

# "EU Digital COVID Certificate" and Body Temperature Detection System

## Solution background

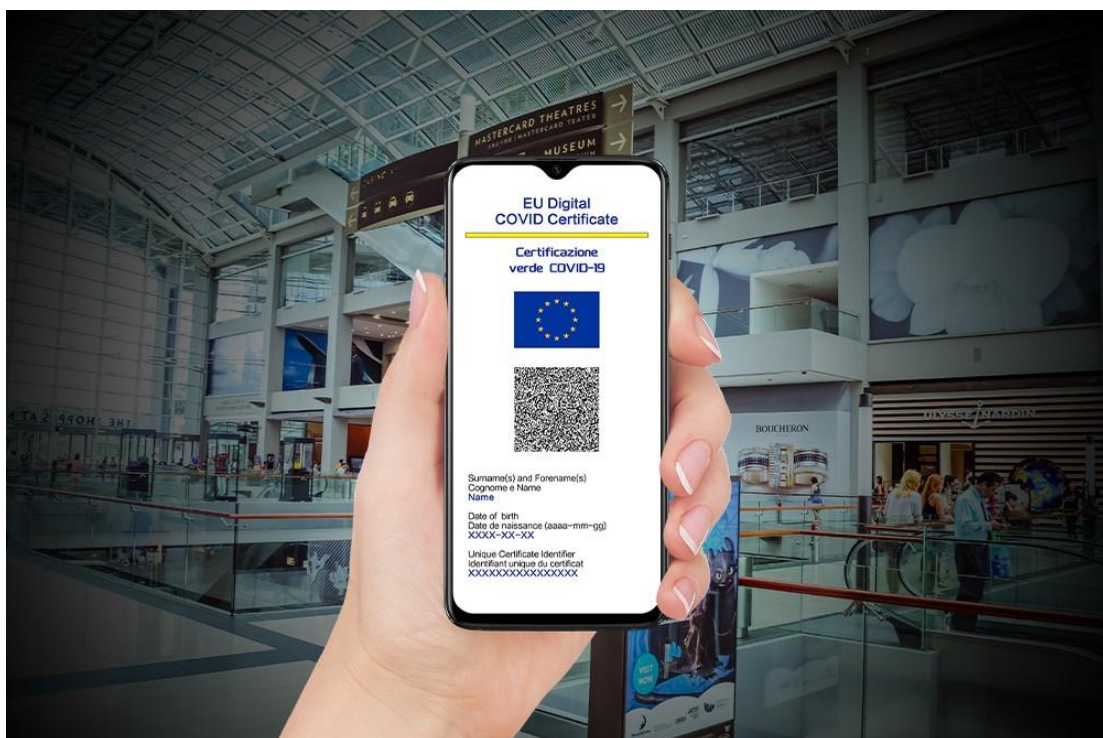
In order to better prevent and control the COVID epidemic, and promote population movement and economic recovery within the EU, the EU Digital COVID Certificate (EUDCC, known as the "EU COVID vaccine passport") has come into effect, allowing EU citizens to move between countries.

The Digital COVID Certificate is issued to users in the form of a QR code, and there are 3 types, including:

- ① Certificate of vaccination approved by the EU
- ② Certificate of negative nucleic acid test
- ③ Certificate of recovery from COVID

Holders of the "EU Health Code" can freely enter and exit various EU countries that recognize this certificate, and are recognized by all 27 member states of the EU and other European countries such as Iceland, Norway, and Switzerland.

We immediately paid attention to the pass demand of the "EU Health Code", and launched a temperature measurement face recognition pass management solution that can recognize the "EU Digital COVID Certificate".



## Solution overview

The solution uses high-performance hardware configuration, equipped with high-precision face recognition algorithms, supports non-contact rapid temperature screening based on infrared thermal imaging technology, and supports the recognition of EU Digital COVID Certificate QR code. Built-in dual-channel speakers can realize voice broadcast and voice reminder, reduce the risk of infection in close contact, and a complete back-end management system to help prevent and control the COVID epidemic, and realize safe and efficient access control for personnel.

