

# idLink Green Turnstile

## Visitor Accreditation + Anti-Passback + Cloud Management



### IdLink Patented Cloud Access Control Technology

VRCN has developed a patented digital door-opening security solution based on our two core technology components:

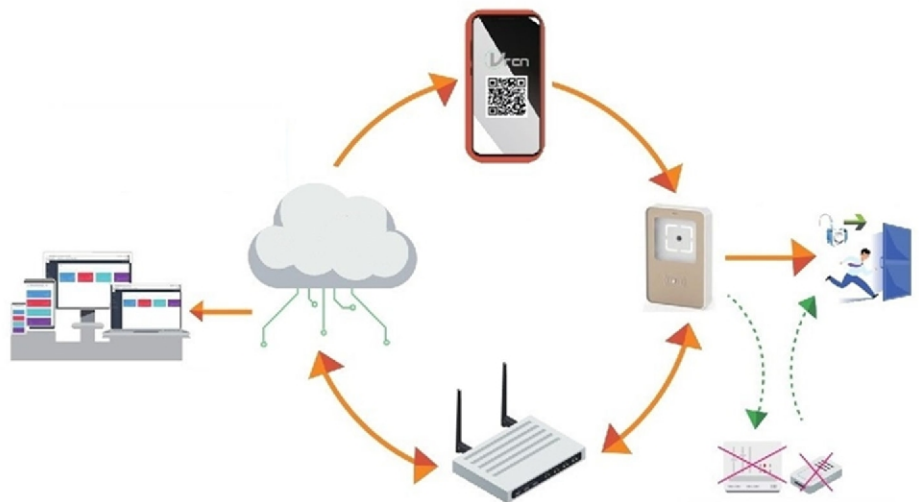
1. Cloud identity authentication mechanism as the **virtual access controller**; and use of
2. A personalized virtual card on mobile which is embedded with a **non-UID credential in the form of dynamic QR code changing every 5 seconds to combat copying of identity by any third party.**

The elimination of the expensive door controller hardware attributes to a simple access control system (ACS) architecture, resulting also an easier and more efficient turnstile operation with the following benefits:

- **No access controller board** inside the turnstile saves all labour cost in tuning readers with software & PC.
- Simple structure will have **less cabling**, thus less installation cost.
- All data communications amongst system components are **AES 256 encrypted**.
- The 5-second changing QR Code **combat copying of identity**.
- **By use of the virtual card on mobile (or BYOD), the whole solution is also greener as there's no need to print any paper or plastic card.**
- Easy operation of unmanned Visitor Management because a visitor can use the virtual card on mobile to perform **self Identity Accreditation at the turnstile**.

## How idLink ACS works

1. Our patented cloud-based access control solution needs no installation of any hardware door controllers; **Users and Administrators can simply log-onto their web cloud accounts and perform all access control and data set up**, such as assigning readers to corresponding doors, issuing virtual cards to relevant staff, setting up door access & time attendance scheduling, issuing temporary visitor mobile passes and generating different forms of reports, etc.
2. While majority of access control system and software can work only in Windows environment, idLink's system run on true cloud platform which **performs perfectly in both PC and / or MAC iOS environment** via browser, for e.g. Safari.
3. Our solution needs not print any paper or card as a credential. Instead, we have developed a unique **personalized virtual card in our idLink Mobile App which could display a personal photo / visual security logo**, a Dynamic QR Code which changes once every 5 seconds and personal information, to replace the traditional physical ID badge or RFID card. The virtual card can also be browser-based and save users' effort to install an App.
4. Embedded behind the mobile virtual card is a **non-UID based credential in random codes generated by AES 256 encryption** technology instead of a unique card / ID number and AES128 encryption now being applied in the general access control industry which are prone to be hacked.
5. **All data communications amongst system components are in TCP/IP and standard ICT cloud protocol**, which is easy to integrate with other digital, IoT and smart city solutions unlike Wiegand protocol in traditional practice.
6. **Open API and coding are also adopted for more sophisticated integration** to other 3rd party e-platform or community App instead of using some low-level computer language provided by conventional access control systems which will cost much time and effort for integration.
7. Upon customer's requests, the **dynamic QR code can also be implemented in a third party APP or complement use of payment gateway for better user's experience** such as e-ticketing.





### Application Scenarios

Since the whole system is cloud based which adopts standard http and cloud protocol, we are able to provide a much simpler but more secure turnstile applications:

- **Visitor Management System;**
- **Automatic Attendees Accreditation at Events;**
- **E-Ticket Authentication;**
- **Facilities Booking & Authentication at Entrance, etc.**

### Easy Implementation of Anti-Passback

As the physical door controller board is not needed in our turnstile but only a network reader, anti-passback function can be easily assigned over cloud and implemented. This is not possible in traditional ACS practice. In addition, the 5-second changing dynamic QR code deters copying. **These two outstanding features make tail-gating totally impossible** in this automated operation. operational process.

### Unmanned e-Ticket Authentication & Seamless User Experience

With use of the virtual card on mobile and idLink turnstile, unmanned e-ticket authentication can be effortlessly achieved with the following operation flow:

1. A User can **book the necessary ticket or facilities online;**
2. **Pay online** accordingly;
3. **Obtain on mobile the unique e-ticket** in the form of Dynamic QR Code which is bound to the user's identity;
4. **Perform self-accreditation** at the automatic turnstile; and
5. **Enter the venue at ease.**

The whole process enables a seamless customer experience in e-ticketing, not to mention that such a solution is greener without printing any paper or use of plastic.



Video Demo of Anti-Passback



## Specifications

Items	Description
Brand Name	idLink
Model Number	IDX-TY-001
Type	Speed gate
Model No.	BDS707-W
Material	Oxidated Aluminum Alloy 8 – 12mm
Gross weight	70 kg (Per Walking Channel, 2 flipping turnstile)
Size	L1400*W120*H1000mm
Power Source	AC220±10%V; 50±10%HZ; 1000W
Power Input	DC24V
People Throughput	30 ppl / minute (Always Open); 25 – 30 ppl / minute (Close)
Turnstile Flip Response	600RPM
Operating / Storage Temp.	-40~125°C
Vibration / Shock	4.9m/s <sup>2</sup> / 19.6m/s <sup>2</sup>
MTBF	5,000,000 cycles
Warranty	12 Months
Communication	RS485
Direction	Bi-direction Adjustable

## VRCN Cloud Access Control System Open Doors Without Using Any Physical Controllers

- **NO** need to use **EXPENSIVE** physical door access controllers

- **NO** need to **CONFIGURATE** readers on-site but remotely via cloud log-in
- Manage access control functions **ANYTIME** and **ANYWHERE**
- Virtual Card in Dynamic QR Code changing every 5 sec. **prevent copying**



- Able to render **API SUPPORT** & integrate with 3<sup>rd</sup> party smart systems for more servicing, e.g. facilities booking, e-ticketing and digital membership, etc.

- A better door access experience, a **SEAMLESS** process of e-Pass / ticket booking online, payment, downloading of secure ticket on mobile, self accreditation at turnstiles

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