

 **ScanVis**TM
by Comba

PRODUCT CATALOG
2020-2021



ScanViSTM

by Comba

What

ScanViS team consists of well-experienced specialists from product development (hardware and software), R&D, technical support, and sales and marketing. Designing and implementing end-to-end solutions with facial recognition technology in access control, events and conferencing, customer analytics, and public security are our core strengths.

Why

ScanViS expedites the use of top-notch, future-proofing facial recognition technology for safe, accurate authentication process to enhance operation efficiency and team performance in both private and public sectors. We aim to make ID verification processes more smart, efficient, reliable, and convenient, and to make internal and external services more personalized.

How

We have currently reached out to enterprises and public organizations who need enhanced private security for their offices, facilities, commercial centers and events in Asia, Europe and South America. Our global distribution networks will continue to expand through strategic partnerships.



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01 ACCESS CONTROL SOLUTION

GateGuard Series

delivers lightning face detection speed of less than one second. Regardless of partial occlusions, different forms of face expressions, and tilt angles, its powerful hardware speeds up facial feature extraction, compares up to 30K databases, and can work with photos up to 10 years ago.

Robust and Reliable



Fast Face Recognition
< 1 second



Liveness Detection
Differentiate live person
from photos/videos



Minimal investment
Integration with existing
access management
systems

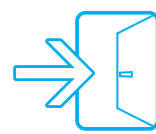


High Accuracy
False match rate
< 0.001%

Applications



Attendance



Access control



GateGuard Series



GateGuard TH

GateGuard PRO

Performance

Face Detection distance	0.5 – 2m
Capacity	30,000 faces + 30,000 cards
Access log capacity	20,000
Speed	~1s typically
Liveness detection	Dual Camera RGB + Infra-red

Hardware

CPU	Dual-core A72 and Quad-core A53	
GPU	Mali-T860	
RAM / ROM	2GB / 8GB	
Front camera	1920 x 1080	
Screen size	7 inches	
Touch screen	Support	
ID card standard	EM4100, ISO1443A, Mifare	
Door control	Wiegand or 2x dry contact output	
Network	Ethernet	
USB	2.0 (x1)	
Input voltage	12V DC, 802.3at PoE	
Power consumption	< 24W	
Operating temperature	16°C ~ 35°C	
Dimension (mm) (not including installation)	275 x 126 x 26	235 x 126 x 26
Weight	0.83 kg	0.72 kg
Installation	Wall mount, speed gate integration	

Central Management Console

ScanViS Win CMS	Max 50 units (application running on Windows)
ScanViS Cloud CMS	Unlimited device units
3 rd party management	RESTful API

GateGuard TH special feature

Thermometer

Temperature detection distance	0.1- 0.5m
Measurement range	32°C ~ 43 °C with 0.1 °C resolution
Accuracy	0.3°C
Response time	500ms
Operation temperature	16°C ~ 35°C

Scan for more info



Feature Highlights



Facial recognition



ID management



Group and schedule setting



Analysis dashboard



Visitor greeting message



Performance

GateGuard

GateGuard Lite

GateGuard W

Detection distance	0.5 – 2m	0.5 – 2m	0.5 – 2m
Capacity	30,000 faces + 30,000 cards	1,500 faces	30,000 faces
Access log capacity	20,000	20,000	20,000
Speed	~1s typically	~2s typically	~1s typically
Liveness detection	Support, RGB camera	Support, RGB + Infra-Red Camera	Support, RGB camera

Hardware

CPU	Dual-core A72 and Quad-core A53	Quad-core A17	Dual-core A72 and Quad-core A53
GPU	Mali-T860	Mali-T764	Mali-T860
RAM / ROM	2GB / 8GB	2GB / 8GB	2GB / 8GB (extendable)
Front camera	1920 x 1080	1280 x 800	1920 x 1080
Screen size	7 inches	8 inches	10 inches
Touch screen	Support	-	Support
ID card standard	EM4100, ISO1443A, Mifare	-	-
Door control	Wiegand or dry contact output	Wiegand or dry contact output	Built-in dry contact output
Network	Ethernet	Ethernet and Wi-Fi	Wi-Fi, Ethernet
USB	2.0 (x1), 3.0 (x1)	-	2.0 (x1), 3.0(x1)
Input voltage	12VDC 100-240V AC adapter	12VDC, 100-240V AC adapter	12VDC 100-240V AC adapter
Power consumption	< 24W	< 24W	≤48W
Working current	-	-	≤5A
Operating temperature	0°C ~ 40°C	0°C ~ 60°C	0°C ~ 40°C
Ingress protection	-	-	IP65 (Front panel)
Dimension (mm) (not including installation)	255 x 126 x 38	240 x 128 x 20.5	294 x 194 x 59
Weight	0.96 kg	0.90 kg	1.28 kg
Installation	Wall mount, speed gate integration	Wall mount, speed gate integration	Wall mount

Central Management Console

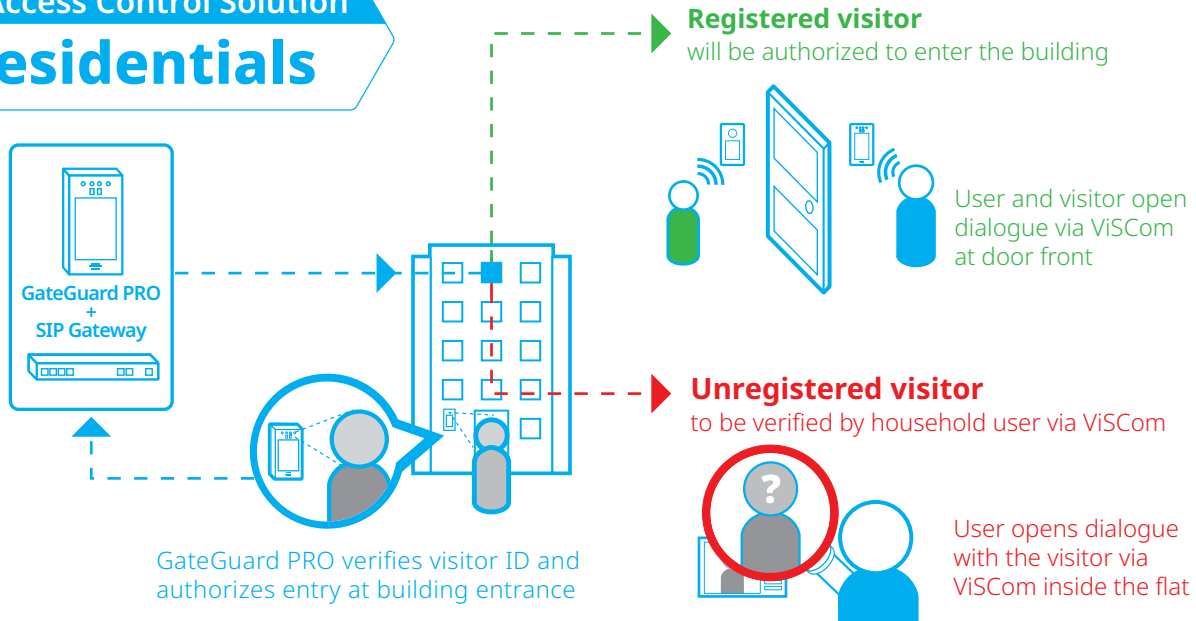
ScanViS Win CMS	Max 50 units (application running on Windows)	Max 50 units (application running on Windows)	-
ScanViS Cloud CMS	Unlimited device units	-	Unlimited device units
3rd party management	RESTful API	RESTful API	-

