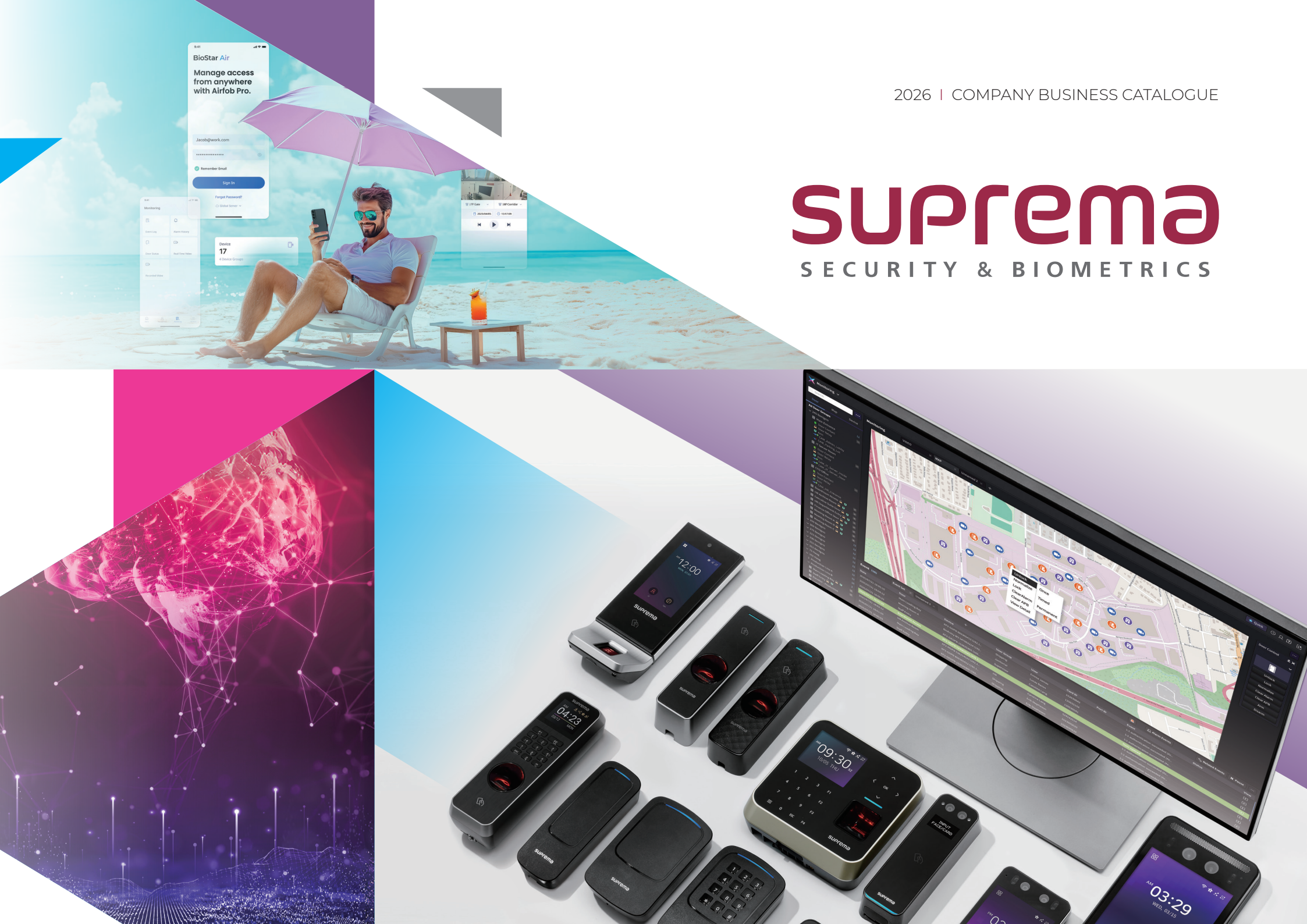


suprema

SECURITY & BIOMETRICS



Contents

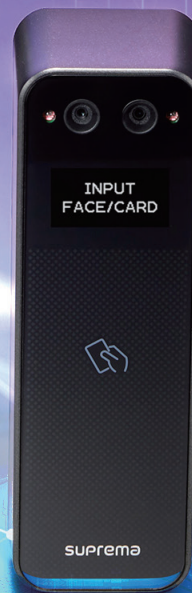
BioStar X	08p
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Biometrics	16p
Controller	18p
RFID Reader	20p
Mobile	22p
Development Tools	26p
Product Data Sheet	28p

Facial Authentication powerd by AI



BioStation 3

BioEntry W3



BioStation 3 Max

To become a Global leading provider of
AI-powered Access Control and Security Solutions
with innovative products and services





Established in 2000, Suprema Inc. is a global leader in AI-powered Access Control and Security Solutions. Over the past two decades, Suprema has demonstrated its expertise and technical superiority in AI security and biometric authentication. Suprema has led groundbreaking innovations in the industry, introducing an integrated security platform, deep-learning based AI solutions, biometric access control systems, cloud solutions, mobile access solutions, and embedded fingerprint modules.

Suprema serves diverse clients across government organizations, banks, hospitals, schools, manufacturing factories, and construction sectors. From startups, mid-sized to enterprise-level businesses, Suprema offers customized solutions and services to meet varying security needs.

With a presence in over 140 countries, Suprema has established itself as a premium global brand. Suprema is recognized among the world's top 50 security manufacturers and holds the top market share in biometric access control across Europe, Middle East, and Africa region.



Year Established

2000



Security Manufacturer

Top 50

(A&S Magazine, 2011-2025,
15 years in a row)



EMEA Market Share

No.1

in Biometric Access Control
(IHS Markit)



Number of people using
Suprema technologies

1 Billion +



Systems
in Operation

1.5 Million +

(worldwide installations)



Global Sales
Network in

140 Countries



National Identification
Projects in

23 Countries



Industry Patents and
Intellectual Properties

100+



Excellent Financial
Stability

A+

(Korea Investors Service)



Monitoring

Search

MonitoringMapVideo

DoorMapDevice

All Door Groups

Management11

Main Entrance

Door Contact

Door Relay

Arm

CAM_Admin_Lobby

CAM_Elevator

IT Server Room

Door Contact

Door Relay

Arm

CAM_IT_Server_Inside

CAM_IT_Server_Door

Breakroom

Door Contact

Door Relay

Monitoring

MapVideo



Event (36)

Event SetUnnamed 3

Date	Door	Device	User Group	User	Card ID	Port ID	Event
2025/07/21 18:08:20	Breakroom	CAM_Stairwell					Fall Detection
2025/07/21 18:08:10	Main Loading Bay	XP2-GDPB 869365412 (192.1...	Shipping	Emma James	152639842		1:1 authentication su...
2025/07/21 18:07:53	IT Server Room	BioEntry W3 547263985 (192...					1:1 authentication fa...
2025/07/21 18:07:48	IT Server Room	BioEntry W3 547263985 (192...					1:1 authentication fa...
2025/07/21 18:05:12	Meeting Room A	BioEntry W3 547863214 (192...	Janitorial	Lucas Baron	012015642		1:1 authentication su...
2025/07/21 18:04:12	Meeting Room A	BioEntry W3 547863214 (192...	Janitorial	Lucas Baron	012015642		1:1 authentication su...
2025/07/21 18:04:12	Staff Entry	XP2-GKDPB 153625365 (192...	Supervisor	Elaine Kim	152639841		1:1 authentication su...

Credentials

Total Cards

854

Total Fingerprints

159

Total Visual Faces

568

Total Mobile Access

427

User

Profile Image



ID

1536963522

Name

Jamila Davis

Email

Jamila@innovationtech.com

Phone

-

Department

Global Sales

Title

Director

Group

Global Sales

Period

2023/07/21 00:00:00 ~ 2033/07/20 00:00:00

1:1 authentication failed (finger)

Event

1:1 authentication failed (finger)

Datetime

2025/07/21 18:07:53

Door

IT Server Room

Device

BioEntry P2 547263985

User

Maroon Kim

BioStar X

One Platform. Total Confidence.

BioStar X is Suprema's Unified Security Platform, featuring best-in-class biometric access, integrated monitoring, and an enterprise-ready backbone built for scale, uptime, and compliance.

Fall Detection

CAM_Stairwell

person_on_ground 0.83

25/07/21 18:08:20

18:08 18:09 18:10 18:11

25/07/21 18:08:20

1 2 3 4 1

Device Information

Exit Button

Door Sensor

Door Open

Held Open

Dual Auth

- Schedule

- Approve

- Approve

- Time

Anti-Tailgate

Linked Card

Linked Card

Event

Fall detection

Datetime: 2025/07/21 18:08:20

Door: Breakroom

Device: CAM_Stairwell

User: -

Status: Active [Ack & Report >](#)

Door

Door name: Breakroom

Entry: XP2-GDPB 563214569

Exit: BioEntry W3

Door Status: Opened

Lock Status: Unlocked

Alarm: Disarmed

Recent Event

Datetime	Door
2025/07/21 18:12:33	IT Server Room
2025/07/21 09:30:12	IT Server Room
2025/07/21 09:30:11	IT Server Room
2025/07/21 09:30:00	IT Server Room
2025/07/21 09:30:00	Door opened
2025/07/21 09:29:55	IT Server Room
2025/07/21 09:29:55	Door unlocked
2025/07/21 09:29:55	Auth succeeded

Access Trend

Mon

Tue

Wed

Thu

Fri

Sat

January February May June July August September October November



One screen for total awareness and action.



