GONSIN

**GONSIN Facial Recognition
Attendance Registration System**

GONSIN Facial Recognition Attendance Registration System

◆ Product Introduction

GONSIN facial recognition registration system is developed from the combination of GONSIN conference registration system and advanced facial recognition technology. Conference registration conduct identification recognition with facial features. The attendee enter the facial recognition area, which completes the conference registration and display the participant's information on the screen simultaneously. That not only makes conference registration more accurate and secure, but also efficiently improve the volume of the participants registration. Conference staff can check the real-time registration information. Meanwhile, the system supports conference registration report export, supplementary registration / registration cancellation, the supposed attendance report/real attendance report / absence report printing, customize conference logo and agenda logo and etc.

◆ System Advantage

- **Super recognition rate**
  GONSIN facial recognition registration system utilizes the leading algorithm, can capture the attendance facial information accurately by multiple facial recognition techniques such as deep learning facial recognition, face compare and living body recognition. It allows the system to accurately capture the attendance facial information to identify multiple face characters such as gender, age, facial expression with the false recognition rate less than 1 in 10,000.

- **Seamless Compatibility for Conference Devices**
  Attendance registration information can be directly related to the conference devices. After the first registration, the attendance do not be required to register again. The system will inter-connect the data of attendance information, conference access control and others from data layers. For rigorous high-level conference, it realizes the system compatibility and data consistency.
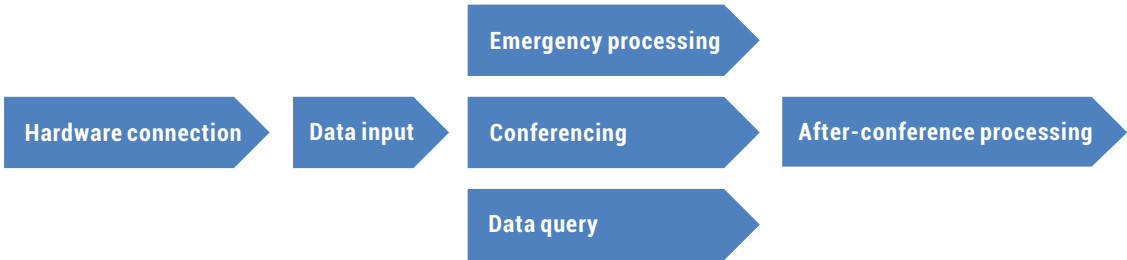
- **Flexible Operation Administration**
  The operator can manage the attendance's pictures before the facial recognition, and supplement attendance information during the registration. Registration data will update at the same time, which make it convenient for the conference staff to check or print the attendance registration.

- **Multiple Solutions**
  According to the entrance number, the registration workstation number can be adjusted. Customer can select the facial recognition processing sever with different configuration. PC, printer, switch, display devices and others, support self-configuration, which makes it more flexible.

Conference Registration Flow

Hardware connection	Data input	Emergency processing	
		Conferencing	After-conference processing
		Data query	

Hardware Connection

The recognition area can be set in according to the conference venue. Every facial recognition registration can be installed a set of facial recognition workstation and specialized camera. Set a supplementary registration console in the entrance area where a PC, HD camera need to be installed to check or supplement registration manually. The facial recognition server, conference registration server, printer can be installed in the control center. All devices can be connected to the switch by cables to form a complete conference registration network.

Pre-conference Data Input

Input the attendance information, data information such as conference name, conference time, attendance names, photos, titles and etc by back-office operation software V7.1.0(FR).

Holding a Conference

Activate facial registration system, enter the registration status, the facial recognition workstation monitors the target area simultaneously. When the attendance enter the recognition area, the camera will transmit the video stream to the server, the server will select the best-quality facial image to match the images from the facial database; When the captured image matches the image from the database, the workstation will hint the successful recognition and display the attendance registration information, GONSIN registration management server will simultaneously display the registration information by the split screen.

Emergency Processing

The attendance with recognition failure can register manually at the supplementary console. Or input the information such as name, photo, title and other by on-site PC and camera, the data will be updated to the conference registration management server simultaneously.

Data Query

During the registration, the query computer at the supplementary registration console can check or print the registration result.

After-conference Processing

The conference registration server will check, print and file the registration data.

Facial Recognition Processing Server
GX-AIS101A-K

Basic Functions

♦ Utilize the leading facial recognition algorithm to ensure the facial recognition accuracy.

♦ Support one channel of specialized facial recognition camera

♦ Support living body detection, identify dynamic faces, which efficiently prevent various attacks from photo, video , face model and etc.

