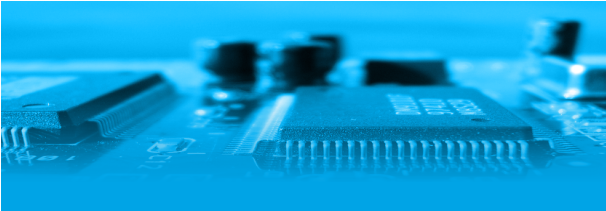


# PRODUCT DATASHEETS

## EVOLUTION SERIES



### Highlights

#### HIGH SECURITY : ANSSI QUALIFIED

EVOLUTION readers are available in "transparent" versions (no encryption keys stored in the reader). Connected to CUBE modules (RS485 with AES128 encryption), EVOLUTION readers are integrated into an ANSSI-certified architecture.

This architecture constitutes TIL's current offer : MICRO-SESAME CUBE.

#### SCALABILITY FOR BIOMETRIC SOLUTIONS

Three models (ST, KB and TL) can host a biometric sensor. It is placed on the lower part and it is used for authenticating the badge holder. Biometric modules can be integrated, even on readers that are already on site.

#### BLUETOOTH AND MULTI-IDENTIFIERS

Bluetooth-specific versions and the addition of a secondary reading add-on module (below) allow the EVOLUTION readers to read up to 4 types of identifiers at once (e.g.: 13.56 MHz badge + Bluetooth + QR code + Key codes).

### Polyvalent & Secure

The EVOLUTION range of readers are simultaneously supporting the whole Mifare® ID family: Ultralight, Ultralight C, Mifare Classic, Mifare Plus, DESFire (EV1/EV2/EV3).

Scalable and modular, they can be adapted to any security strategy and can be programmed to read UID numbers or secure data in a High Secure MICRO-SESAME CUBE architecture, ANSSI Qualified (Desfire EV1/EV2 only).

Optional add-on modules can be added to EVOLUTION readers to be tailored to your needs.

Most of the readers can be declined into a biometric solution by adding an easy-to-connect biometry reader.

Two more optional modules are available for QR-Code or 125 kHz reading.

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

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

### Main features

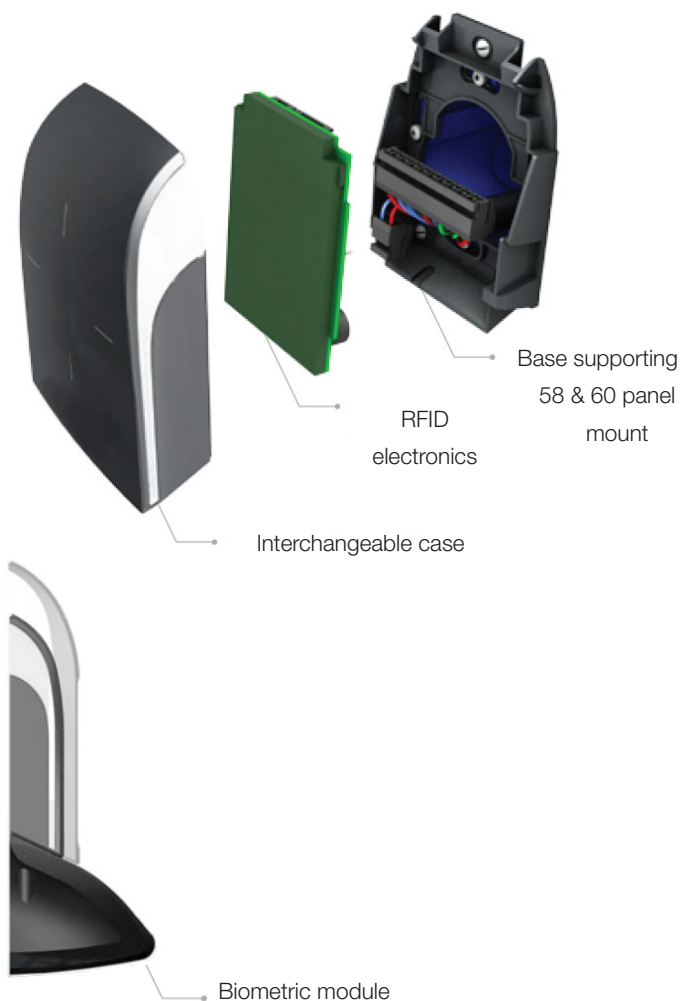
- Keypad versions (keys or touchscreen) accept the «bi-mode» function : using a badge for staff, and a key code for visitors.
- Touchscreen version : numbers are never displayed at the same position.
- Signal & pullout prevention (accelerometer) transmitted via the TIL remote modules.
- IP65 polycarbonate case (IK10), resistant to water jets and dust (IP65).
- Cases are available in different colors. 360 different colors can also be used for backlighting.

### 13,56 MHZ READER RANGES

PROXILIS	EVOLUTION	SIGNO

# EVOLUTION SERIES

## Mounting and modularity



## Technical details

- **Power supply** : 12 VDC
- **Average consumption** : 100 mA
- **Emission frequency** : 13.56 MHz - ISO14443 A & B, ISO18092 (NFC). *Bluetooth Series* : see specific datasheet
- **Max. distance between module & reader** : 100 m (Wiegand/Dataclock) to 600m (RS485) or 300m (RS485 encrypted)
- **Communication interface** : Data/clock ISO2, Wiegand or RS485 with AES128 encryption
- **Connection** : 10 point (5mm) snap-on terminals
- **Protection** : Pullout detection (accelerometer) + possibility of removing keys
- **Dimensions** :
  - » 111 x 42 x 22 mm (long reader for doorjambs)
  - » 107 x 80 x 26 mm (standard reader and keypad reader)
  - » 128 x 80 x 31 mm (colour touchscreen reader)
- **Mounting** : Surface or panel mount (electrical box axis distance: 58 & 60 mm -except for the XS model)  
Compatible with any support types including metallic surfaces (no spacer needed)
- **Reading distance** : Up to 8 cm when using Mifare Classic badges
- **Parameterisable signaling** :
  - » 2 RGB LEDs - 360 colours
  - » 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 connections)
- **Operating temperature** :
  - » -20°C to +70°C (standard reader and keypad)
  - » -10°C to +60°C (touchscreen reader)
- **Weight** : 0.225 kg

## 13,56MHz ID compatibility

- ISO14443 A & B, ISO18092 (NFC)
- MIFARE® Ultralight & Ultralight C, MIFARE Classic, MIFARE Plus, MIFARE DESFire EV1 & EV2, NFC, SMART MX, CPS3, Moneo, iCLASS, PicoPass

Sales Contact : [sales@til-technologies.com](mailto:sales@til-technologies.com)  
[www.til-technologies.com](http://www.til-technologies.com)