Infrastructure that grows stronger as you scale.



X is where integration meets no limits.

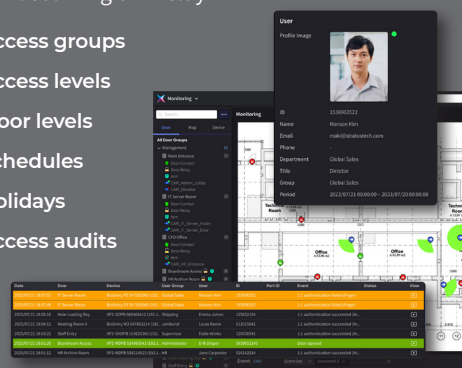
Total control, over who, where and when.

From lobby to rooftop, BioStar X lets you own every access point with a surgeon's precision. Schedules, zones, fire alarms, floors... You're not just managing doors. You're orchestrating movement.

Core access structure at scale

Managing hundreds of doors or thousands of users? BioStar X was designed to grow, without ever becoming unwieldy.

- Access groups
- Access levels
- Floor levels
- Schedules
- Holidays
- Access audits



Advanced AC

Enforces behavioral policies, safety standards, and emergency protocols with powerful zone logic.

- Anti-passback
- Fire alarm
- Interlock
- Schedule lock and unlock
- Occupancy
- Muster
- Intrusion alarm

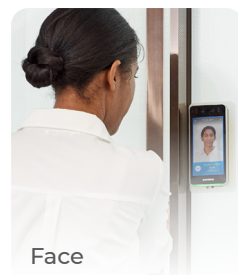
Emergency management

BioStar X makes it easy to respond fast with just one button push or tap on your phone.

- One-click lockdown
- Emergency unlock rules
- Access override tools
- Roll Call

Multi-credential. One user, multiple ways in.

Whether it's staff, contractors, or visitors, BioStar X supports multi-credential and every access method you need to keep your operation moving.



Always on, intelligence that makes moves.

BioStar X blends AI detection, live video, and zone-level control into one unified monitoring console. Whether you're securing a single floor or a sprawling site, it gives you full visibility and rapid response. Less noise. More brains.

Unified monitoring console

BioStar X makes it easy to visualize activity by door, device, or full facility maps with live status indicators.



VMS integration

ADD-ON

Connect your VMS to monitor live camera feeds and link access and security events to recorded footages.

Event-driven alerts & responses

Monitor, investigate, and resolve events in a purpose-built interface with real-time controls and logs.

- Real-time alerts
- Live door control
- One-touch emergency actions
- Linked events

AI-based monitoring enhancements.

Advanced video intelligence and automation, built right into BioStar X. *VMS Integration required.



Tailgating

Catch unauthorized follow-ins, in real time.



Intrusion

Instantly detect off-hours or unapproved access.



Fall

React fast to potential safety incidents.



Loitering

Identify unusual lingering behavior automatically.



Abandon

Automatically detect and alert on unattended items for faster, safer response.

Rock-solid security, built for Enterprises.

With AES-256 encryption, role-based permissions, and 50+ security event triggers, BioStar X runs tight security from core to edge. Built for the real world, where peace of mind and compliance are non-negotiable.

Multi-communication server

Handles more devices with less strain by distributing tasks across parallel comm servers. Resource sharing ensures smooth scaling and high performance, even in large deployments.

Granular role-based access permissions

End-to-end encryption

All system communications, from server to device to client, are encrypted using protocols like AES 256, TLS 1.2, HTTPS, and secure RS-485, ensuring data integrity across every channel.

Global compliance ready

BioStar X aligns with ISO 27001, ISO 27701, GDPR, and the EU NIS2 Directive to ensure international best practices in data protection, encryption, and privacy management.

Failover clustering (TBA)

Comprehensive audit trails and reporting

Secure tamper on Suprema devices

Detects pry, open, and removal events in real time, triggering alerts and automated responses. Upon detection, onboard wipe irreversibly clears data and configurations from the device.

BioStar Air

Zero on-prem. All-in on cloud.

The only access control solution that natively connects the world's most advanced biometric readers to the cloud.

Built by the global leader in biometric security, BioStar Air eliminates the need for door controllers and on-prem servers while offering the most flexible credential options available. Smart readers with cutting-edge design connect seamlessly to its cloud-managed platform, giving you complete control of access to all your sites from your phone or browser.

Simple to manage, effortless to scale, ultimately secure—BioStar Air.



**Fire & Security
Matters Awards**

Security Innovation of
the Year (2026)



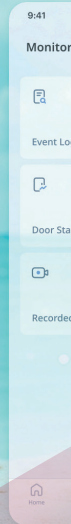
**a&s ADRIA
Awards**

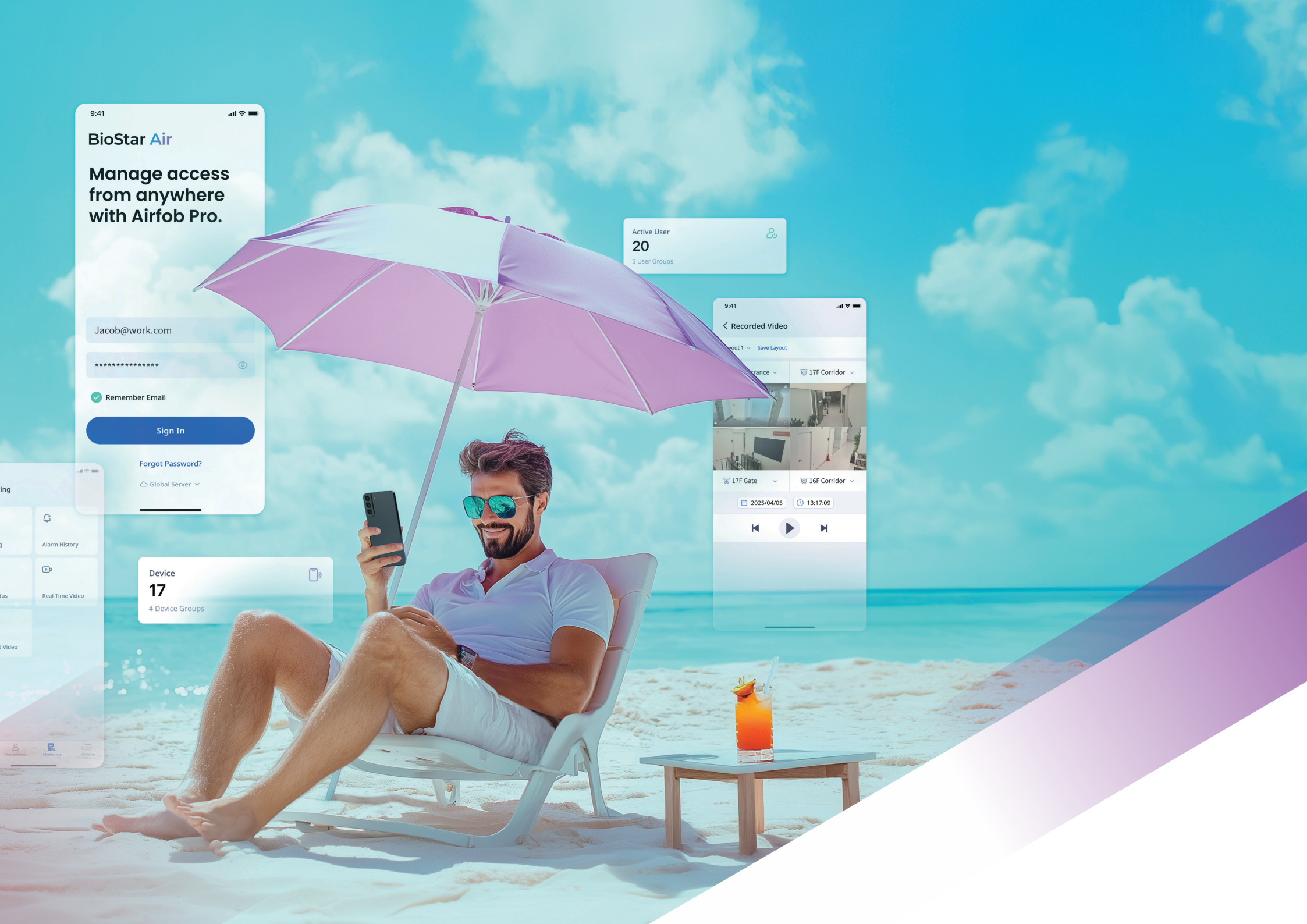
Winner in the Access
Control Category (2025)



**Security InfoWatch
Reader's Choice Awards**

Winner of Access Control
Software (2025)





9:41

BioStar Air

Manage access from anywhere with Airfob Pro.