♦ Support facial recognition for up to 50,000 persons

♦ Unware dynamic facial recognition, smoothly recognize during registration with excellent user experience

♦ High-speed registration with milliseconds-level recognition, avoid queue and congestion, ensure the speed of people flow

Technical Parameters

Processing capacity	Support one channel of 2 million pixels stream video
Recognition speed	5 persons / channel / second
System	Ubuntu 16.0
CPU	Intel i5-6260U
Hard disk	120G
Memory	8GB
Ethernet ports	10M/100M/1000M self-adaption LAN port
Working voltage	AC220V-DC18V adapter power supply
Peak power	50W
Dimensions	115×111×51mm(L×W×H)
Working temperature	0ºC~45ºC
Working humidity	20%~80%

Facial Recognition Processing Server

GX-AIS102A-K

Basic Functions

♦ Utilize the leading facial recognition algorithm to ensure the facial recognition accuracy.

♦ Support 2 channels of specialized facial recognition camera

♦ Support living body detection, identify dynamic faces, which efficiently prevent various attacks from photo, video , face model and etc.

♦ Support facial recognition for up to 50,000 persons

♦ Unware dynamic facial recognition, smoothly recognize during registration with excellent user experience

♦ High-speed registration with milliseconds-level recognition, avoid queue and congestion, ensure the speed of people flow

Technical Parameters

Processing capacity	Support 2 channels of 2 million pixels stream video
Recognition speed	5 persons / channel / second
System	Ubuntu 16.0
CPU	ARMv8 CortexA57 quad-core@1.73GHz
GPU	NVIDIA TX1 maxwell 256-core up to 1TFLOPS FP16
Storage	16G(support up to2TB MircoSD)
Memory	4GB
Ethernet ports	3 100M/1000M self-adaption LAN ports
Working voltage	AC220V-DC12V adapter power supply
Peak power	36W
Dimensions	128×98×70mm(L×W×H)
Working temperature	0ºC~45ºC
Working humidity	20%~80%

Facial Recognition Registration Workstation
GX-4550A-B

Basic Functions

- Install registration workstation module software, to display real-time registration information
- Simple and concise appearance design
- Slim frame with aluminium edge and thin to 45mm
- 42 inches FHD display, all-sight view
- Tempered glass for the surface
- IR touch control, simple operation
- Equipped with multi-media information publishing software, to publish information when there is no conference
- Cold-roll steel sheets pedestal with universal wheels for convenient movement.

Technical Parameters

Control	IR touch control
PC	I5 CPU/4G memory/64G SSD hard disk
LCD screen	42 inches,1080×1920dpi,16:9
Display size	529×936mm
LCD Bright	250cd/㎡
LCD Angle	All sight
Shell Material	Metal shell with tempered glass panel
Color	Sliver brushed
Universal wheel	four
Power	AC110 240V
Power	≤65W
Main body Dimensions	635×68×1800mm
Pedestal Dimensions	638×450×50mm
Working temperature	0ºC~50ºC
Working humidity	20%~80%

Specialized Facial Recognition Camera

GX-HD1300E

◆ Basic Functions

♦ Utilize the leading facial recognition algorithm to ensure the facial recognition accuracy.

♦ High-speed facial shooting, offers high-quality image for the facial recognition server.

◆ Technical Parameters

Sensor type	1/2.8" Progressive Scan CMOS
Shutter	1/10s to 1/1000s
Camera interface type	C interface
Video compression standard	H.264
Maximum image size	1920×1080dpi
Max framerate	25fps
Support agreement	TCP IP ICMP HTTP FTP DHCP DNS DDNS RTP RTSP
Communication ports	1 RJ45 10M/100M self-adaption Ethernet port
Power supply	DC12V±10% adapter power supply or POE power supply
Power Consumption	4W MAX
Dimensions	62×62×88mm(L×W×H)
Working temperature	-30ºC~60ºC
Working humidity	Less than 90% (No condensation)

GONSIN Intelligent Conference Management Software - Registration workstation Module
V7.1.0(FRM)

GONSIN
Meeting

Zhang San

Li Si   Wang Wu   Ding Liu   Cheng Qi

Due present: 502
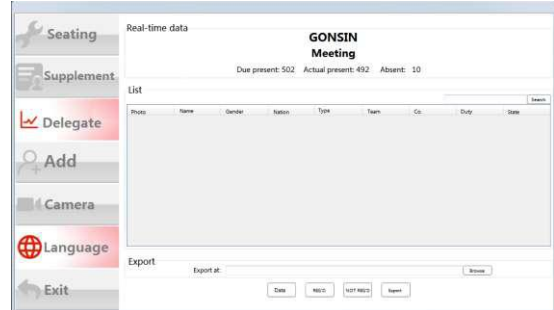Actual present: 492
Absent: 10

◆ Basic Functions

- ♦ Display real-time registration information, the attendance's information and registration status will be showed on the display
- ♦ Devices management function, support online monitor function with facial recognition server and facial recognition workstation
- ♦ Supplement attendance data, including name, photo, title, device number, seat number and other customized data.
- ♦ Utilize Superdog data encryption, ensure the data safety by LicenseOnChip technique, support AES algorithm encryption. Apply ECC key exchange technique to ensure the safety of conference data transmission
- ♦ Key management service, the devices can be used with the authorization code without the Superdog.
- ♦ Log in with user account and password, realize privilege level management, to avoid outside tampering or data leak. Support setting different user types including operation user, management user, backup user ant etc.
- ♦ The software support information check, export and printing of the conference registration.
- ♦ The software support secondary development, the interface protocol can be opened to customize the software in according to the project demand.