ViSCom

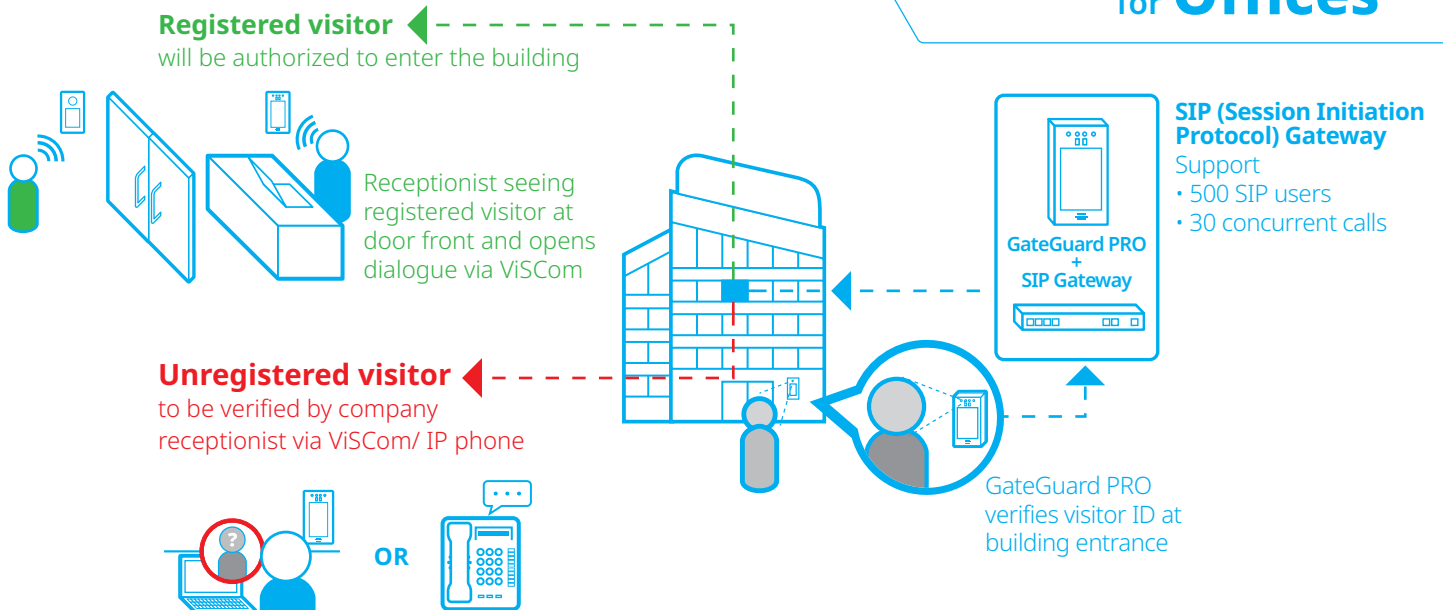
Highly compatible solution for entry management in facility/property sector

ScanViS ViSCom is a total solution running intercom system on Android platform to offer two-way communication between users and visitors. Together with monitoring, account registration, safety and security functions, it offers smart access control connecting IP phones, indoor and outdoor intercom devices in residential and commercial buildings.

Total Access Control Solution for **Residentials**



Total Access Control Solution for **Offices**



Feature Highlights



Two-way visual communication



Multi-account registration



Emergency & speed dialing



Security alarm



VS-75

System

CPU	ARM Cortex -A7, quad core
RAM / ROM	1GB/DDR3; 8GB/EMMC
Operating system	Android 6.0

Screen Display

Size	7 inches
Resolution	1024 x 600
Brightness	300 cd/m ²
Touch screen	Support

Video

Image sensor	1M Pixels color CMOS camera
Video codec	H.264
Video solution	QCIF, CIF, VGA, 4CIF, 720P

Audio [HD voice]

Audio stream	Two-way
Wideband codec	G.722
Narrowband codec	PCMA, PCMU, G.729, G723_53, G723_63, G726_32
Echo cancellation	G.168, acoustic echo cancellation audio output
Speaker	Built-in
Others	Voice activity detection (VAD), Comfort noise generator(CNG)

Administration

Auto provisioning	FTP/ TFTP/ HTTP/ HTTPS/ PnP
Web management	HTTP/ HTTPS
Operation	Configuration keypad-based management
Functions	Firmware upgrade, configuration backup/ restore, SNMP/TR069, syslog, NTP/daylight saving time
Alarm type	Door bell/ high alert/ intrude/ telecare

Protocols & Network

SIP	v1 (RFC2543), v2 (RFC3261), SIP over TLS, SRTP
others	RTSP, TCP/ IPv4 / UDP, RTP/ RTCP, RFC2198, 1889, HTTP/ HTTPS/ FTP/ TFTP, ARP/ RARP/ ICMP/ NTP, DNS SRV/ A Query/ NATPR Query, Primary/ Secondary DNS, 802.1p/q, DSCP, DHCP/ Static/ PPPoE, STUN, Session timer
DTMF Mode	In-band, RFC2833 and SIP INFO