## Working Process

- The device captures the face
- Visitors show the QR code of the EU Digital COVID Certificate
- Local identification inspection:
  - QR code verification
  - Temperature screening
  - Recognition of wearing a mask
  - Face recognition
- The display shows visitor information. If the QR code/temperature/mask wearing is normal, the visitor can pass normally
- Abnormal QR code/temperature
- Not wearing a mask/stranger,
- Display screen and voice alarm



Step1: Face Recognition



Step2: EU Vaccination Certificate QR Code Scanning

Step3: 1. QR code verification 2. Body temperature detection  
3. Mask checking 4. Face recognition



## Solution features

### 1、 QR code verification of "EU Digital COVID Certificate"

The solution supports the identification of the QR code of the "EU Digital COVID Certificate". The device recognizes and reads the QR code information, and displays the information on the screen, including basic visitor information and epidemic prevention information. The relevant information is only temporarily verified and not saved locally.

### 2、 Support full coverage of EU languages

Supports Simplified Chinese, Traditional Chinese, English, Italian, Polish, German, Russian, Thai, French, Arabic, Vietnamese, Czech, Romanian, Japanese, Kazakh, Hebrew, Slovak, Dutch, Turkish, Lithuanian, Greek, Portuguese [Portugal], Portuguese [Brazil], Ukrainian, Spanish, Indonesian, Korean, Croatian and other dozens of languages, covering the needs of customers in the EU.



### 3、 Support infrared thermal imaging temperature screening

Supports non-contact, precise and rapid temperature screening based on infrared thermal imaging technology. The best temperature detection distance is 0.5 meters, and the farthest is 1 meter. The temperature measurement accuracy is  $\leq \pm 0.5^{\circ}\text{C}$ . Supports automatic alarm for abnormal temperature, detection speed in seconds.

