

FE-500



- Face + Mask detection
- Speed <1s (50K 1:N mode)
- Multi face verification(up to 5 people)

Key features

FE-500



Recognition rate

- 99.77% recognition rate at 1% FAR
- 99.27% recognition rate at 0.1% FAR

Recognition distance

Long range detection
(Max 3M)

Speed

Less than 1sec (for 50K user for 1: N authentication)
Possible to authenticate 3-5 people simultaneously within 1sec

Live

Photo detection
Video detection

Face + Mask detection

FE-500 Specification

FE-500 Specification	
CPU	2 core CPU
Memory	4GB RAM, 8G Flash
LCD	5 inch IPS Touch screen
Camera	2MP dual-lens
No. of user registration	50K user capacitor / 1,000K Event log
OS	Linux
Function	Face + Mask detection
Power	12V/2A(Max.24W)
Detection	Single/Multi(Up to 5 person)
Range	Max 3M
Live detection	Picture, Video, Mask can be detected
Communication	TCP/ WIFI(Optional)
Speed	<1s(1:N, 50k)
RF card	MIFARE/EM/HID
Temperature	-10 – 50C
Humidity	10% - 90%
Size	192mm*92mm*30mm

Deep learning

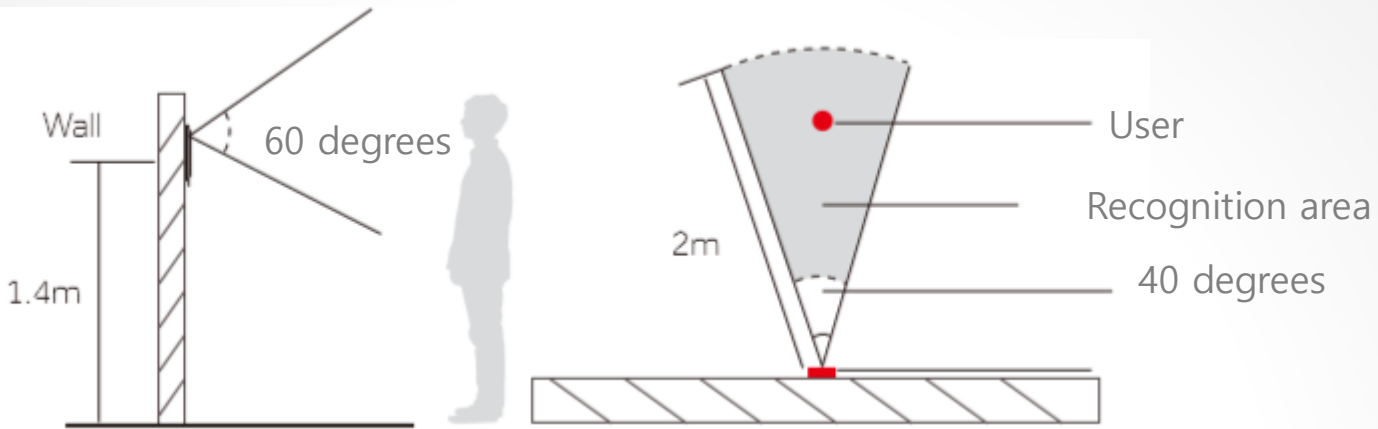
Adapting the AI technology which makes it possible to be upgraded continuously.

Face device can increase recognition rate by reflecting users' even minor & recent facial changes.



Compared with registered face, face device updates changed face shortly.

Recognition area



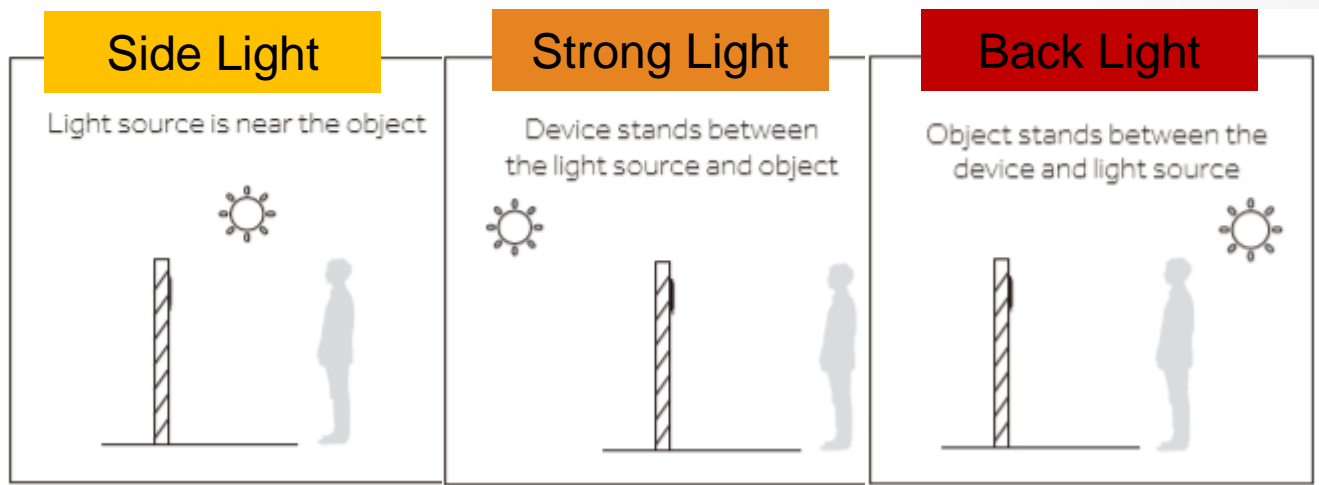
If the installed height of the face device is 1.4m, the user's face can be recognized from 0.5M to 2M.