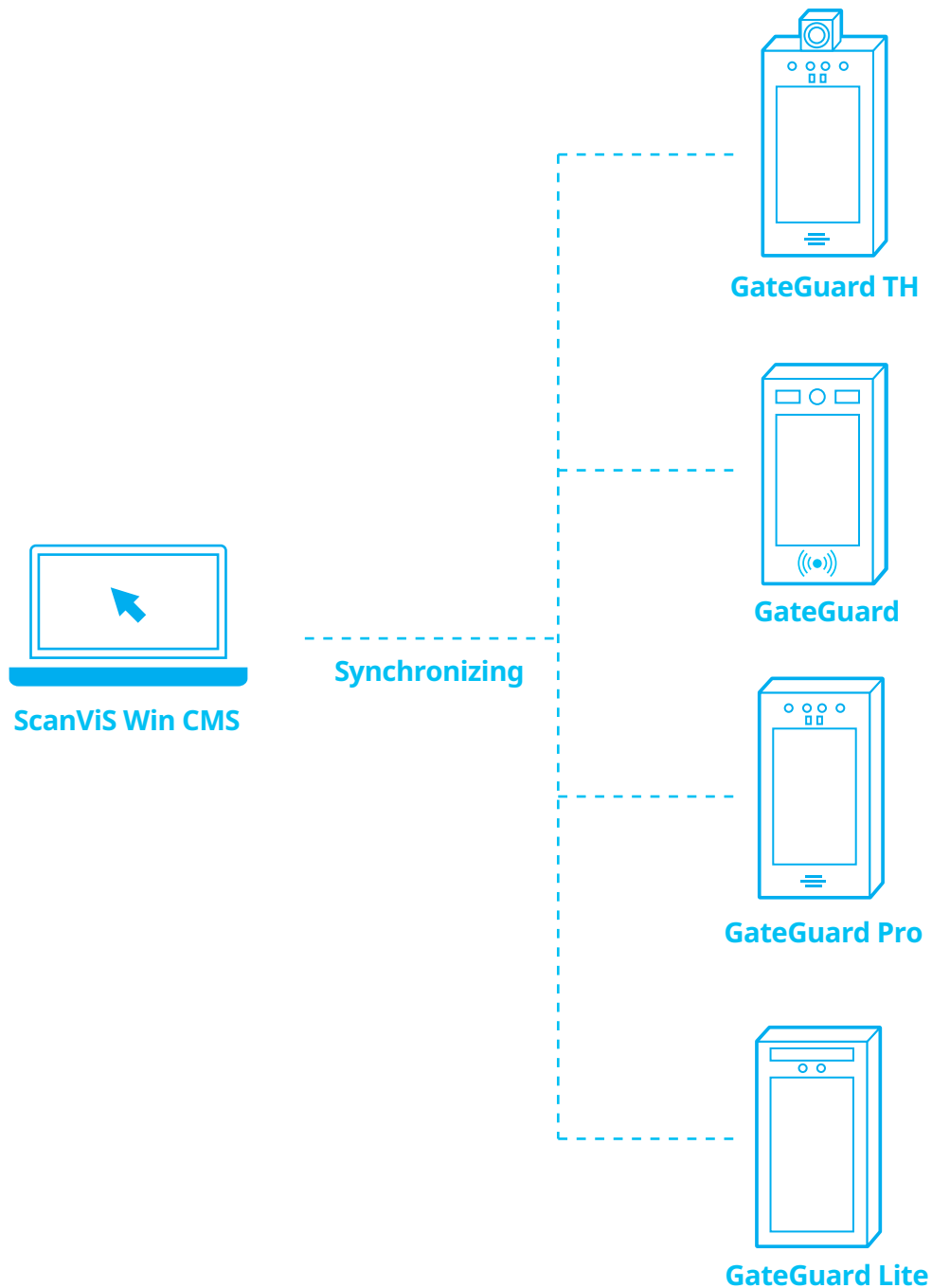
Miscellaneous

Power supply	DC 12V1A or 802.3af PoE
I/O interface	1* RS485 port, 8* channels of alarm input, 1* relay input & 1* relay output
Operating temperature	-20°C ~ 60°C
Relative humidity	10 ~ 90%
Dimension (mm)	130 x 215 x 33
weight	Approx. 0.8 kg

ScanViS Win CMS

Centralized platform for efficient device management

ScanViS Win CMS can be installed in any standard PC and notebook computer. It can centralize device management of the whole GateGuard series namely GateGuard, GateGuard PRO, GateGuard TH, and GateGuard Lite. The platform supports user group management to control access right and access time.



Feature Highlights



Central management up to 50 devices



Self-discovery of devices

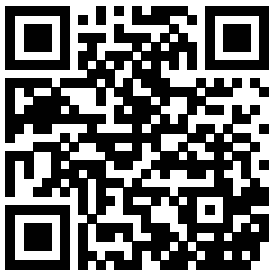


Access log archive



User group batch upload

Scan for more info



ScanViS Win CMS

Minimum Installation Requirement

CPU	I3 or above
RAM	4GB
Harddisk free space	10GB
Operating system	Win10

Software Feature

GateGuard discovery	Auto-discovery or add IP address manually
GateGaurd monitoring	Online / offline status
User addition	Individual via GUI or batch upload
User group	Allowable access GateGuards Allowable access time Holiday setting
Access log	View on GUI or download to files Configurable store duration Auto detele when hard disk is full