Jacob@work.com

☒ Remember Email

Sign In

Forgot Password?

Global Server

- ing
- Alarm History
- Real-Time Video
- Video
- Map Overview
- Messaging
- All Items

Device

17

4 Device Groups

Active User

20

5 User Groups

9:41

Recorded Video

Layout 1 Save Layout

Entrance 17F Corridor

17F Gate 16F Corridor

2025/04/05 13:17:09

⏮ ⏪ ⏩ ⏭



Cloud Biometrics.
Done right.



Hybrid edge.
Real-world ready.



Flexible control.
Protected Data.



Elastic scalability.
Global consistency.

Effortless access control, **from anywhere.**

With BioStar Air, you stay in control. Set up and manage sites, enroll users, and define access levels yourself without relying on your service provider. All from one cloud platform with a modern, intuitive interface designed to stay clear and easy to use.



All your spaces, at your fingertips, from your desktop or phone.

Central cloud dashboard

 Users & groups

 Access readers & cameras

 Doors & groups

 Schedules & access levels

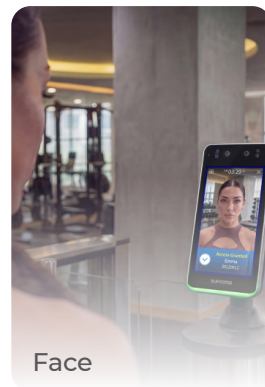
 Elevators & floors

 Monitoring & logs

One identity, multiple credentials.

Create, send, and revoke all kinds of credentials remotely. No site visit required to add cards, faces, or QR. Empower your organization with the right access mix.

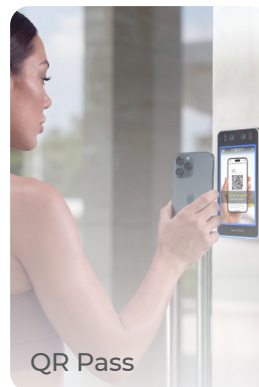
*Credential support varies by reader.



Face



Mobile
credentials



QR Pass



Link Pass



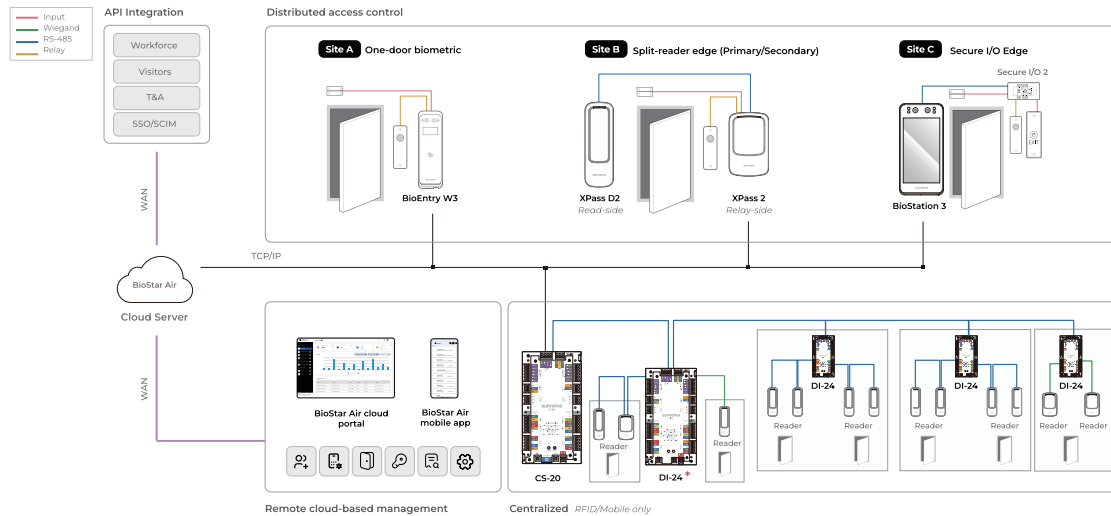
RFID



PIN

Hybrid edge. Built for the real world.

BioStar Air combines edge intelligence with flexible architecture, from direct-to-cloud deployment to controller-based systems with RS-485 expansion for larger environments.



* A single CS-20 can connect up to **68 readers** by daisy-chaining up to 16 DI-24 door interfaces.



Direct-to-cloud edge.

Each device operates independently with built-in intelligence, enabling fast one-cable deployment without additional infrastructure.



Controller-based systems.

Drop-in replacement for existing systems with two-door controllers to support retrofits on larger sites, centralized control, and more complex deployments.



RS-485 device chaining.

Connect multiple readers through a single network point to reduce cabling and simplify door configurations.

Security That Runs Itself.

BioStar Air secures and maintains everything on your behalf, so you never have to install a security patch or reboot a server.



Certified secure.

ISO 27001 certified, BioStar Air meets 26 data protection standards, 14 security controls, and 18 personal information management requirements, ensuring compliance with global security best practices.



End-to-end encryption.

Hosted on AWS Amazon RDS with AES-256 encryption, BioStar Air ensures secure portal access and encrypted personal data, protecting against unauthorized access.



Secure API communication.

All BioStar Air API communications run on TLS 1.2 encryption with secure HTTPS connections. Access tokens automatically expire to prevent unauthorized access, and AWS API Gateway safeguards against brute-force attacks.



No more patch Tuesdays.

With automatic updates and cloud-based firmware management, customers always have the latest version without manual maintenance. No downtime, no security gaps, just seamless, worry-free protection.



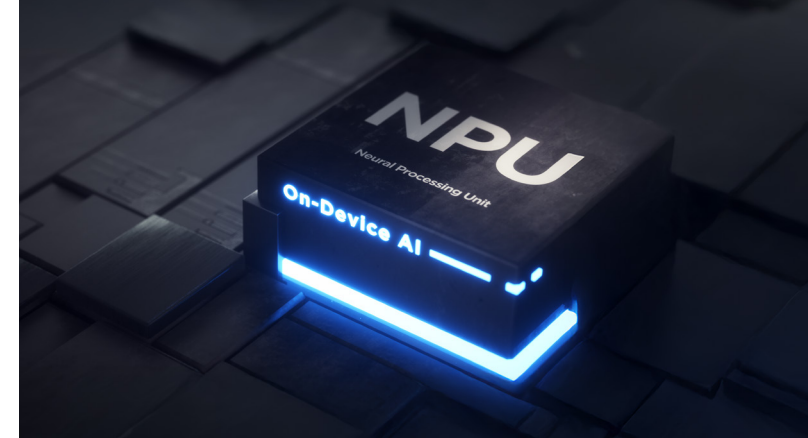
Biometrics

Leading provider of biometric solutions since 2000, Suprema has continuously innovated fingerprint and facial authentication technology as well as deep learning artificial intelligence that is core to biometric solutions.



Artificial Intelligence

Leveraging Suprema's extensive field data accumulated for over decades, Suprema boasts unparalleled authentication capabilities specializing in biometric access control. Suprema has developed a cutting-edge biometric authentication AI algorithm, adopting a highly advanced AI processor known as the NPU(Neural Processing Unit), optimized for deep learning. With its expertise in creating a lightweight AI engine and capability to effectively train vast biometric template data, Suprema's deep-learning based AI algorithm ensures the highest accuracy in authentication performance. This positioned Suprema as the world's first company to adopt NPU-based deep-learning technology into biometric authentication.



Facial Authentication

Suprema's deep-learning based AI algorithm delivers highly accurate and fast facial authentication performance with BioStation 3. It uses dynamic face templates to increase matching accuracy for people of diverse ethnicities and those wearing masks, glasses, hats, beards, niqabs, and various hairstyles. Also, it is not only highly accurate but also fast, so it takes within 0.2 seconds to authenticate moving faces.