GONSIN Intelligent Conference Management Software - Facial Recognition Module
V7.1.0(FR)

Basic Functions

Support main screen or split screen display, the software interface can synchronize to the big screen, support self-adapt to screens with different resolutions.

Multiple functions, different software module functions can be realized in according to different auxiliary products.

Compatible with various devices from GONSIN conference system, meet the demand of inter-connection with wired/wireless/other devices.

Utilize Superdog data encryption, ensure the data safety by LicenseOnChip technique, support AES algorithm encryption. Apply ECC key exchange technique to ensure the safety of conference data transmission

Key management service, the devices can be used with the authorization code without the Superdog.

Log in with user account and password, realize privilege level management, to avoid outside tampering or data leak. Support setting different user types including operation user, management user, backup user ant etc.

Built-in multiple language selection. Support language customization, visual language edition interface, which is convenient for the translator to edit and proofread, language data package input / output is supported.

Devices management function, support online monitor function with facial recognition server and facial recognition workstation

Attendance information input function, including name, photo, device number, seat number or customized type, support online and offline create

Support create new conference venue or open the existing one, the user can set conference venue background and seating plan. Seating plan is suitable for all conference, and can be invoked through the conference agenda
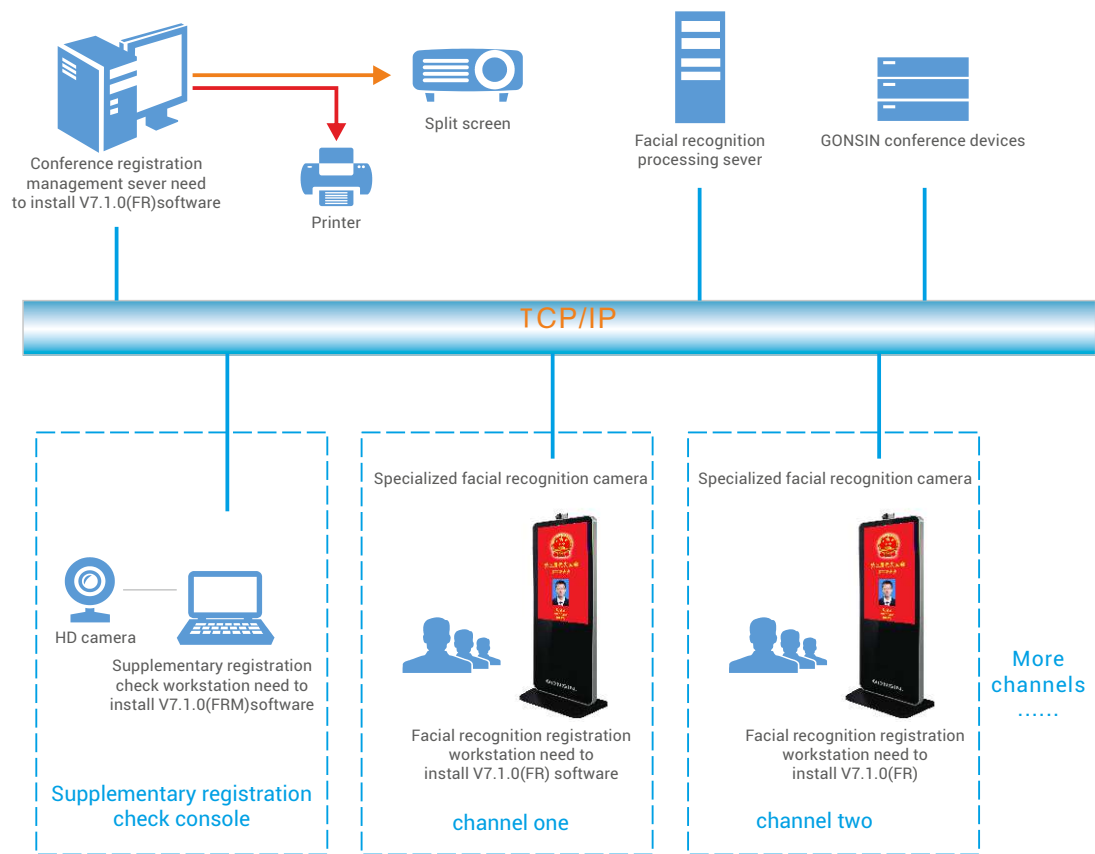
Support creating conference name and conference agenda, support multiple registration methods, such as facial recognition registration, key-press registration, numbered card inserting registration , unnumbered card inserting registration

Support screen customization, visual edition interface for various settings including font, color, pictures and data interconnection. Support quick switch for multiple interface styles.