Capacity

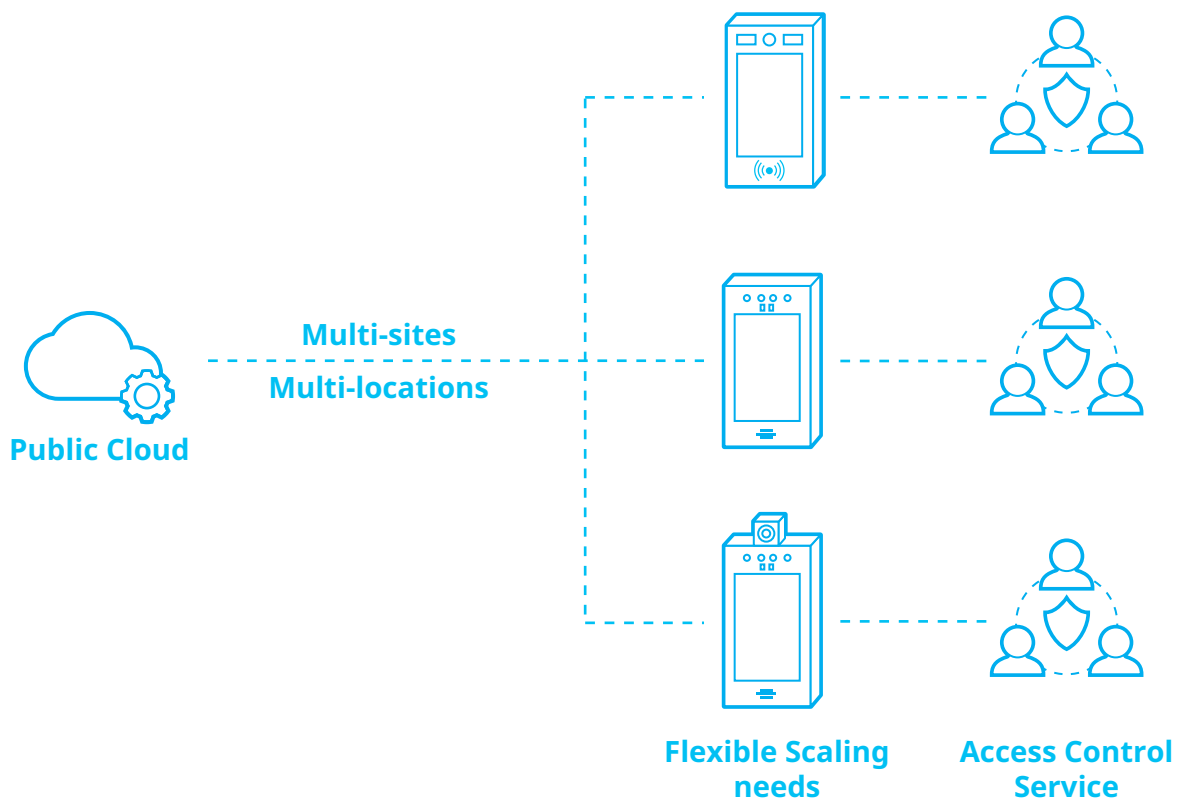
Device	50 GateGuards
User database	30,000

ScanViS Cloud CMS

Centralized platform for efficient device management on cloud

ScanViS Cloud CMS offers a low-cost and easy-to-deploy management system to all GateGuard devices. At the same time, it can be scaled up to unlimited devices or scale down anytime, anywhere as needed. There is no extra fixed maintenance cost to run the system, leaving the running cost transparent and easy to manage.

Access Control as a Service (ACaaS)



Feature Highlights



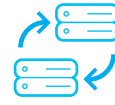
Low Setup Cost



Scalable for multi-locations

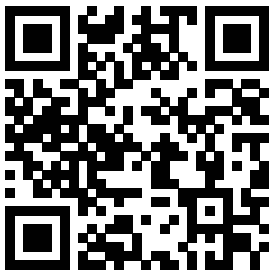


High availability



High redundancy

Scan for more info



ScanViS Cloud CMS

Software Feature

Visitor management	Visitor information creation, email notification to visitor
Member management	Support unlimited members
Watchlist	Blacklist, Whitelist
Access Record	Member access record
Access analytics	Statistical graphs
Permission management	Support customized access permission schedule
Admin	Device management, Company profile management
Task center	Data batch upload/download, data backup
System log	Operating time, account type, operator, operation type, object, specific contents

Capacity

Device	Unlimited
User database	Unlimited faces can be uploaded to the Cloud CMS, but up to 30k faces per single GateGuard device assignment.

Public Cloud

Cloud host	AWS
GDPR	Complied

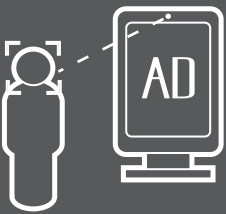
02 RETAIL SOLUTION



Retail Solution

offers an interactive source to collect and deliver information through customer engagement. It helps boost store experience with intelligent signage and retail analytics. With indoor and outdoor displays, video walls, and stretched panels, business owners have a variety of product options that allow for creating custom digital installations to cater to their business needs.

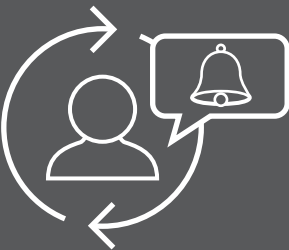
Easy and manageable



Interactive display with build-in camera



Analyze the age, gender and combination of audience



Recognize re-visiting customer with notification alert



Flexible and easy deployment

Applications



Retail advertisement



Information kiosk for events

ScanViS Display

An interactive retail solution for customer engagement

ScanViS Display is an end-to-end intelligent signage solution for targeted advertising in retail or event environment. It contains a front-end device, either an all-in-one ScanViS intelligent signage is structured with 40" screen display, embedded camera and ScanViS processor, or a ScanViS Processor box with external USB camera and HDMI display. It controls the content and data through a cloud-based content management system (CMS) and a facial recognition (FR) engine respectively.



