Installation and Application

Electronic label QID-TAG™

Passive label for the identification of windows and doors

IoT sensor CycleCounter®

Active sensor for monitoring and transmitting data

LoRaWAN™ Gateway

Bridge between GSM and LoRaWAN™ for ensuring a working radio signal

Commissioning of the LoRaWAN™ Gateway (in case a gateway is used)

1. Maintain the CycleCounter® Sensors in SLEEP mode (OFF)

2. Set up the LoRaWAN™ Gateway at a suitable location in the vicinity of the sensors and connecting the gateway to the mains power (110 or 220 volts)
   ATTENTION: Availability of GSM (smart phone) reception at the location of the gateway must be ensured.

3. Wait until the LEDs on the reverse side of the device indicate the following status:

STATUS	green: Fast double-blinking
LORA	green: Continuously illuminated
CELL	green: Slow blinking

4. Wait for approx. 30 minutes until the gateway has connected to Swisscom and has performed the security check.

5. Activate/wake up the CycleCounter® Sensors only once the above mentioned waiting time has passed.

We digitise windows and doors.

Installation of the QID-TAG™

CH1QID0200000001
QID-TAG®.com NFC

- One electronic label QID-TAG™ should be attached to each door in order for information and documents to be allocated.
- In case a CycleCounter® sensor is installed, the installation and use of a QID-TAG™ is also required.
- The QID-TAG™ will be installed enclosed and horizontally at the front of the door panel, e.g. above the door handle.
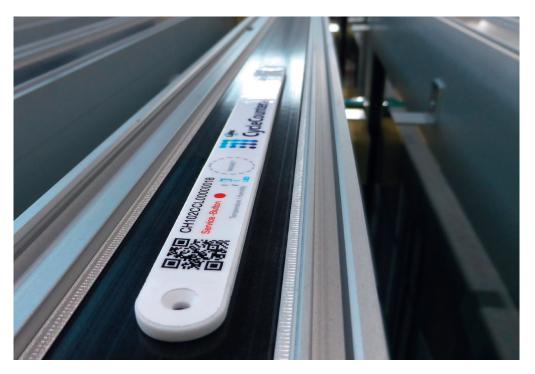- The QID-TAG™ will be installed by using either screws or adhesive.

Installation of the CycleCounter® sensor

CH1CCL0206190024
Service-Button ● MAGNET
Temperature / Humidity LED
LoRa
CycleCounter.io
digital window and door management solutions

The sensor shall be mounted horizontally on the top of (the movable element of) a door or window casement. Either adhesive tape or screws should be used to mount the sensor. The advantages of a screw-based installation are:

- Better, more stable and more secure bonding
- Can be removed or replaced more easily

The correctly installed CycleCounter® sensor at the window or door frame

The magnet included in the delivery should be installed at the door casement (not at the movable element) in exact alignment above the dashed circle designated «Magnet».

The maximum distance should not exceed 20 mm. If the distance is very small, a thinner magnet may be used.

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Operation of the CycleCounter® sensor

The CycleCounter® sensor is in sleep mode when shipped.

Sensor commissioning and wake up:
- Placing the magnet above the «MAGNET» field and briefly invoking the service button; in order to activate the initialisation
- LED blinks in red, then (short) in blue and finally three times in green (successful JOIN)
- Unsuccessful JOIN process: 3 times short blinking in red, the above process is repeated again automatically
- Within approx. 15 minutes, an automatic calibration (inclination and open position tilted) will be performed following a successful JOIN process. Within these approx. 15 minutes, the element (door, window) must not be tilted, since otherwise the calibration «horizontal» cannot be executed.

Sensor deactivation; Sleep or Reset:
- Placing the magnet above the «MAGNET» field and pressing the service button for 2 seconds
- The LED must blink 5 times in red for the sensor to enter sleep mode

Procedure for service and maintenance work on an element (window, door):
- Prior to commencing service and maintenance work:
    - Place the magnet above the «MAGNET» field and press the service button briefly
    - LED blinks 3 times in blue
    - Service mode has been invoked: Service and maintenance work on the element can be carried out (no alarm notifications and messages will be sent during this time)
    - Care of the sensor: Dirt should be removed using a dry cloth or a vacuum cleaner
- The service mode must be terminated upon the completion of the service and maintenance work for an element:
    - Place the magnet above the «MAGNET» field and press the service button briefly (2 seconds max)
    - LED blinks 3 times short in blue (this action terminates the service mode)
    - The alarm notification function is reactivated; inclination measurement re-starts; the counter for shock and open position horizontal/tilted starts again from zero; messages and alarm notifications will again be sent as normal

Basic settings CycleCounter®

Standard time for transmission	
Reports shall be sent in intervals of how many days	14 days
Wait for Open-Time	
Waits for door to open for sending	10 minutes
Open Door alert	
An open-door alert will be sent after how much waiting time	30 minutes
CloseDoor alert	
The alert is sent immediately once a previously open-door is closed again	immediately
Alert for due service	
The maintenance interval is reached after how many cycles	20'000
Alert for X-axis inclination	
X-axis inclination in degrees, longitudinal axis - door setting has changed	2°
Shock alert	
Acceleration or vibration	2.5 g
Temperature alert	+50° C
Moisture alert	60%
Battery status alert	10%

Example

If the door is open for more 30 minutes, the Door Open alert will be sent. Once a door is closed again following a Door Open alert, the sensor will immediately transmit a «Door Closed» alert, and will continue to count and send status information.

In future, the parameters «Service Interval» or «Alarm Threshold Values» can be changed for each element / sensor manually.

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