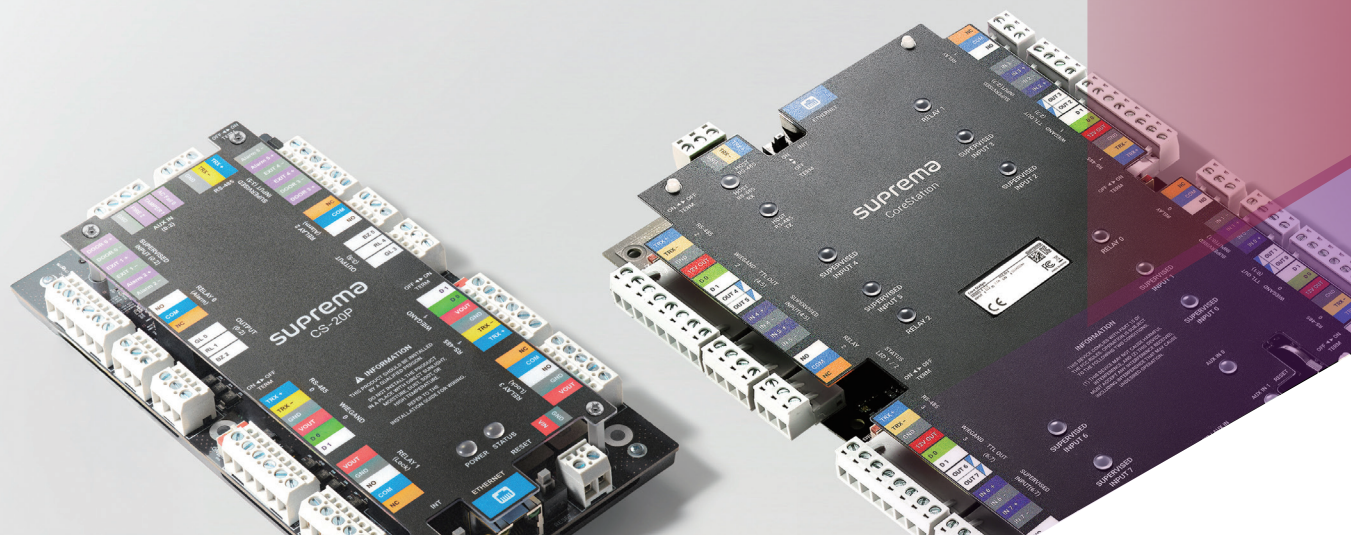
Fingerprint Recognition

Suprema has pioneered fingerprint recognition technology based on deep learning. As a result, the accuracy, speed, and spoof-fingerprint detection performance of BioStation 2a's deep-learning-based AI algorithm are outstanding. Deep-learning has significantly enhanced the AI algorithm's capability to extract templates from low-quality fingerprints, such as those that are noisy or distorted. Also, it offers Live Finger Detection (LFD) which detects fake fingerprints copied using rubber, silicone, clay, glue, film, etc. ensuring highly accurate performance.



Controller

Suprema controller provides the advantages of a biometric-enabled security over a centralized access control system.



CoreStation (CS-40) | Intelligent Biometric Controller

Designed to accommodate enterprise-level systems, Suprema CoreStation stores up to 500,000 users with an incredible fingerprint matching speed of up to 400,000 match per second. Its multi-port interface also supports nonbiometric access control system such as RFID card readers, door locks, alarms sensors and RTE. With its high-performance, biometric readiness and Ethernet communication, CoreStation lets users access the full features of the BioStar X platform. Suprema CoreStation can be used in conjunction with door modules and output extension modules to control up to 132 access points. Suprema modules provides secure connection with encrypted communication.

CoreStation 20 (CS-20, CS-20P) | 2 Door Controller

CoreStation 20 is a controller that supports PoE+ for easy installation and 2-door access control, providing an enterprise-grade security solution. As a centralized access control system, it stores up to 500,000 users and integrates seamlessly with BioStar X for access control and time attendance management while offering high compatibility with various interfaces. The CS-20P model also supports a SAM card slot for enhanced security.



Input Module (IM-120)

- 12 supervised inputs
- Offline operation
- Auxiliary & tamper input



Output Module (OM-120)

- Up to 12 output relays
- Elevator control with BioStar X
- Anti-passback, fire alarm feature



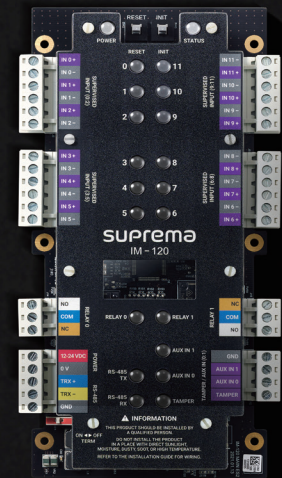
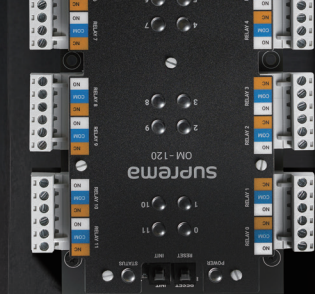
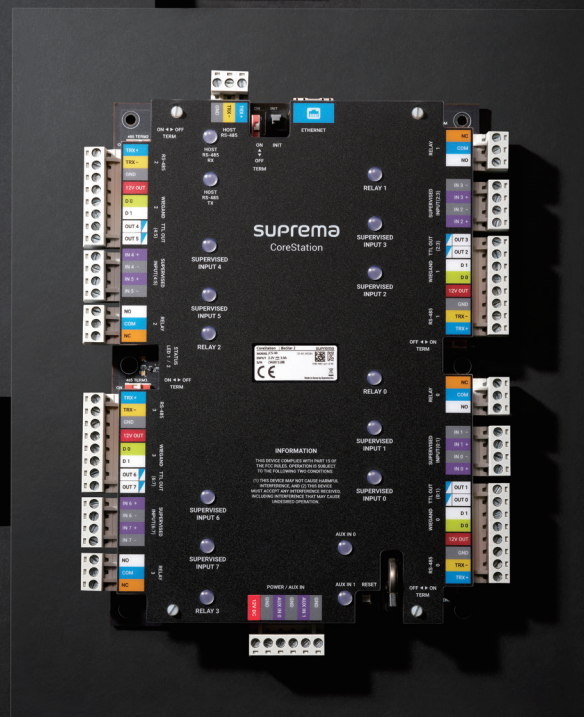
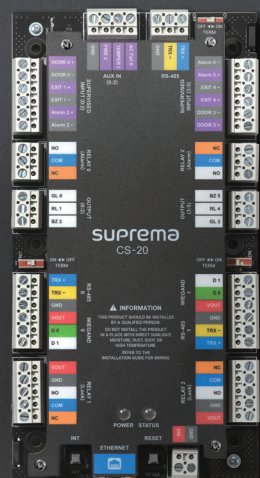
Door Interface Module (DI-24)

- Economical expansion option
- Green LED/Red LED/Buzzer control
- Dedicated Fire, Tamper, Power Fail inputs
- Provides DC power output for door locks and readers



Secure Module (SIO2)

- Secure door control
- Encrypted communication
- Compact form factor



BookCafe

RFID Reader

Suprema offers card readers that support dual-frequency RFID technology, compatible with a wide range of card types including MIFARE, DESFire, FeliCa and EM. Suprema card readers can also read mobile credentials using both NFC and BLE communication. Suprema X-Station 2 is equipped with color LCD touchscreen and QR code recognition and can be used to manage time and attendance as well as visitor passage and access control at unmanned facilities.





X-Station 2

Versatile Intelligent Terminal

- Compatible with most RFID cards, Mobile Access cards, QR codes
- Enhanced security with Secure Boot and OSDP (Open Supervised Device Protocol)
- Built-in Camera for image logs



XPass Q2

Intelligent QR/RFID reader

- Reads most QR codes/barcodes, RFID cards, and mobile credentials
- IP65-rated for reliable indoor/outdoor use
- Provides DC power output for door locks and readers



XPass 2

Outdoor Compact RFID Device

- Compatible with most RFID cards and dual-frequency
- Mobile Access cards
- IP67 and IK08 Vandal-proof structure



XPass D2

Outdoor Compact RFID Reader

- Compatible with most RFID cards and dual-frequency
- Mobile Access cards*
- IP67 and IK08 Vandal-proof structure
- SIA OSDP verified

* Suprema Mobile Access is supported on XPass D2 - V02A H/W versions only.

