

# CCS and ProxerCollect

## Procontrol's card and wristband reader and collector family



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### Procontrol's proximity card and wristband collector and drop box products

The **CCS system** is for reading and collecting RFID proximity cards, with gate opening function, relay output, access control (one or bidirectional) functions, Certain types can give back the card after reading it.

The **ProxerCollect 12** can also collect proximity wristbands, and cards with holders, badges, lanyards.

Indoor and outdoor, motor-driven or gravitational, simple contact-driven online and more complex offline-online, smart types are available.

The card collectors are equipped with Manchester eMarine EM4102, 125kHz RFID proximity card readers. Procontrol ships complete system, but also undertakes the integration of the Client's reader with development.

OEM products are also accessible; mechanical parts and electronic parts may also be ordered separately. (Please ask for quotation).

The product types CCS-1, CCS-2 are gravitational, while the ProxerCollect and the CCS-3M are motor-driven devices.

#### Operation

- 1. The card is taken in (gravitational or motor-driven)
- 2. System checks authorization and user rights
- 3. (according to ordered type, the invalid card can be retrieved)
- 4. The gate, door, turnstile controlled by the card collector gets the opening order

#### **General properties**

All CCS collector items are prepared for handling the card type agreed with the Client (samples are usually required). One, specifically agreed type (size, thickness), typically standard ISO size 86 x 54 x 0,77 mm, or, at some types Clamshell,  $86 \times 54 \times 1,9$  mm, ISO 7810 standard, ID-1 format, is to be used.

Card types other than the named ones are must be checked with Procontrol, as the different dimensions, thickness may use jam in the device.

The CCS card collectors may take in bare cards without badge, holder, clip, lanyard, sticker, PVC adhesive back, etc. Printed surface does not mean any issue, so we suggest Fargo card printers for the personalization of the cards. Ask for quotation.

ProxerCollect 12 is suitable for handling cards with badge, holder, clip, lanyard. The retractive mechanics with ribbed belts can take in a wide range of proximity tags, bracelets.









#### RFID tag collector types, available at Procontrol

<b>Collecting cards</b> cards only without holder, clip, lanyard, sticker, PVC adhesive back, etc.		Cards even with holder, lanyard or clip and wrist and wristbands			
gravita	gravitational		motor-driven		
simple online		intelligent offline-online			
CCS-1	CCS-2	CCS-3M	ProxerCollect-12		
OEM version					
CCS-1-OEM	CCS-2-OEM	CCS-3M-OEM	ProxerCollect-12-OEM		
outdoor design for external usage					
CCS-1-EXT	CCS-2-EXT	-	ProxerCollect-12-EXT		

#### Options

#### 1. Card retriever

The CCS card collector systems swallows all the cards by default. In case retrieving the cards is a request, two options can be set:

- The expired cards are collected, the valid cards are retrieved for further use. The gate/ door/ turnstile is opened in both cases.
- The valid cards are collected, the gate/ door/ turnstile opens. The invalid, expired, not authorized cards are retrieved, and no opening command is issued. The cards can be taken from the pocket on the top of the column.

#### 2. Ethernet interface

The system connects to the HOST system via RS485 interface according to the standard configuration. The optional Ethernet interface makes connection possible to the already existing Ethernet network.

- 3. Entryphone to the system administrator
- 4. LCD display, depicting text messages
- 5. Integrating foreign RFID proximity card reader as agreed with the Client



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## ProxerCollect 12 Card and Wristband Collector

ProxerCollect 12 motor-driven card and wristband collector column, which is suitable for handling cards with badge, holder, clip and/or lanyard. The retractive mechanics with ribbed belts can take in a wide range of proximity tags, bracelets or other RFID-tagged objects.

User only has to make sure that the object gets safely inside the slot.



The collector draws in the proximity tag with the pair of ribbed belts while reading the RF identifier. In case the tag is authorized, the device collects it; if it is not authorized or readable, then the device retrieves it.