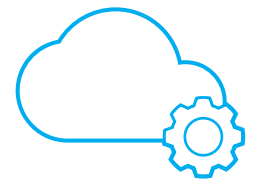
Target advertisement



VIP and revisiting customer recognition

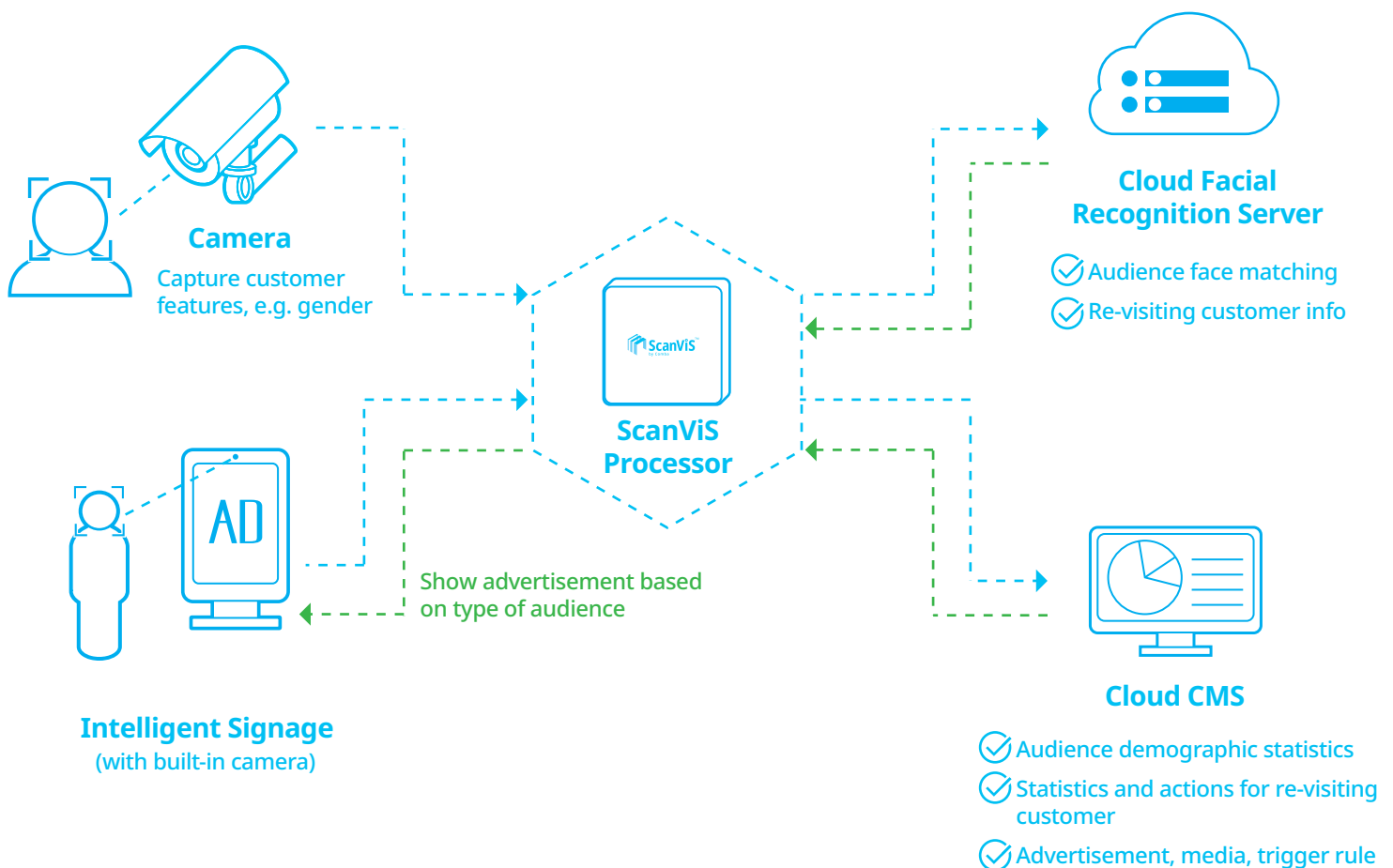


Visitor analysis



Cloud CMS

How Its Works



Through Cloud CMS, user can manage:



Targeted advertisement rule setting

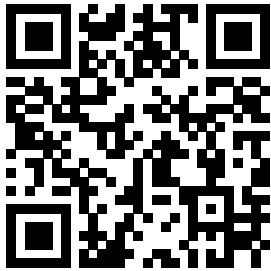


Viewing time of each advertisement



Visitor number and demographic analysis

Scan for more info

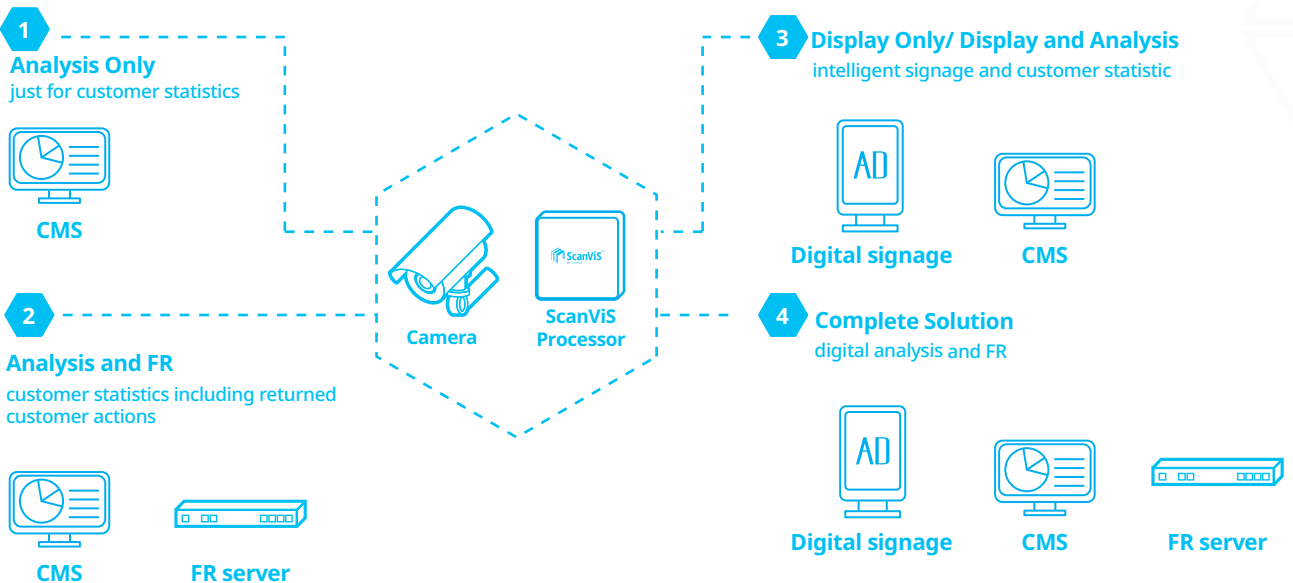


ScanViS Display

Minimum Installation Requirement

CPU	Quad-core ARM Cortex-A53
GPU	Penta-core Nall-450
RAM	1GB
ROM	8GB
Interface	HDMI 2.0 USB 2.0 * 2 AV output x 1
Network	RJ45 Ethernet 802.11 b/g/n
Dimension (mm)	115 x 115 x 20
Weight	130 g
Power	12V DC / 1 A With AC power adapter

Deployment Options



03 EVENT SOLUTION



Event Solution

helps event organizers promote seamless event registration and check-in process through speeding up entry time, enhancing security, and personalizing the experience throughout the event period. It can simplify or integrate into existing check-in systems with minimal hardware investment.