Then, it is very advantageous for user to be recognized his face vertically & horizontally.

No need to install it inclined like other similar face recognition products.



Light condition



Lighting might cause the problem between the real image and the registered image at the time of site authentication.

In case of using backlight, side light or strong light, the deep learning algorithm of FE-500 learns the corresponding authenticated image repeatedly and updates the registered image in the long run.

Strong sales point



Multi-user authentication(3-5 user) at the same time



Long range detection (1-3M)



Possible to register even with snap shot taken by mobile phone



Integrated S/W (same s/w for fingerprint reader & face recognition device)



Fast recognition speed(<1s)



36.5c

Face + Mask Detection

Gauss Software

Dashboard

The dashboard provides a comprehensive overview of the system's status. It features three main sections: Device Information, User Information, and System Information. Device Information shows 4 total devices with 3 flags. User Information shows 12 total users. System Information displays CPU usage at 8.30% and memory usage at 23.80%. A date/time stamp indicates the current system time as 2019-11-05 08:13:50. Below these sections, there is a Log Information bar chart and a Communication Information table.

Device	Device Type	IP Address	Active	Status
AccessControl	AccessControl	192.168.1.1	Active	Online
AccessControl	AccessControl	192.168.1.2	Active	Online
AccessControl	AccessControl	192.168.1.3	Active	Online
AccessControl	AccessControl	192.168.1.4	Active	Online

Face Registration

The Face Registration interface allows users to enroll their faces. It includes a camera view for live scanning, an 'Enroll by photo file' option, and a 'Get Template' button. A QR code is displayed next to the user's photo. The interface also shows the 'Enroll(Face) ID' and navigation controls at the bottom.

Fingerprint Registration

The Fingerprint Registration interface is used to register new users. It includes fields for User ID, User Name, and Test#. The 'Fingerprint' tab is active, showing options for Enroll No., Card No., Time Zone 1, Time Zone 2, Access Mode, Limit Time, Issue Date, and Expiration Date. The 'Manager Mode' is set to 'Dress Mode/Fingerprint' and 'None'. Two fingerprint capture areas, 'Fingerprint #1' and 'Fingerprint #2', are shown with a sample fingerprint image. Navigation buttons for New, Test, Delete, Get, and Close are at the bottom.

Time & Attendance

The Time & Attendance interface displays time registration details for a specific user. It includes a 'Time name' field and a 'Day work' checkbox. The 'Overtime work', 'Break time work', and 'Auth. type / Function keys' options are also visible. The registration details include Arrival time (09:00), Leave time (17:00), Day type (Today), Late in time (09:30), Early leave time (16:30), and Min. Day work hours (05:00). Navigation buttons for New, Save, Delete, and Close are at the bottom.

Gauss Software

Key Features

Database	Microsoft LocalDB(Gauss Lite/Gauss Pro) Microsoft MS-SQL Server(Gauss Commander)
Server/Client	Gauss Lite(Not support) Gauss Pro(Not support) Gauss Commander(Support)
Dashboard	Support graphical dashboard and user can monitoring at-a glance views of key performance.
Access Control	Support access control and user can control doors and monitoring events and alarms
Time & Attendance	Support regular / shift time and attendance function. Easy to define working time and schedule for each employee and data calculation.
Fingerprint Registration	Possible to register fingerprint by fingerprint USB scanner then upload user templates to other fingerprint devices.
Face Registration	Possible to register face templates even with snap shot taken by web cam on computer, mobile phone and so on.
Monitoring	Support event and alarm monitoring with user's photo.
Data Export	Support data export to an excel file when views log report.
Account Management	Support account management for Gauss software login.
Remote Door Control	Support remote door control and user can lock/unlock doors.

Gauss Software

Software Comparison Table

	Gauss Lite	Gauss Pro	Gauss Commander
No. of maximum support devices.	5	20	100
Database	Microsoft LocalDB	Microsoft LocalDB	Microsoft MS-SQL Server
Server/Client	Not Support	Not Support	Support
Cost	Free	Not free	Not free