The ProxerCollect 12 is for indoor usage with steel housing, in shock resistant, vandal-proof design. It collects the cards, tags in its collector bag. At authorized tags the door opening function works. The invalid, not authorized cards, tags are immediately pushed back via the entry slot.







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#### **Properties**

- For indoor usage, in OEM design as well.
- Intelligent offline-online device, with microcontroller electronics, LCD displays
- RFID proximity cards, ISO (86 x 54x 0,77mm) or Clamshell (86 x 54x ~1,5-2mm), wristbands, cards in holder with clips, lanyards can be automatically collected
- Motor-driven
- In standard design with EM reader, but other types of readers can be integrated as well, e.g. Wiegand readers, LF or HF readers
- At invalid proximity tags the tag is pushed back
- Automatic card retrieving function after 2 seconds
- 2x16 characters LCD display
- Storage box is closed by key, can be lifted out
- With microcontroller
- Interface: RS485 (optionally: Ethernet)
- Client can also control it via their own system with PCS (Procontrol Communication Standard) commands or contacts
- Offline authorization check is possible
- Stainless steel case, polished, optionally brushed steel or brass surface

#### Operation

- 1. The built-in lower and upper RFID readers read alternately in every 100 ms.
- 2. When the device has read the identifier the motors speed up, draw in the card/ wristband, and finally throws it to the collector box.
- 3. The green light turns on, an informational message (thank you, received) appears on the built-in display.
- 4. The system logs the receiving of the tag and pulls the gate opened, barrier opened relay.
- 5. If there is no successful reading within the time set, the device gives back the card, wristband via the same slot where it was inserted.





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## **CCS-1: Online Proximity Card Collector**

The CCS-1 indoor card collector is mainly for traffic control and card collecting at exits with turnstiles or swing gates.

This is an easy-to-use only type with transistor control panel, with opto sensors. Other than the standard reader can be built in; Client can control it from their own access control system via contacts.

Gravitational, the card dropped in may go in only one direction, there is no possibility for retrieving the card, when it gets inside the device. However, at inserting the card, it stands out a bit, thus can be pulled out.



The CCS-1 can take bare cards in, with no holder, sticker, PVC adhesive back, clips or lanyard Printed card surface is accepted.

After opening the lock of the card collector with the dedicated key, the box can be taken out and emptied.



LED signs:



#### Operation

- 1. User inserts the card
- 2. The device sends the contact that a card is present
- 3. Client's system decides on the card
- 4. The device receives a contact ("drop the card").
- 5. The card falls.
- 6. The device gives the "card dropped" feedback contact.



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#### **Properties**

- Stainless steel case, polished surface
- Built-in RFID reader for ISO (86 x 54x 0,77mm) 125kHz Manchester EMarine or Hitag1 proximity cards, but other (134khz, 13,56 Mhz compatible) reader types can be built-in
- The card can be taken out after inserting (before dropping), as there is not automatic drawing in.
- In the storage box about 1000 pcs ISO sized cards can fit in.
- Dimensions: see drawing
- Option: LCD display with 2x16 characters
- Key locked card storage box, removeable
- Interface: RS485 (optionally: Ethernet)
- · Transistor control panel with opto sensors
- With no electronics



**OEM version can be built-in:** CCS-1-OEM Card reader and collector with gate opening function, for collecting guest cards. Can be built in, with cover plate, without housing, for indoor usage.



CCS-1 card collector column



CCS-1-OEM built-in in a turnstile





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## CCS-1-EXT External Barrier Controller and Card Collector

The CCS-1-EXT is for external usage, e.g. for identifying cars, trucks and opening barriers.

The equipment consists of solid column, built-in card receiver socket, proximity card reader terminal, card collector mechanics and storage box. The height of the column can be set, so the column can be integrated into truck clienter systems as well.

Optionally there is an open tray on the front of the column, where the card can be retrieved from (only available at card retriever function).