Accurate and Scalable



Reduce queuing time by >30%



Watchlist compilation
Blacklist alarm for appropriate action



Minimal investment
Enable integration with existing building access management system

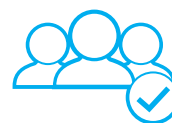


Real-time access log
Enhances security with instant monitoring

Applications



Event registration



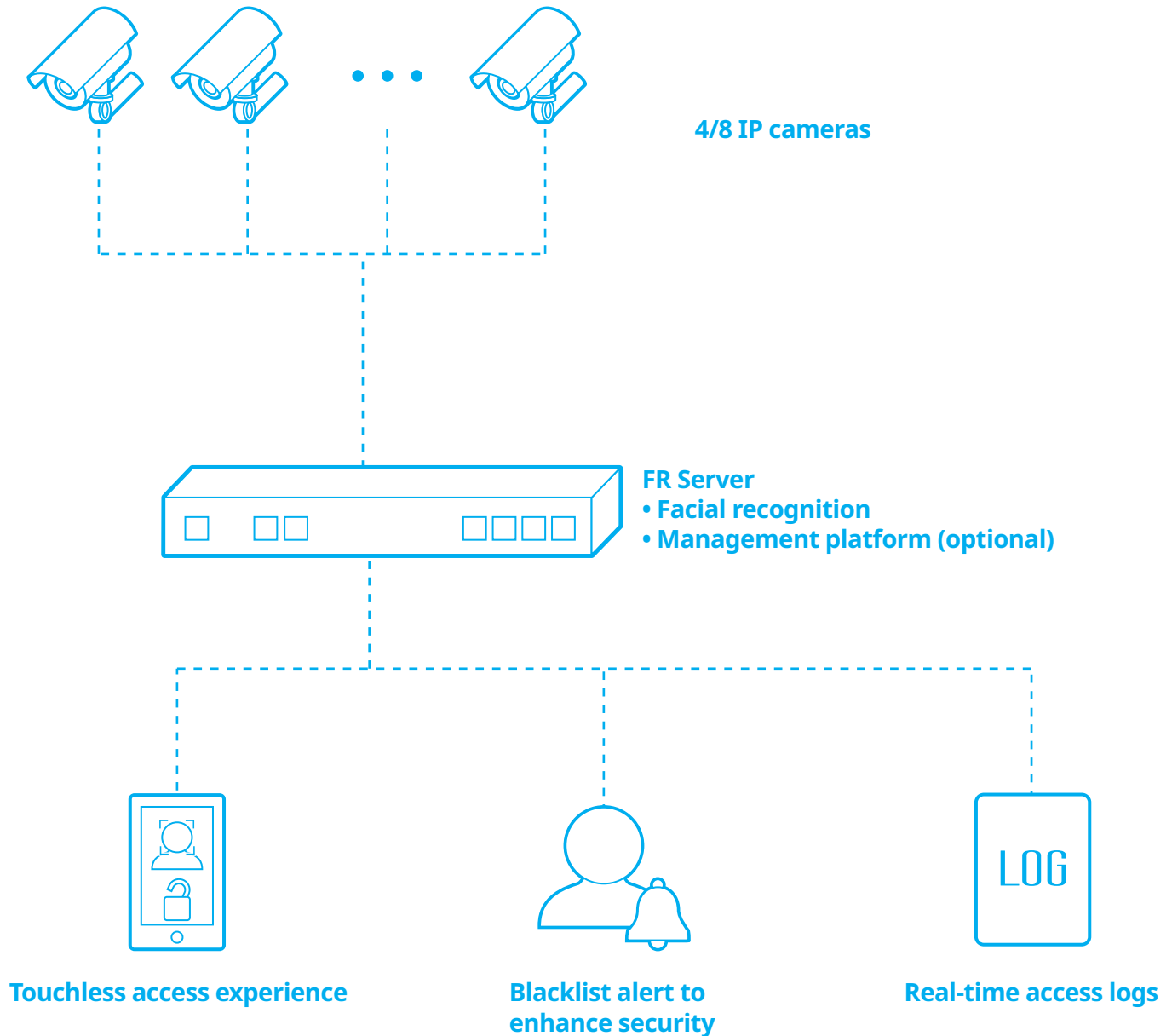
Event check-in



ScanViS CamGuard

Fast and scalable registration and check-in solution for events

ScanViS CamGuard delivers event solution embracing facial recognition server that works with IP cameras. Its management platform can operate alone or in a dedicated server for large deployment with multiple CamGuard servers.



Feature Highlights



Registered users up to 100k faces with recognition time <1s



Real-time access log

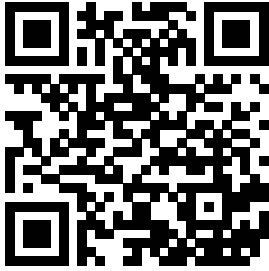


ID group management on web GUI



3rd party management system

Scan for more info



IP camera + server

Performance

Supported cameras	4 IP cameras
Minimum size of detected face	50 x 50 pixel
Capacity	100,000 faces
Speed	~1s typically
Maximum faces recognized per frame	20
Recognizable angle	Yaw/ pitch/ roll= -30° ~ +30°
Captured photo size	Single capture photo is less than 200kb
Liveness detection	Support

Hardware

CPU	E3-1220v6 (Quad Core 3.0GHz)
RAM / ROM	32GB DDR4
Hard Disk	2TB
Operating system	Ubuntu Linux 18.04
Network	Ethernet
Input voltage	100-240V AC
Power consumption	~290W
Operating temperature	0°C ~ 40°C
Dimension	1U
Weight	1kg
Installation	Rack Server

04 PUBLIC SECURITY SOLUTION



Public Security Solution

is powered by the world-leading facial recognition algorithm that runs with multiple cameras to easily track and locate individuals, like suspected criminals, persons of interest, or members of terrorist groups. Together with automatic alert system, the solution supports cross-platform portrait sharing including face-capturing cameras, smart glasses and bodycams.

Fast and safe



Static Face Image Search
Up to 1 Bn face database



Watchlist capacity
Up to 1 million face images



Minimal investment
Less hardware requirement



Mobile terminal real-time query
Support up to 30k mobile terminals

Applications



Community security



Search for missing people

Security Surveillance Series

Scan for more info



Performance

Supported cameras	4 IP cameras
Input video stream	1080P 25fps
Minimum size of detected face	60 x 60 pixels
Capacity	3,000,000 faces
Face comparison	1:1 Identity Verification 1:N comparison (support database of 300,000 faces) n:N Database Comparison
Accuracy / matching ratio	97% @ 0.00001% False Match Ratio 94% @ 0.000001% False Match Ratio
Maximum faces recognized per frame	20
Real time surveillance and alarm delay	<3s (max 300k face database)
Storage and retrieval of passers-by	15 days
Face structural data support	Age, gender, glasses, mask

FacePack

Hardware

CPU	Intel Xeon E5-2696V4 x 1
RAM / ROM	128GB DDR4
Hard disk	2TB SSD HDD
Operating system	Embedded real time Linux
Display	17.3" LCD, 1920x1080 resolution
Network	4 x PoE
WiFi	2.4GHz/5GHz 2x2 MIMO, WiFi Hotspot 30 mobile terminal connections
USB	USB3.0 FAT/ exFAT/ NTFS
Input voltage	100-240V
Power consumption	600W
Operating temperature	-10°C ~ 50°C
Operating humidity	10% ~ 90%
Dimension (mm) (H x W x D)	352 x 418 x 186
Weight (including suitcase)	9 kg

