

# SECOLO SMART LOCK SL1000 / SL1001



The smarter RFID locking and tracking unit



## SECOLO - Smart Lock SL1000 / SL1001

The world's only RFID lock for mesh trolleys and transport boxes

Are you looking for an electronic solution to protect documents, data carriers, evidence, expensive instruments or valuable goods from theft, tampering or unauthorised copying in fixed or moving containers? Then the SECOLO Smart Lock is the answer!

With the SECOLO Smart Lock, you have full control over the access rights to the contents of the safe. Decide whether you prefer

to use RFID cards and/or PIN codes or even the dual control principle for unlocking. Whether you want to operate it as a stand-alone system (authorisation assignment on the lock) or in a network. The integrated RFID and radio technology makes it possible to adapt the behaviour of the lock to existing logistics processes in software-supported systems and to influence processes through the feedback from the integrated RFID tracking technology (digitalisation 4.0).

## Patented safety for use in logistics

The SECOLO SL10xx series is a patented electronic RFID container lock equipped with a PIN keypad (SL1001 only), RFID reader, NFC reader, RFID tracking technology and ISM radio interface. Its globally unique and patented locking technology with 4000N (approx. 400kg) break-open resistance is not only exceptionally robust, but also reliable, durable and extremely resistant to container deformation thanks to its self-adjusting bolt. Its mode of operation means that it can be unlocked without any problems even when pressure of 800N (approx. 80kg) is applied to the lid from the inside, which is particularly important for unmanned/automated emptying processes.

In contrast to many other locks on the market, SECOLO locks have been developed from the ground up for the tough requirements of transport containers in intra- and extra-logistics. When developing our products, we attach great importance to perfect function, durability and sustainability. This is reflected, among other things, in the particularly energy-saving electronics with a battery life of up to 10 years and an expected lock life of up to 20 years. Stability, maintenance-free (except batteries) and simple operation make the SECOLO security locks a premium product.

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## Functions

### Unlocking

- > PIN code 1 (1 to 12 digits)
- > PIN code 1 + PIN code 2 (4 to 8 digits)
- > RFID data carriers (user cards, key fobs, wristbands)
- > RFID data carrier + PIN code 2 = higher security (SL1001 only)
- > 2-person rule / 4-eyes principle
- > Location-dependent access with an accuracy of 1m2 in the building
- > Automatic unlocking via marker and/or SECOLO management software
- > Automatic unlocking via marker in the transfer vehicle
- > Unlocking via handheld with NFC interface

### RFID-Tracking

- > Beacon signal: The electronic lock can periodically send its UID in a beacon signal.
- > Marker position detection: When the lock passes a marker field, it sends a position signal to the server via the wireless interface.
- > Direction of movement: Marker technology enables the direction of movement to be recognised by a marker gate with two or more markers

### Monitoring / Alarms

- > Gate alarm: The activated container moves into an RFID field with alarm function.
- > Zone alarm: If the security container is removed from the RFID monitoring zone without authorisation.
- > Lid open too long: If the lid is not closed within a definable time, the lid open alarm starts
- > Battery warning: A battery change is required in a few weeks (audible, visual and via wireless interface or NFC)

### Alarm signals

- > Acoustic: By means of a built-in signalling device
- > Visual: By means of a red LED in the control panel
- > Radio signal: In the event of an alarm, the lock sends radio signals to the SECOLO software, with forwarding to the security centre if necessary

### Data transmission from / to the lock

- > RFID data transport card: Access rights
- > NFC: Access rights, configuration, events
- > Radio interface: access rights, configuration, events, load firmware

## Technical data

Keypad	Keys 0 to 9 / OK-Key / *-Key (only SL1001)		
RFID-Reader	ON button to activate the RFID reader for passive RFID data carriers ISO15693 and ISO14443; operating frequency: 13.56MHz	Humidity	-40°C bis + 60°C (during storage)
Access rights	in the lock memory up to 1,000 authorised persons, unlimited for rights on the data carrier	Dimensions	5% bis zu 95% (non-condensing) (B x H x T) 196 x 152 x 53 mm
Event memory	Dynamic allocation with the authorisations. The last 1,000 events for 100 authorised persons.	Weight	850g (incl. bolt and batteries)
Memory	currentless data retention for 10 years	Bolt	- self-adjusting - Anti-blocking design (patented) - Resistant to mechanical impact from all directions - Anti-blocking design (patented) - Breaking strength: 3,960 N (approx. 400kg)
RFID-Tracking	Carrier frequency 125kHz; modulated signal	<b>Fastening</b>	
Radio interface	ISM band from 868 MHz to 923.5 MHz	Container wall thickness	0.5 to 7.0 mm
Data security	AES128 encryption „private & public key“ procedure	Lock fastening	6 pcs. M5 x 25 hinge bolts (carriage bolts) between lock and container wall
Power supply	4 x 1.5V lithium metal hybrid batteries AA	Bolt fixing	2 pcs. M5 x 16 hinge bolts or 4 pcs. M4 x 10 security screws or 4 pcs. 4mm rivets
Power consumption	typically 33 µW in „sleep mode“ typically 150 mW in „active mode“		
Temp	-20°C bis + 60°C (in operation)		



Operating instructions / certificates  
[www.fmtec.eu/en/downloads/](http://www.fmtec.eu/en/downloads/)

CE FC 2ARNI-19SL100X001  
IC 24508-19SL100X001  
CAN19LP1140T8