Support information processing after the conference, conference attendance list, conference topic result, and files created during the conference, all can be exported or printed. Support cloud upload for history data(only for some relevant products)

Support secondary development, customized development can be realized by opening the interface protocol in according to the project demand.
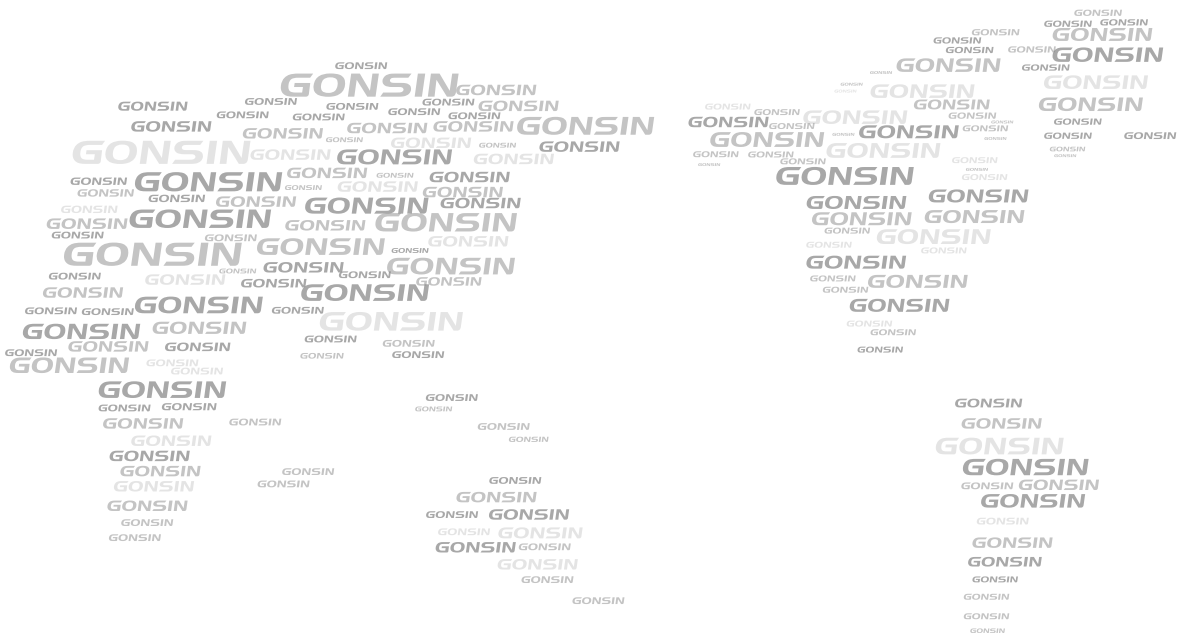
System Diagram

Conference registration management sever need to install V7.1.0(FR)software

Split screen

Printer

Facial recognition processing sever

GONSIN conference devices

TCP/IP

HD camera

Supplementary registration check workstation need to install V7.1.0(FRM)software

Supplementary registration check console

Specialized facial recognition camera

Facial recognition registration workstation need to install V7.1.0(FR) software

channel one

Specialized facial recognition camera

Facial recognition registration workstation need to install V7.1.0(FR)

channel two

More channels ......

◆ Device Lists

Number	Device Name	Device Type	Remarks
1	Specialized facial recognition camera (support 1 channel)	GX-AIS101A-K	The servers should be set in according to the number of facial recognition registration channel.
2	Specialized facial recognition camera(support 2 channels)	GX-AIS102A-K	
3	Facial recognition registration workstation	GX-4550A-B	Every workstation need to be installed V7.1.0(FRM)software.
4	Specialized facial recognition camera	GX-HD1300E	Every channel need a camera.
5	Supplementary registration check workstation	Optional, users can purchase by themselves	需安装V7.1.0(FRM)软件
6	Conference registration management server	Users can purchase by themselves	V7.1.0 (FR) software needs to be installed.
7	GONSIN intelligent conference management software - facial recognition Module	V7.1.0 FR	
8	GONSIN intelligent conference management software - workstation Module	V7.1.0 FRM	
9	HD camera	Optional, users can purchase by themselves	Connecting to the supplementary registration rogatory PC.
10	Printer	Optional, users can purchase by themselves	
11	Switch	Users can purchase by themselves	
12	Cables	Users can purchase by themselves	

GONSIN CONFERENCE EQUIPMENT CO.,LTD.
www.gonsin.com

English WeChat