Feature Highlights



Face search speed-millions/sec



Push alerts for person of interest

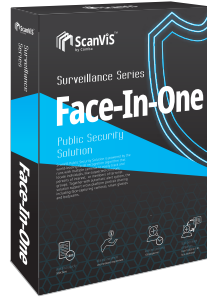


Rapid deployment with one click



Offline Video Analysis

Scan for more info



Performance

	Face-In-One (4 GPU cards)	Face-In-One (8 GPU cards)
Supported IP cameras (video streams)	50	100
Query per second (image stream QPS)	80	160
No. of face capture	150	300
Input video stream	1080p (1920 x 1080) 25fps	
Minimum size of detected face	60 x 60 pixels	
Capacity	1,000,000,000 faces	
Face comparison	1:1 Identity Verification 1:N comparison (support repository size of 1,000,000 faces) n:N face comparison of 2 databases	
Face capture ratio	99%	
Accuracy / matching ratio	97% @ 0.00001% False Match Ratio 94% @ 0.0000001% False Match Ratio	
Maximum faces recognized per frame	20	
Real time surveillance and alarm delay	<2s	
Storage and retrieval of passers-by	15 days or more	
Search passers-by with images	Yes	

Hardware

CPU	Intel E5 2680 V4*2 / Xeon6126*2 / Xeon6130*2	
GPU	4 * P4	8*P4
RAM / ROM	128/ 256/ 512 GB	
Hard disk	480GB SSD System Disk plus 1T*12 SSD (raid6) / 1.9T*9 SSD (raid6)/ 2T*8 HDD (raid5)/ other	
Operating system	Linux	
Network	2* 10GB Ethernet	
Input voltage	100-240V AC	
Power consumption	1600W redundancy power module	

Ethernet



IP Camera or face capture camera deployed in different city area



City-wide private network



3rd party system for alarm and database management



Face-In-One facial recognition platform

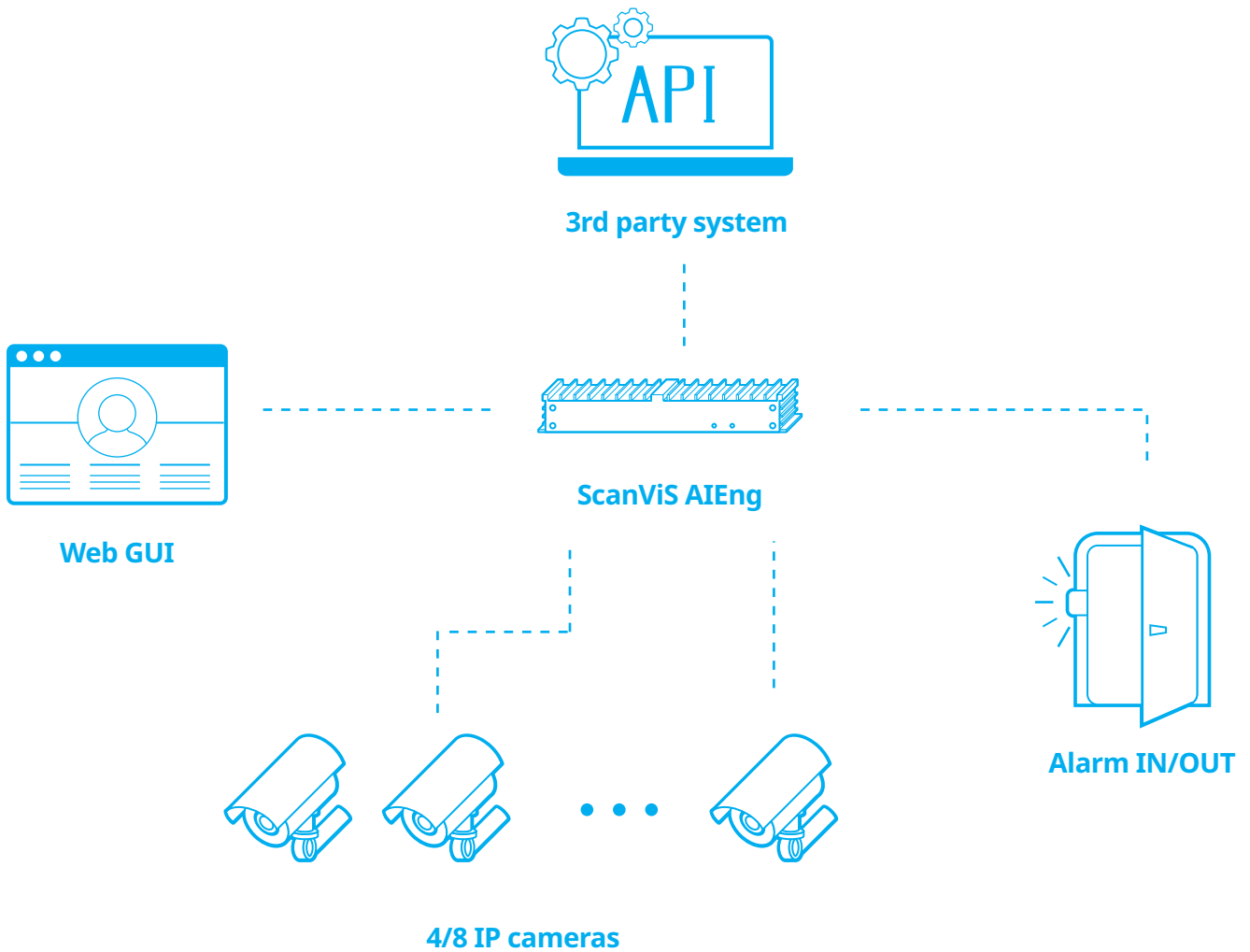
Public Security Solution



ScanViS AIEng

Enterprise-grade facial recognition server for corporate security in premises

ScanViS AIEng is a facial recognition lite server that detects individual faces, extracts attributes, and matches the captured face with a database of 1 million faces. It offers ID management, blacklist alerts, multi-channel facial image analysis, and camera management. With the built-in security and facial recognition system, this lite server enables data management at anywhere, and allows customization to fit applications and scenarios in an optimal way.