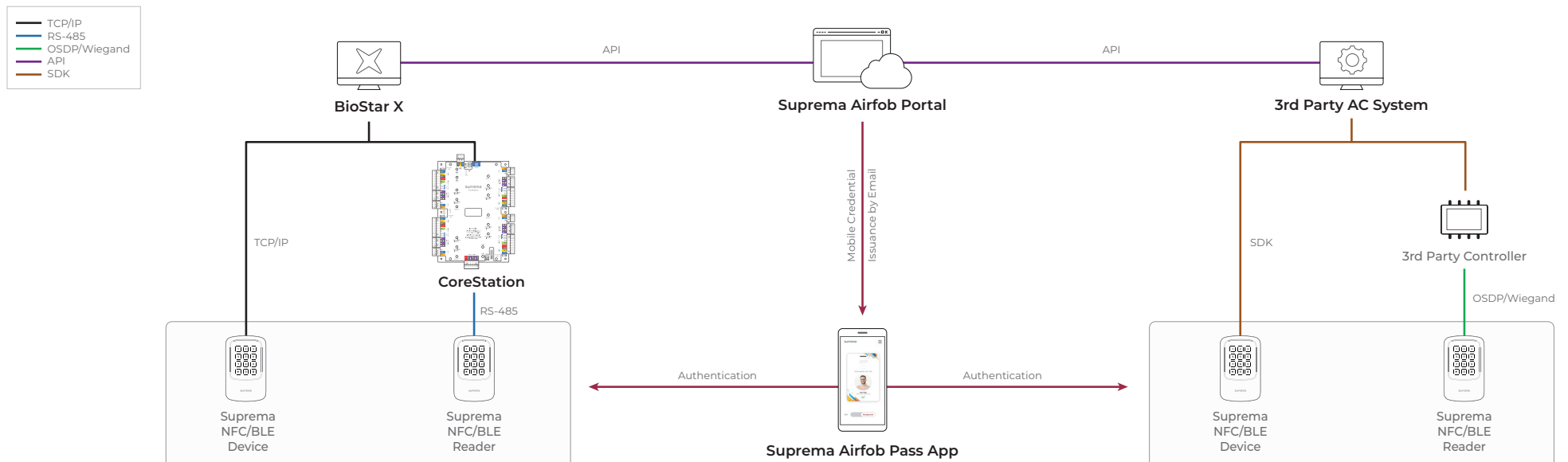
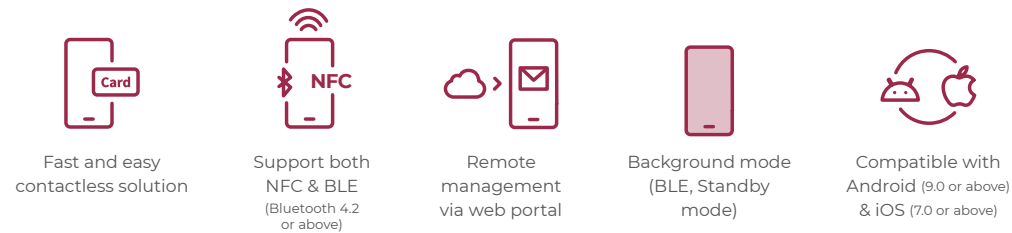
| Mobile

Along with biometrics, using smartphones as credentials is a growing trend in the access control industry. Suprema lets users replace RF cards and fobs with Mobile Access cards and QR codes issued and managed either on Suprema system or 3rd party solutions.



Suprema Mobile Access

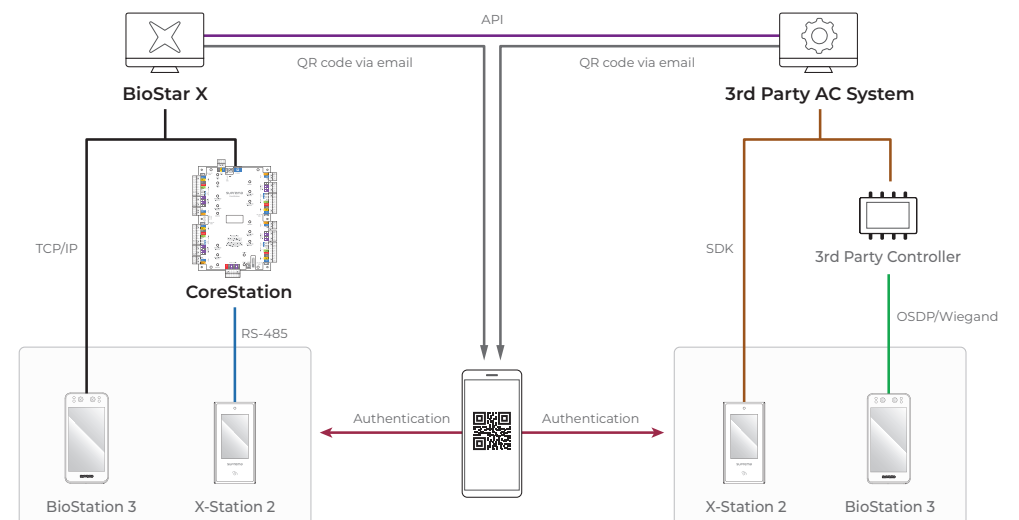
Suprema Mobile Access significantly improves user convenience by letting people use smartphones as access cards. Mobile access cards can be issued on either BioStar X or Suprema Airfob Portal and users can receive them via email. Suprema Mobile Access can easily be integrated with 3rd party systems.





QR Code

Suprema offers the option of using QR codes as credential. Suprema's BioStation 3 and X-Station 2 can read QR codes composed of up to 32 ASCII codes. QR codes can be issued on BioStar X or 3rd party systems.



User

Search

User Group

Access Explorer

All Users

Management

Administrative

Executive

Janitorial

Maintenance

Technical

IT

Security

Supervisor

Operator

Shipping

Stock

First Shift

Second Shift

Third Shift

Sales

Global Sales

Fulfillment

All Users (207)

Select All

Select User: 2

Batch Edit

Delete

New User

Search

K

1

/

8

>

X

50 rows

ID

First Name

Last Name

Group

Access Group

Start Date

End Date

Card

Mobile

Face

Finger

Status

EMP202400001

Rah

Ahmed

Administrative

Lab1

2023/01/31

2023/12/31

1

1

1

1

EMP202400002

William

Smith

Administrative

Lab1

2020/01/02

2030/12/31

1

-

-

1

EMP202400003

Matthew

Lee

Executive

Management

2022/04/06

2030/10/30

-

-

-

1

EMP202400004

Benjamin

Burton

First Shift

Management

2021/03/01

2029/12/01

1

-

-

1

EMP202400005

Emma

Jhonson

IT

Management

2023/01/05

2029/11/11

2

2

1

2

EMP202400006

Lucas

Baron

Janitorial

Lab1

2020/01/01

2030/12/01

2

1

2

1

EMP202400007

Alice

Gray

Maintenance

Office1

2020/09/14

2030/10/14

-

1

-

2

EMP202400008

Eva

Evelyn

Second Shift

Lab1

2020/01/01

2030/12/31

1

-

-

1

EMP202400009

Alice

Clipton

Security

Office1

2021/05/02

2029/06/31

1

-

-

1

EMP202400010

Emma

James

Shipping

Management

2020/02/15

2030/01/14

1

-

-

1

EMP202400011

Javed

Hasan

Stock

Lobby

2019/05/06

2025/06/08

-

1

-

-

EMP202400012

Eulalie

Krinks

Supervisor

Management

2019/02/01

2026/07/05

1

-

-

1

EMP202400013

Sophie

Madison

Administrative

Management

2020/08/01

2029/09/06

1

-

-

1

EMP202400014

Hassan

Muhammad

Administrative

Management

2018/03/01

2027/03/01

1

1

1

1

EMP202400015

Chester

Gullan

Administrative

Management

2019/06/07

2030/05/06

2

1

2

1

EMP202400016

Elizabeth

Taylor

Supervisor

Management

2021/07/28

2025/08/09

1

2

1

2

EMP202400017

Avery

Jonson

Stock

Office1

2022/07/06

2027/09/05

1

-

-

1

EMP202400018

Sofia

Marso

Shipping

Lobby

2019/06/04

2025/06/06

1

1

1

1

EMP202400019

Chloe

Grace

Security

Management

2019/04/15

2025/09/04

2

1

2

1

EMP202400020

Natalie

Zoe

Supervisor

Management

2023/02/18

2030/12/15

2

1

2

1

EMP202400021

Hannah

Gray

Shipping

Lobby

2021/05/09

2030/05/10

-

1

-

-

EMP202400022

Zoe

Brooklyn

Second Shift

Lobby

2019/08/01

2030/02/15

1

-

-

1

EMP202400023

Lillian

Lily

Supervisor

Lab1

2018/11/12

2028/12/30

1

1

1

1

EMP202400024

Samantha

Leah

Supervisor

Management

2010/10/11

2024/12/30

1

-

-

1

EMP202400025

Audrey

Gamer

Shipping

Lobby

2012/05/08

2024/12/31

-

1

-

-

EMP202400026

Savannah

Gordon

Security

Office1

2020/06/01

2029/10/31

-

1

-

-

EMP202400027

Gabriella

Gomez

Janitorial

Office1

2018/10/04

2028/11/30

1

1

1

1

EMP202400028

Camila

Gould

Shipping

Lobby

2021/03/24

2029/10/20

2

-

-

2

EMP202400029

Aria

Good

Stock

Lab1

2022/04/08

2029/12/01

1

-

-

1

EMP202400030

Kaylee

Grimes

Supervisor

Lab1

2021/05/07

2028/05/08

-

1

-

-

EMP202400031

Scarlett

Naah

Shipping

Management

2020/06/03

2027/06/01

1

-

-

1

EMP202400032

Halley

Norman

Second Shift

Lobby

2023/01/23

2030/05/01

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User | Sophie Madison

ID

EMP202400013

Name

Sophie Madison

Email

soma@stratostech.com

Telephone

+1 201 359 3966

Department

HR

Title

Manager

Group

Administrative

Period

2022/01/21 00:00 - 2028/12/31 24:00

See More

Trace

Outtime	Door	Event
2024/01/01 12:42:12	Breakroom	Door Locked
2024/01/01 12:42:02	Breakroom	Door Unlocked
2024/01/01 11:35:30	Breakroom	Door Locked
2024/01/01 11:35:20	Breakroom	Door Unlocked
2024/01/01 11:30:41	HR Department Entry	Door Locked
2024/01/01 11:30:41	HR Department Entry	Door Unlocked
2024/01/01 10:05:23	HR Department Entry	Door Locked
2024/01/01 10:05:23	HR Department Entry	Door Unlocked
2024/01/01 10:02:59		
2024/01/01 10:02:59		
2024/01/01 08:31		
2024/01/01 08:31		
2024/01/01 08:31		
2024/01/01 08:31		





Development Tools

Suprema is integrating with security system partners to be able to offer our products and solutions to a wider group of customers. Integration lets customers add Suprema products to their infrastructure in a streamlined and efficient way.



