorative case 85x85 mm
- Mounting : Surface or panel mount (electrical box axis distance: 60 mm)
- Reading distance : Up to 6 cm w/ Mifare Classic, 5 cm w/DESFire EV1
- Parameterisable signaling :
  - » Controllable LEDs, 7 colors available, set up via configuration badge
  - » Integrated buzzer (driven by NG / V3 control units only)
- Materials : ABS-PC
- Resistance / sealing : Indoor use only
- Operating temperature : -20°C to +70°C
- Weight : 0.150 kg

## 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.

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