Feature Highlights



False match rate is less than 0.00001%



Support > 1,000 people flow per minutes

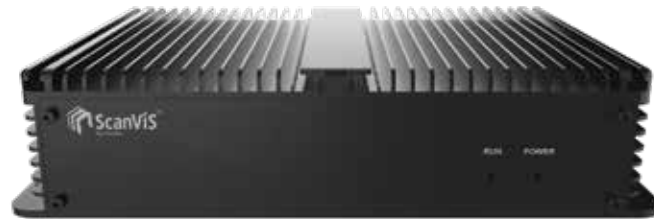
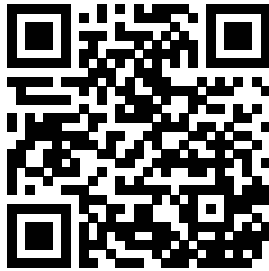


Real-time traffic logs with captured photos



Capture up to 20 faces in one scene

Scan for more info



Performance

Supported cameras	4/8 IP cameras
Input video stream	1080P (1920x1080) 25fps
Minimum size of detected face	60 x 60 pixels
Database capacity	1,000,000 faces
Facial recognition repository size	300,000 faces
Accuracy / matching ratio	97% @ 0.00001% False Match Ratio 94% @ 0.0000001% False Match Ratio
Maximum faces recognized per frame	20
End to end facial recognition speed*	<3s
Face capture ratio	99%
Captured photo size	~50KB
Face attributes support	Age, gender, glasses, hat, sunglasses, mask, mustache, hair style, shirt color and style

AIEng

Hardware

CPU	AI Chipset for facial recognition
Memory	16GB
Hard disk	64GB
Network	Ethernet RJ45
Interface	RS485/ HDMI/ USB/ Audio/ Alarm In-Out
Input voltage	DC12V/2A
Power consumption	<10W
Operating temperature	-20-°C ~ +65°C
Operating humidity	10% ~ 90% (RH)
Dimension (mm)	233 x 146 x 52
Weight	1.8 kg



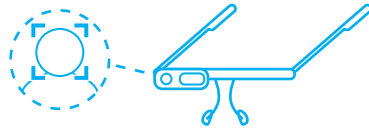
ScanViS Smart Glasses

Highly adaptable device to complete security services

ScanViS Smart Glasses is an intelligent wearable gadget with three significant functions including face search, giving command and data distribution. It is structured with screen display, camera, anti-noise microphone and speaker, ensuring compatibility and efficient communication with other devices to serve high performance surveillance purposes.



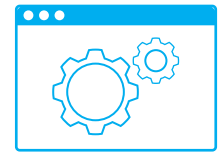
Zooming function
for on-site face search



Built-in screen display
to show face data



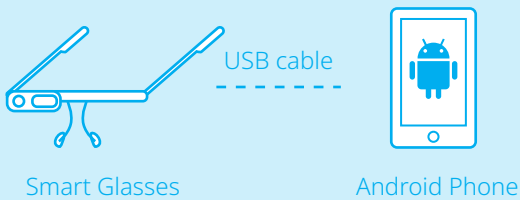
Offline operation
with mobile phone



Support online operation
with 3rd party face platform

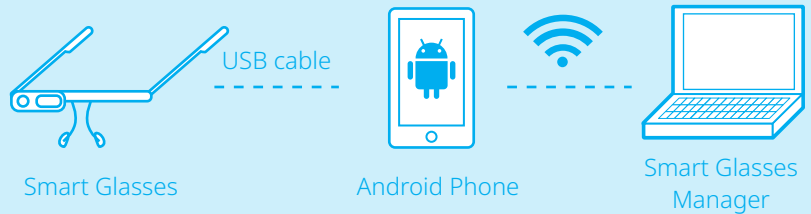
Standalone Mode

for face search with **10,000** databases



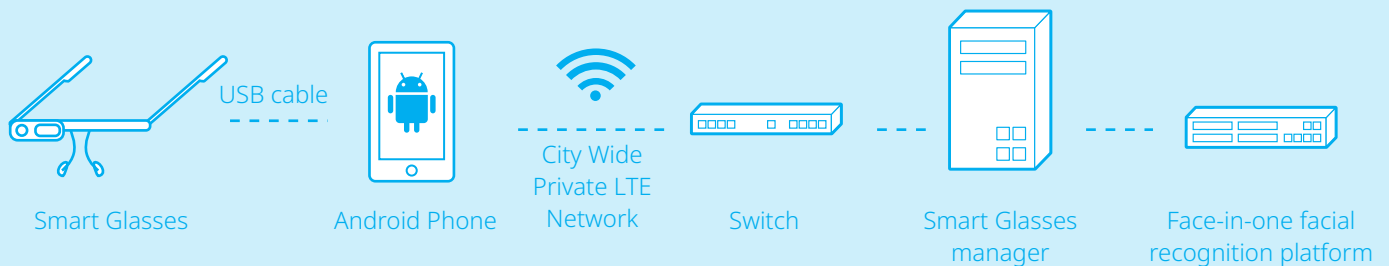
Connected Mode

for face search with **50,000** databases



Total Security Solution

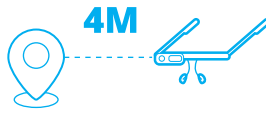
for face search with **1 billion** databases



Feature Highlights



Capture up to 5 faces in 1 scene (connected mode)



Long capture distance up to 4 meters

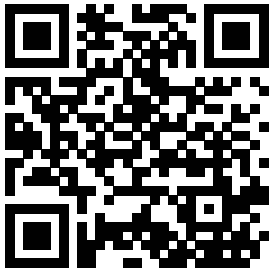


Real-time alert updates



Low power consumption

Scan for more info



Smart Glasses

Performance

Maximum faces recognized in one scene	5 faces (mobility) 20 faces (static)
Database capacity	1 Billion faces (with Smart Phone + Face-in-one) 50,000 faces (Smart Phone + Smart Glasses Manager) 10,000 faces (standalone with Smart Phone)
Watchlist capacity	100,000 faces (with Smart Phone + FacePack Lite) 10,000 faces (standalone with Smart Phone)
Face comparison	1:N comparison
Accuracy / matching ratio	97% @ 0.00001% False Match Ratio 94% @ 0.0000001% False Match Ratio

Hardware

CPU	Intel Movidius Myria
Display	Resolution: 640 x400 Field of view (FOV): 20°(diagonal)
Camera	1080P HD video
Interface	USB Type-C 2.0
Control	Customized button Mobile client
Audio	Input: anti-noise dual mic Output: single speaker
Size (mm)	159 x 180 x 34
Weight	45g (contains glasses frame)



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