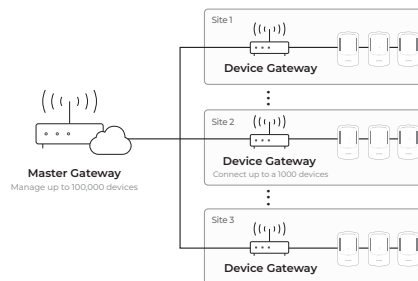
BioStar X API

BioStar X API is a comprehensive web application programming interface that provides necessary tools for developers to create applications or integrate BioStar X into 3rd party software.



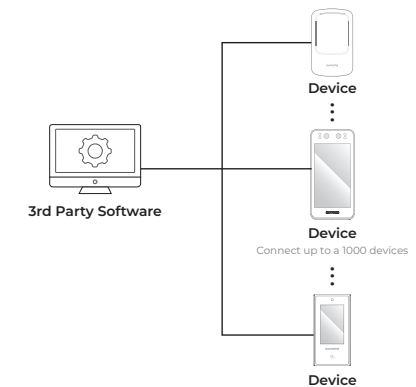
Suprema G-SDK

Suprema G-SDK is a new software development kit for allowing Suprema devices to be integrated with third-party software. It is a lightweight, scalable, and cross-platform solution which expedites your development.



BioStar Device SDK

BioStar Device SDK development framework allows developers to seamlessly integrate core functionality of Suprema biometric devices and terminals with 3rd party software.



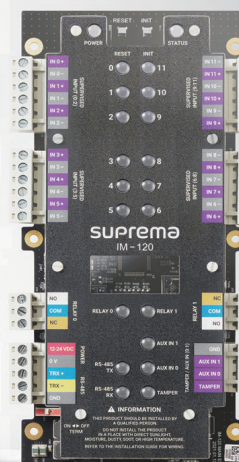
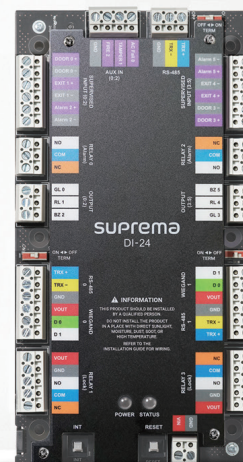
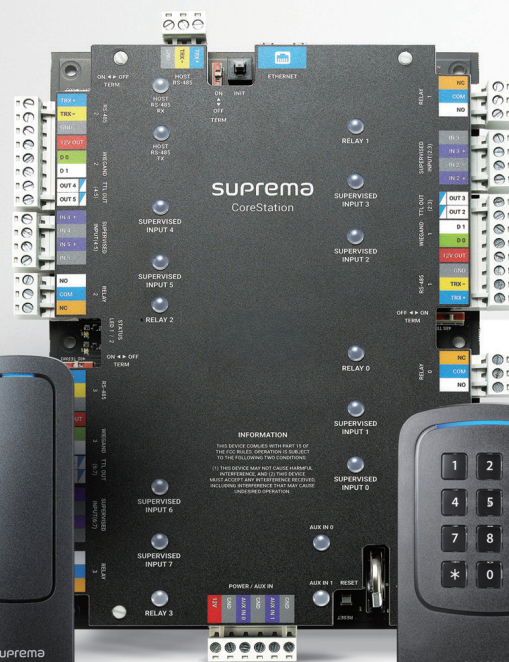
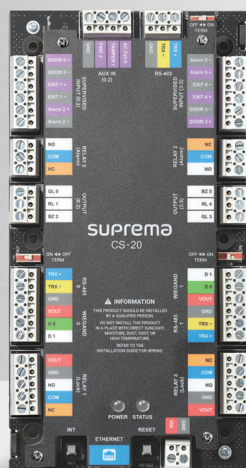
Product					
Product Name		BioStation 3 Max	BioStation 3	BioEntry W3	BioStation 2a
General	Biometric	Face:BS3M-DB, APB / Face, Fingerprint: BS3M-ODB, OAPB	Face	Face	Fingerprint
	LFD (Live Finger Detection)	BS3M-DB, APB: - / BS3M-ODB, OAPB: Supported (SW-based)	-	-	Supported (SW-based)
	Protection Class	IP65, IK06	IP65, IK06	IP67, IK08	IP65
	RF Options	BS3M-DB, ODB: 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa BS3M-APB, OAPB: 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa, iCLASS SE/SR/Seos	BS3-DB: 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa BS3-APWB: 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa, iCLASS SE/SR/Seos	BEW3-DB: 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa BEW3-APB: 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa, iCLASS SE/SR/Seos	BS2A-ODPB: 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa BS2A-OAPWB: 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa, iCLASS SE/SR/Seos, FeliCa
	Mobile	NFC, BLE	NFC, BLE	NFC, BLE	NFC, BLE
	Max. User ¹⁾	100,000	100,000	100,000	500,000
Capacity	Max. Credential (1:N) ²⁾	Face: 50,000 Fingerprint: 100,000 (BS3M-ODB, OAPB only) Card: 100,000	Face: 50,000	Face: 30,000 Card: 100,000	Fingerprint: 100,000
	Max. Credential (1:1) ²⁾	Face: 100,000 Fingerprint: 100,000 (BS3M-ODB, OAPB only) Card: 100,000 PIN: 100,000	Face: 100,000 Card: 100,000 PIN: 100,000	Face: 30,000 Card: 100,000	Fingerprint: 500,000 Card: 500,000 PIN: 500,000
	Max. Text Logs	5,000,000	5,000,000	1,000,000	5,000,000
	Max. Image Logs	50,000	50,000	10,000	-
Interfaces	Wi-Fi	-	BS3-DB: - / BS3-APWB: 802.11 b/g/n 2.4 GHz	-	BS2A-ODPB: - / BS2A-OAPWB: 802.11 b/g/n 2.4 GHz
	Ethernet	10/100/1000 Mbps, auto MDI/MDI-X	10/100/1000 Mbps, auto MDI/MDI-X	10/100 Mbps, auto MDI/MDI-X	10/100 Mbps, auto MDI/MDI-X
	RS-485	1 ch Master or Slave (Selectable)	1 ch Master or Slave (Selectable)	1 ch Master or Slave (Selectable)	1 ch Master or Slave (Selectable)
	RS-485 Communication Protocol	OSDP V2 compliant	OSDP V2 compliant	OSDP V2 compliant	OSDP V2 compliant
	Wiegand	1 ch Input, 1 ch Output	1 ch Input, 1 ch Output	1 ch Input, 1 ch Output	1 ch Input, 1 ch Output
	Input	3 ch Input	3 ch Input	3 ch Input	3 ch Input
	Relay	1 Relay	1 Relay	1 Relay	1 Relay
	USB	USB 2.0 (Type C)	USB 2.0 (Host)	USB 2.0 (Type C), only FW-Upgrade	USB 2.0 (Host)
Hardware	CPU	1.4 GHz Quad Core	1.5 GHz Quad Core	1.5 GHz Quad Core	1.5 GHz Quad Core
	Memory	32 GB Flash + 4 GB RAM	32 GB Flash + 4 GB RAM	16 GB Flash + 2 GB RAM	16 GB Flash + 2 GB RAM
	Crypto Chip	Supported	Supported	Supported	Supported
	Sound	16 bit	16 bit	16 bit	16 bit
	Operating Temperature	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 60°C (-4°F ~ 140°F)
	Tamper	Supported	Supported	Supported	Supported
	Power	Voltage: 12 Vdc, Current: Max. 2.1 A Voltage: 24 Vdc, Current: Max. 1 A	Voltage: 12 Vdc, Current: Max. 1 A Voltage: 24 Vdc, Current: Max. 0.65 A	Voltage: 12 Vdc, Current: Max. 1.0 A Voltage: 24 Vdc, Current: Max. 0.6 A	Voltage: 12 Vdc, Current: Max. 0.8 A Voltage: 24 Vdc, Current: Max. 0.4 A
	PoE	BS3M-DB, ODB: - BS3M-APB, OAPB: PoE+, IEEE 802.3at compliant	BS3-DB: - BS3-APWB: PoE+, IEEE 802.3at compliant	BEW3-DB: - BEW3-APB: IEEE 802.3af compliant	IEEE 802.3af compliant
	Dimensions (W x H x D mm)	BS3M-DB, APB: 119.8 x 233 x 23.5 BS3M-ODB, OAPB: 119.8 x 268.3 x 49.6	82.5 x 171 x 23.4	50 x 160 x 34.15	142 x 144 x 45 (Bottom) / 37.8 (Top)
	Certifications	CE, UKCA, KC, FCC, IC, RCM, RoHS, REACH, WEEE, SIG, MIC, TELEC, ETL Listed to UL 294	BS3-DB: CE, UKCA, KC, FCC, IC, RCM, BIS, SIG, RoHS, REACH, WEEE, MIC, TELEC, ETL Listed to UL 294 BS3-APWB: CE, UKCA, KC, FCC, IC, RCM, BIS, SIG, RoHS, REACH, WEEE, MIC, TELEC, ETL Listed to UL 294	CE, UKCA, KC, FCC, IC, RCM, BIS, ANATEL, SIG, RoHS, REACH, WEEE, EAC, TELEC	CE, UKCA, KC, FCC, RCM, SIG, RoHS, REACH, WEEE

