

# 3D Structured Light Facial Recognition Module

# FR3D

## High Precision Algorithm



### High-precision Recognition

For 3D mask attacks, the 3D structured light multimodal fusion algorithm is used, which utilizes texture information of different materials, pupil characteristics, and facial contour edge features to determine if it is a live body, with a defense capability of over 99.9%.

### Low Power Consumption

Creatively integrating the algorithm module with the structured light module reduces the size and power consumption, facilitating easier structural design for customers;

### Data Encryption

Data encryption, privacy protection, and no storage of user photo information.

### Strong Adaptability

Adapt to various environments, not affected by low light, strong light, or stained face.

### Normal use in Low Light Conditions

It can be normally recognized in low light, no light, and outdoor light at night.



**system**  
Android / Linux /  
Windows7/10



**Recognition Distance**  
0.25m-1m



**Capacity**  
10000



**Recognition Accuracy**  
99.99%



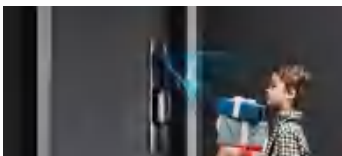
**Recognition Speed**  
0.6s



**Interface**  
USB

## Application Area

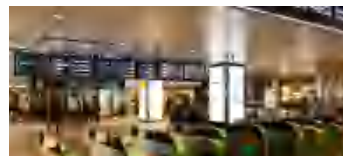
It is applicable to smart door locks, smart access control, smart cabinets, and other devices that require the integration of unique personnel identity authentication



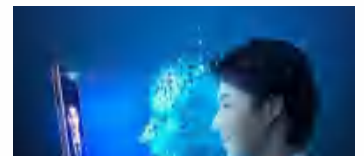
Facial Recognition Lock



Smart Cabinet



Smart Access Control



Face Recognition Terminal

# Specification Parameter

## Product Advantages

|                             |   |
|-----------------------------|---|
| Baseline                    | 40mm  |
| Depth distance              | 0.25-1m   |
| Power consumption           | Average power consumption: 2W (typical)<br>Peak power consumption: 5W (typical) |
| Depth Image Resolution      | 640*400@30FPS 320*200@30FPS   |
| Color image resolution      | 1920*1080@30FPS<br>1280*720@30FPS<br>640*480@30FPS                              |
| Accuracy                    | 6mm at a distance of 1m   |
| Depth                       | FOV H 67.9° V45.3°  |
| Color                       | FOV H 71° V43.° @1920*1080  |
| Supported Operating Systems | Android / Linux / Windows7/10   |
| Power Supply                | USB   |
| Operating Temperature       | 10°C ~ 40°C   |
| Applicable Scenarios        | Smart door lock smart access control, smart cabinet, etc.                       |
| Dust and Water Resistance   | Not supported   |
| Safety                      | Class1 Laser  |
| Dimensions (mm)             | 5.6*17.4*11.1mm   |



## Contact Information



### Shenzhen Rakinda Technologies Co., Ltd.

Tel: +86 18145816425

Email: [contact@rakinda.com](mailto:contact@rakinda.com)

WhatsApp: +8618145816425

Website: [www.rakinda.com](http://www.rakinda.com)

Skype: Scanmax Rakinda

WeChat: +8618145816425

Add: 5F Bldg .A2.Lilang Software Park, No,31 Bulan Rd,  
Longgang Dist,Shenzhen City,Guangdong Province, China