

## 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 XS reader can operate in «transparent» mode (encryption keys are not stored in the reader).

### ADAPTED TO YOUR CORPORATE IMAGE

The EVOLUTION XS 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
- IK10 polycarbonate case, resistant to water jets and dust (IP65)
- Cases are available in different colors. 360 different colors can also be used for backlighting

# EVOLUTION XS READER



## Indoor doorjamb reader

EVOLUTION XS 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.

Designed for both indoor and outdoor use, and doorjamb mount. Backlighting ensures good visibility in the dark.

As the whole the EVOLUTION series, several versions of this model are available. It can be programmed to 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.

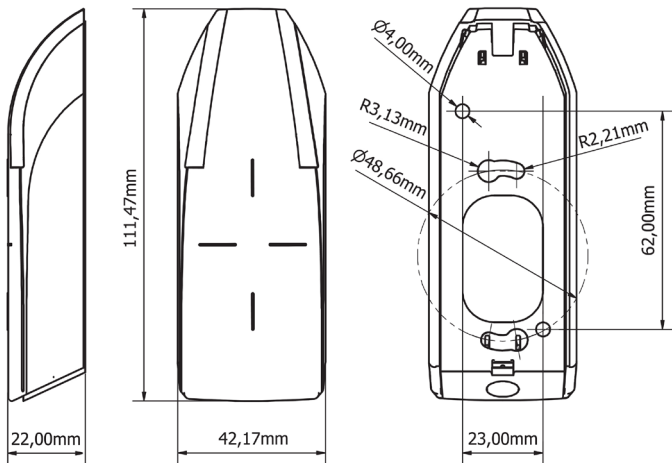
### READERS IN THE 13,56 MHZ EVOLUTION SERIES

EVOLUTION IN	EVOLUTION XS	EVOLUTION ST	EVOLUTION KB	EVOLUTION TL

# EVOLUTION XS READERS

## Dimensions

Front and side views



## Product references

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

- LEC05XF1000-NL0 : EVOLUTION XS (UID) reader, Wiegand/Dataclock multiple format, cable output, black
- LEC05XF1000-NL5T : EVOLUTION XS (UID) reader, RS485, cable output, black

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

- LEC05XF4000-NL5 : EVOLUTION XS secure reader, RS485, cable output, black

### Secure reader SSCP V2 MIFARE / MIFARE+ / DESFire EV1, qualified ANSSI

- LEC05XF5000-NL5 : EVOLUTION XS secure reader, RS485, cable output, black

## Technical details

- Power supply : 10 to 15 VDC
- Average consumption : 120 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
- 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 : 3 m. cable
- Protection : Pullout detection (accelerometer) + possibility of removing keys
- Dimensions : 111x42x22 mm
- Mounting : Surface or panel mount (drilling 32 mm x 2)
- 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 RGB LEDs - 360 colors available
  - » Integrated buzzer (driven by NG / V3 control units only)
- Materials :
  - » ABS-PC UL-V0 (black)
  - » ASA-PC-UL-V0 UV (white)
- Resistance / sealing : IK10, IP65 (excluding connectors)
- Operating temperature : -20°C to +70°C
- Humidity : 0 to 95%
- 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.

Sales Contact : sales@til-technologies.com