1) The number of users registered without having any credential data.
2) If FaceStation F2, BioStation 3 are a master device and a device with a fingerprint sensor is connected as a slave, the slave device can be used for fingerprint authentication. You can find the capacity for fingerprint in the website's guide documentation.

						
BioLite N2	BioEntry W2³⁾	BioEntry P2	X-Station 2	XPass Q2	XPass 2	XPass S2
Fingerprint	Fingerprint	Fingerprint	Fingerprint: XS2-ODPB, OAPB	-	-	-
Supported (SW-based)	Supported (HW + SW-based)	Supported (SW-based)	XS2-ODPB, OAPB: Supported (SW-based)	-	-	-
IP67	IP67, IK09	-	IP65	IP65	IP65, IP67, IK08	IP65
BLN2-ODB: 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa BLN2-OAB, PAB: 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa, iCLASS SE/SR/Seos	BEW2-OHPB: 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa BEW2-ODPB: 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa BEW2-OAPB: 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa, iCLASS SE/SR/Seos	BEP2-OD: 125KHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa BEP2-OA: 125KHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa, iCLASS SE/SR/Seos	XS2-ODPB, DPB: 125 kHz EM & 13.56 MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa XS2-OAPB, APB: 125 kHz EM, HID Prox & 13.56 MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa, iCLASS SE/SR/Seos	XPQ2-DB: 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa	XP2-MDPB, GDBP, GKDPB: 125 kHz EM & 13.56 MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa XP2-MAPB: 125 kHz EM, HID Prox & 13.56 MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa, iCLASS SE/SR/Seos	13.56MHz MIFARE, MIFARE Plus, DESFire/EV1 (CSN), FeliCa, ISO14443A, ISO15693
NFC, BLE	NFC, BLE	NFC	NFC, BLE	NFC, BLE	NFC, BLE	-
10,000	500,000	10,000	500,000	200,000 ⁴⁾	200,000	50,000
Fingerprint: 10,000	Fingerprint: 100,000	Fingerprint: 10,000	Fingerprint: 100,000 (XS2-ODPB, OAPB only)	Card: 200,000	-	-
Fingerprint: 10,000 Card: 10,000 PIN: 10,000	Fingerprint: 500,000 Card: 500,000	Fingerprint: 10,000 Card: 10,000	Fingerprint: 500,000 (XS2-ODPB, OAPB only) Card: 500,000 PIN: 500,000	Card: 200,000	Card: 200,000 PIN: 200,000 (XP2-GKDPB only)	Card: 50,000
1,000,000	1,000,000	1,000,000	5,000,000	1,000,000	1,000,000	100,000
-	-	-	50,000	-	-	-
-	-	-	-	-	-	-
10/100 Mbps, auto MDI/MDI-X	10/100 Mbps, auto MDI/MDI-X	10/100 Mbps, auto MDI/MDI-X	10/100 Mbps, auto MDI/MDI-X	10/100 Mbps, auto MDI/MDI-X	10/100 Mbps, auto MDI/MDI-X	10/100 Mbps, auto MDI/MDI-X
1 ch Master or Slave (Selectable)	1 ch Master or Slave (Selectable)	1 ch Master or Slave (Selectable)	1 ch Master or Slave (Selectable)	1 ch Master or Slave (Selectable)	1 ch Master or Slave (Selectable)	1 ch Master or Slave (Selectable)
OSDP V2 compliant	OSDP V2 compliant	OSDP V2 compliant	OSDP V2 compliant	OSDP V2 compliant	OSDP V2 compliant	OSDP V2 compliant
1 ch Input or Output (Selectable)	1 ch Input or Output (Selectable)	1 ch Input or Output (Selectable)	1 ch Input or Output (Selectable)	1 ch Input or Output (Selectable)	1 ch Input or Output (Selectable)	1 ch Input or Output (Selectable)
2 ch Input	2 ch Input	2 ch Input	2 ch Input	3 ch Input	2 ch Input	2 ch Input
1 Relay	1 Relay	1 Relay	1 Relay	1 Relay	1 Relay	1 Relay
-	-	-	USB 2.0 (Host)	USB 2.0 (Type C), only FW-Upgrade	-	-
1.2 GHz	1.2 GHz Quad Core	1.0 GHz	1.5 GHz Quad Core	1.0 GHz	1.0 GHz	533 MHz DSP
4 GB Flash + 64 MB RAM	2 GB Flash + 256 MB RAM	8 GB Flash + 64 MB RAM	16 GB Flash + 1 GB RAM	8 GB Flash + 256 MB RAM	4 GB Flash + 64 MB RAM	16 MB Flash + 16 MB RAM
Supported	Supported	Supported	Supported	Supported	Supported	Supported
16 bit	Multi-tone Buzzer	Multi-tone Buzzer	24 bit	Multi-tone Buzzer	Multi-tone Buzzer	Multi-tone Buzzer
BLN2-ODB, OAB: -20°C ~ 50°C (-4°F ~ 122°F) BLN2-PAB: -10°C ~ 50°C (14°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)	-20 °C ~ 60 °C (-4°F ~ 140°F)	-35°C ~ 65°C (-31°F ~ 149°F)	-35°C ~ 65°C (-31°F ~ 149°F)
Supported	Supported	Supported	Supported	Supported	Supported	Supported
Voltage: 12 Vdc, Current: Max. 0.4 A	Voltage: 12 Vdc, Current: Max. 0.5 A	Voltage: 12 Vdc, Current: Max. 0.2 A	Voltage: 12 Vdc, Current: Max. 0.8 A Voltage: 24 Vdc, Current: Max. 0.5 A	Voltage: 12 Vdc, Current: Max. 0.5 A Voltage: 24 Vdc, Current: Max. 0.3 A	Voltage: 12 Vdc, Current: Max. 0.5 A Voltage: 24 Vdc, Current: Max. 0.3 A	Voltage: 12 Vdc, Current: Max. 0.4 A
-	IEEE 802.3af compliant	-	IEEE 802.3af compliant	-	IEEE 802.3af compliant	-
58 x 190 x 44 (Bottom) / 34.6 (Top)	50 x 172 x 43.4 (Bottom) / 38.1 (Top)	50.1 x 164 x 38	XS2-ODPB, OAPB: 82 x 208.5 x 53 (Bottom) / 25.9 (Top) XS2-DPB, APB: 82 x 159 x 25.9	50 x 150 x 40.2	XP2-MDPB, MAPB: 48 x 144.7 x 27 XP2-GDBP, GKDPB: 80 x 130 x 25	80 x 120 x 11.4
CE, UKCA, KC, FCC, IC, RCM, BIS, SIG, RoHS, REACH, WEEE	BEW2-OHPB,ODPB: CE, UKCA, KC, FCC, IC, RCM, BIS, ANATEL, SIG, RoHS, REACH, WEEE BEW2-OAPB: CE, UKCA, KC, FCC, IC, RCM, BIS, ANATEL, SIG, RoHS, REACH, WEEE, ETL Listed to UL 294	CE, UKCA, KC, FCC, RCM, BIS, ANATEL, RoHS, REACH, WEEE	XS2-ODPB, OAPB: CE, UKCA, KC, FCC, IC, RCM, BIS, ANATEL, SIG, RoHS, REACH, WEEE XS2-DPB, APB: CE, UKCA, KC, FCC, IC, RCM, BIS, ANATEL, SIG, TELEC, RoHS, REACH, WEEE	CE, UKCA, KC, FCC, IC, RCM, SIG, RoHS, REACH, WEEE, EAC, TELEC	XP2-MDPB, GDBP: CE, UKCA, KC, FCC, IC, RCM, BIS, SIG, RoHS, REACH, WEEE, ETL Listed to UL 294 XP2-GKDPB: CE, UKCA, KC, FCC, IC, RCM, BIS, SIG, TELEC, RoHS, REACH, WEEE, ETL Listed to UL 294 XP2-MAPB: CE, UKCA, KC, FCC, RCM, SIG, RoHS, REACH, WEEE	CE, UKCA, KC, FCC, BIS, RoHS, REACH, WEEE

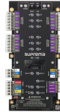
³⁾ Some models (BEW2-ODP, BEW2-OAP, BEW2-OHP) do not support BLE.