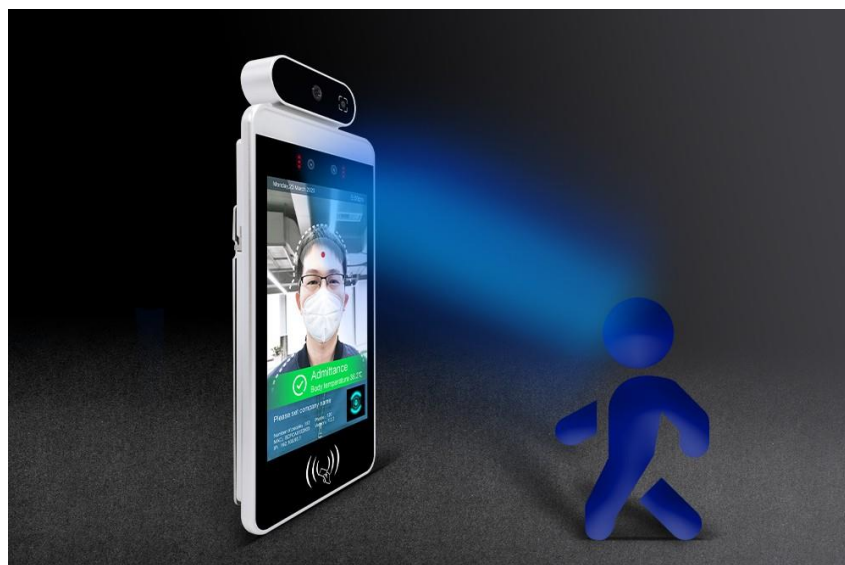


The best temperature detection distance is 50cm

The recognition distance of the QR code is about 20cm

#### 4、Support accurate face recognition

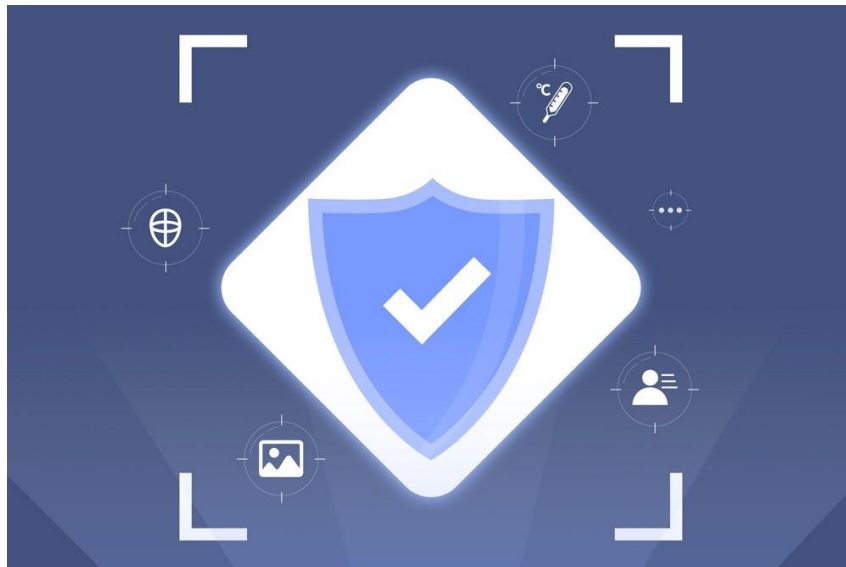
Support 20,000 face library. The recognition rate of 1:1 comparison is more than 99.7%, the recognition rate of 1:N comparison is more than 96.7% @0.1% false recognition rate, and the live detection accuracy rate is 98.3% @1% false rejection rate. The pass speed of face recognition is less than 1 second. It can effectively detect whether the visitor is wearing a mask, give voice prompts to those who are not wearing a mask, and support the completion of accurate face recognition and comparison while wearing a mask.



## 5、Support privacy protection

In accordance with the needs of different use scenarios, the privacy protection has been deeply optimized:

- 1) Can set to display custom pictures on the client after personnel passing through;
- 2) Can set the stranger record retention period, support to set the time to automatically delete stranger records;
- 3) Can support stranger mode, that is, after identifying strangers, only measure the temperature and not record the pass records;



## 6、 Super hardware configuration

Using industrial-grade aluminum alloy CNC shell, dozens of processes, efficient heat conduction, fanless design, IPS full-view LCD HD display, industrial-grade wide dynamic binocular camera, built-in dynamic dual-camera living body identification and anti-counterfeiting, night infrared, LED double fill light.

Optional RK3288 quad-core/RK3399 six-core/MSM8953 eight-core processor, high performance and low power consumption, support 7\*24 hours stable and smooth operation.



## 7、 Support customized management platform

Provide a professional management platform, which can support personalized customization of APP and background, to meet the actual demands of different usage environments in different regions. The customization of 500+ APP versions has been completed, and a wealth of experience has been accumulated. It can respond faster to support customer customization needs, and comprehensively cover the pass management of various scenarios.

## Application scenarios

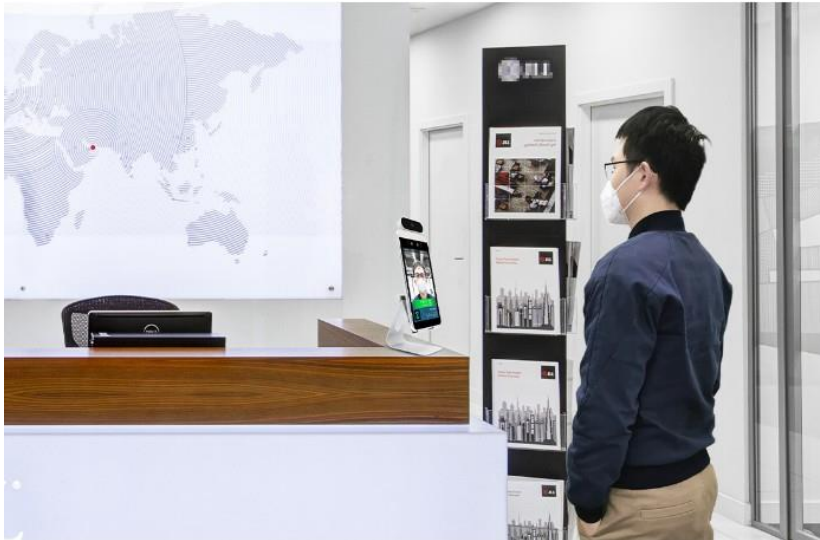
- Public transportation scenes such as airports/stations/subway



Office buildings/parks/factories/hospitals, etc.



Hotel/Enterprise etc.



Schools