Due to the external design, the card slot is covered by a steel trap door.

The storage box may keep 1000 pcs ISO cards. After opening the lock, the storage box can be removed and emptied.



- Stainless steel housing, powder coated (RAL1003)
- Outdoor usage
- In standard design for ISO or Clamshell, Manchester EMarine proximity cards (optionally for other types as well)
- Dimensions: standards for trucks 1580mm height
- Card slot hole with steel trapdoor
- Storage box locked with key



#### Operation

The card must be inserted into the slot on the top of the column (under the trap door) The reader reads and verifies the card number and draws in the card. At not authorized cards there are two short beeps, and the card is taken, but no relay is pulled. At authorized cards there is one longer beep. The relay is pulled, and the card is taken by the device. In case the object is not readable by the built.in reader, it is dropped within 30 seconds, without sound signal and relay handling.



Time to pull a relay:	1000 ms
Time to pull "drop the card" relay:	1000 ms
Drop time of not readable object.:	30.000 m

) ms Cards can be taken out from the storage box, which can be opened by key. After emptying the box, put it back into the column and close the cover plate.

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## **CCS-2: Intelligent Proximity Card Collector**

The CCS-2 card collector type can be used indoor or outdoor, and available in OEM format as well.

Intelligent, offline-online device, with microcontroller, and optional LCD display; with gravitational operation method.

Client can control it from their own access control system with PCS (Procontrol Communication Standard) orders or via contacts

CCS-2 is mainly for traffic control and card collecting at exits with turnstiles or swing gates.

The card inserted is swallowed entirely, cannot be taken out till the system decides whether to drop it or retrieve in to the return tray.

#### **Properties**

- Indoor and outdoor usage, in OEM format too
- Intelligent device with microcontroller
- Stainless steel case, polished surface
- Built-in RFID reader for ISO (86 x 54x 0,77mm) 125kHz Manchester EMarine or Hitag1 proximity cards, but other (134khz, 13,56 Mhz compatible) reader types can be built-in
- At invalid cards (not readable or not authorized) it gives back the card.
- It gives back the card automatically after 2 seconds
- In the storage box about 1000 pcs ISO sized cards can fit in.
- Dimensions: see drawing
- Option: LCD display with 2x16 characters
- Key locked card storage box, removeable
- Interface: RS485 (optionally: Ethernet)
- Offline authorization check
- Client can control it with their own system via PCS (Procontrol Communication Standard) commands or contacts







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## CCS-3M: Indoor Motor-driven Proximity Card Collector

A CCS-3M motor-driven, card reader, collector, retriever, controller terminal. Users insert the card at the slot and receives it back from the same slot. The card is to be pushed in gently. The device pulls in the card completely and after the check-up, retrieves it or keeps and drops it.

The CCS-3M indoor card collector column is for traffic control and card collecting at exits with turnstiles or swing gates.

Having opened the security lock of the storage box, it can be gathered and emptied.

### Properties

- For indoor usage, in OEM format too
- Intelligent offline-online device, with microcontroller and LCD display
- Motor-driven operation
- Typically for standard ISO or Clamshell, EM cards, but other readers (Wiegand; LF, HF) can be integrated
- Invalid cards (not readable or not authorized) the motor pushes back the card.
- Automatic card retrieval after 2 secs
- In the storage box about 1000 pcs ISO sized cards can fit in.
- Dimensions: see drawing
- Option: LCD display with 2x16 characters
- Key locked card storage box, removeable
- Interface: RS485 (optionally: Ethernet)
- Offline authorization check
- Client can control it with their own system via PCS (Procontrol Communication Standard) commands or contacts
- Stainless steel case and polished steel or brass surface

On the right there is the CCS-3M-OEM type, without housing, which can be built in an access gate or turnstile, sunk in the top cover. The device also can be built into a table top or receptionist desk. The storage box is custom-made.











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