⁴⁾ Based on users registered without credentials.

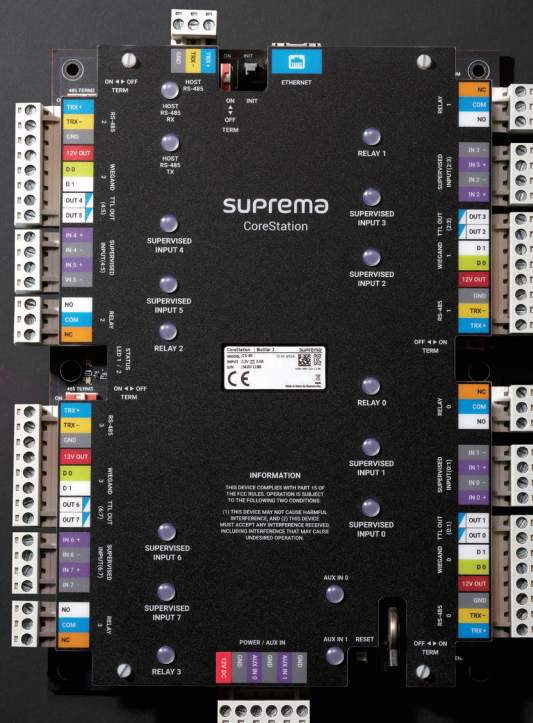
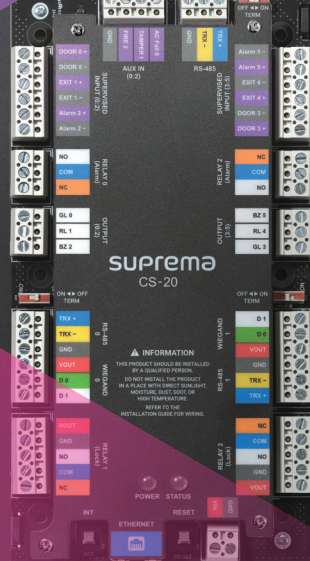
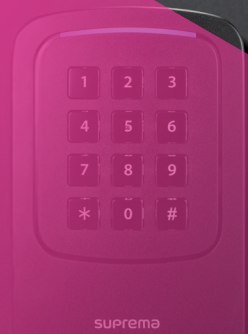


Product			
Product Name		CoreStation (CS-40)	CoreStation 20 (CS-20 CS-20P)
Capacity	Max. User	500,000	500,000
	Max. Credential (1:N)	Face: 4,000 Fingerprint: 100,000 ⁵⁾	-
	Max. Credential (1:1)	Face: 30,000 Fingerprint: 500,000 ⁵⁾ Card: 500,000 PIN: 500,000	Card: 500,000 PIN: 500,000
	Max. Text Logs	5,000,000	5,000,000
Interfaces	Ethernet	10/100 Mbps, Auto MDI/MDI-X	10/100 Mbps, Auto MDI/MDI-X
	RS-485	5 ch	3 ch
	RS-485 Communication Protocol	OSDP V2 compliant	OSDP V2 compliant
	Wiegand	4 ch	2 ch
	Relay	4 Relays	4 Relays
	Supervised Input	8 ch (TTL Input Selectable)	6 ch
	Output	8 ch	6 ch
	AUX Input	2 ch (AC Power Fail, Tamper)	3 ch (AC Power Fail, Tamper, Fire)
	SAM Slot	-	- Supported
Connectivity	Max. Slave Devices (RS-485)	Max. 64 devices (Max. 31 devices per port)	Max. 4 devices
	Max. Wiegand Devices	Max. 132 devices (with DM-20)	Max. 2 devices
Hardware	CPU	1.4 GHz Octa Core	1.2 GHz Single Core
	Memory	8 GB Flash + 1 GB RAM	4 GB Flash + 256 MB RAM
	Crypto Chip	Supported	Supported
	LED	Multi-color	POWER: RED single-color STATUS: Multi-color
	Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)
	Tamper	Optional (ENCR-10)	-
	Power	Voltage: 12 Vdc, Current: Max. 0.2 A Voltage: 24 Vdc, Current: Max. 0.1 A	Voltage: 12 Vdc, Current: Max. 2.8 A Voltage: 24 Vdc, Current: Max. 1.4 A
	Dimensions (W x H x D mm)	150 x 214 x 21	100 x 190 x 33.9
	PoE+	-	- Supported
	Certifications	CE, UKCA, KC, FCC, RCM, RoHS, REACH, WEEE, ETL Listed to UL 294	CE, UKCA, KC, FCC, RCM, IC, RoHS, REACH, WEEE, EAC

Product			
Product Name		BioEntry R2	XPass D2
General	Biometrics	Fingerprint	-
	Protection Class	-	IP65, IP67, IK08
	RF Options	BER2-OD: 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire EV1/EV2/EV3, FeliCa	XP2D-MDB, GDB, GKDB: 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa
	Mobile	BER2-OD: NFC	XP2D-MDB, GDB, GKDB: NFC, BLE
Interfaces	RS-485	1 ch Slave	1 ch Slave
	RS-485 Communication Protocol	OSDP V2 compliant	OSDP V2 compliant
	Wiegand	-	1 ch
Hardware	CPU	1.0 GHz	80 MHz
	Memory	32 MB Flash + 32 MB RAM	512 KB Flash + 160 KB RAM
	Sound	Multi-tone Buzzer	Multi-tone Buzzer
	Operating Temperature	-20°C ~ 50°C (-4°F ~ 122°F)	-35°C ~ 65°C (-31°F ~ 149°F)
	Tamper	Supported	Supported
	Power	Voltage: 12 Vdc, Current: Max. 0.2 A	Voltage: 12 Vdc, Current: Max. 0.3 A
	Dimensions (W x H x D mm)	50.1 x 164 x 38	XP2D-MDB: 48 x 144.7 x 27 XP2D-GDB, GKDB: 80 x 130 x 25
	Certifications	CE, UKCA, KC, FCC, RoHS, REACH, WEEE	CE, UKCA, KC, FCC, IC, RCM, BIS, SIG, RoHS, REACH, WEEE, ETL Listed to UL 294

Product					
Product Name		Input Module (IM-120)	Output Module (OM-120)	Door Interface Module (DI-24)	Secure Module (Secure I/O 2)
Interfaces	RS-485	1 ch	1 ch	3 ch	1 ch
	RS-485 Communication Protocol	OSDP V2 compliant	OSDP V2 compliant	OSDP V2 compliant	OSDP V2 compliant
	Wiegand	-	-	2 ch	-
	Relay	2 Relays	12 Relays	4 Relays	1 Relay
	Input	Supervised Input: 12 ch (TTL Input Selectable)	-	6 ch	TTL Input: 2 ch
	Output	-	-	6 ch	-
	AUX Input	2 ch (AC POWER FAIL)	2 ch Dry Contact Input	3 ch (AC POWER FAIL, Tamper, Fire)	-
Hardware	CPU	Cortex M3 72MHz	Cortex M3 72MHz	1.2 GHz Single Core	Cortex M3 72MHz
	Memory	512 KB Flash + 64 KB SRAM	128 KB Flash + 20 KB SRAM	4 GB Flash + 256 MB RAM	128 KB Flash + 20 KB RAM
	LED	Multi-color	Multi-color	POWER: RED single-color STATUS: Multi-color	Multi-color
	Operating Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	0°C ~ 50°C (32°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)
	Power	Voltage: 12 Vdc, Current: Max. 0.2 A	Voltage: 12 Vdc, Current: Max. 0.6 A	Voltage: 12 Vdc, Current: Max. 2.8 A Voltage: 24 Vdc, Current: Max. 1.4 A	Voltage: 12 Vdc, Current: Max. 0.5 A
	Dimensions (W x H x D mm)	90 x 190 x 21	90 x 190 x 21	100 x 190 x 33.9	36 x 65 x 18
	Certifications	CE, UKCA, KC, FCC, RCM, RoHS, REACH, WEEE	CE, UKCA, KC, FCC, RoHS, REACH, WEEE, EAC	CE, UKCA, KC, FCC, RCM, IC, RoHS, REACH, WEEE, ETL Listed to UL 294	CE, UKCA, KC, FCC, RoHS, REACH, WEEE, ETL Listed to UL 294

5) If a device with a fingerprint sensor is connected as a slave, the slave device can be used for fingerprint authentication.



suprema
SECURITY & BIOMETRICS

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For more information, visit our website below by scanning the QR code.
<https://www.supremainc.com/en/about/contact-us.asp>