

# suprema

SECURITY & BIOMETRICS



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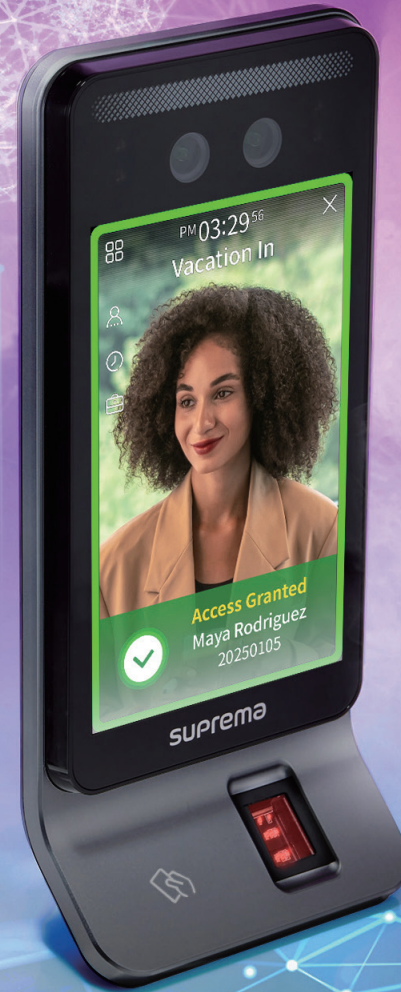
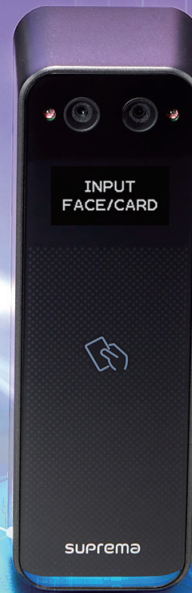
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# Facial Authentication powered by AI



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

Search

Monitoring

Map

Video

Door Map Device

All Door Groups

Management

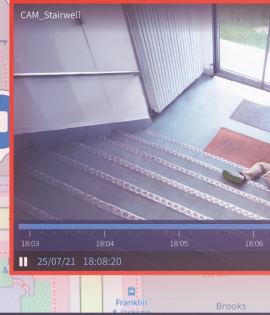
- Main Entrance
- Door Contact
- Door Relay
- Arm
- CAM\_Admin\_Lobby
- CAM\_Elevator
- IT Server Room
- Door Contact
- Door Relay
- Arm
- CAM\_IT\_Server\_Inside
- CAM\_IT\_Server\_Door
- Breakroom
- Door Contact
- Door Relay

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



Event (36)

Event Set Unnamed 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...	153625365		1:1 authentication su

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

Total Cards



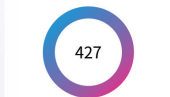
Total Fingerprints



Total Visual Faces



Total Mobile Access



# 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

25/07/21 18:08:20

person\_on\_ground 0.83

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

▶ 25/07/21 18:08:20 X4

1 2 3 4 1

Event	Value
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 09:29:55	IT Server Room

**Access Trend**

Month	Activity Level
January	High
February	Medium-High
March	Medium
April	Medium
May	Medium
June	Medium
July	Medium
August	Low
September	Medium
October	Medium
November	High



One screen for total awareness and action.



Infrastructure that grows stronger as you scale.



X is where integration meets no limits.

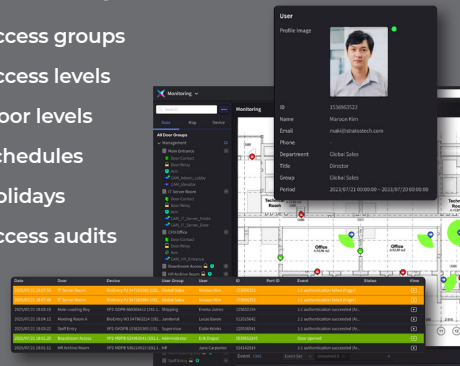
## Total control, over who, where and when.

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

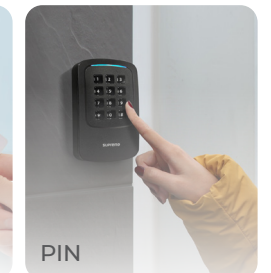
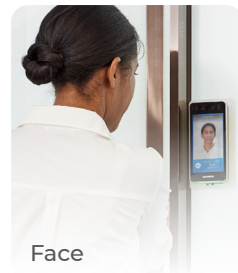
### Emergency management

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.

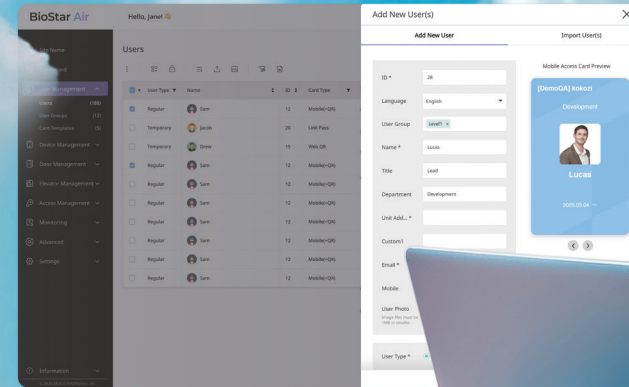
# BioStar Air

Zero on-prem. All-in on cloud.

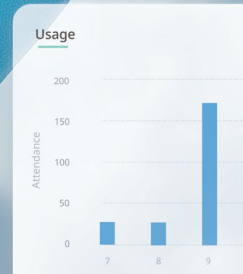
The only access control solution that natively connects the world's most advanced biometric readers to the cloud.

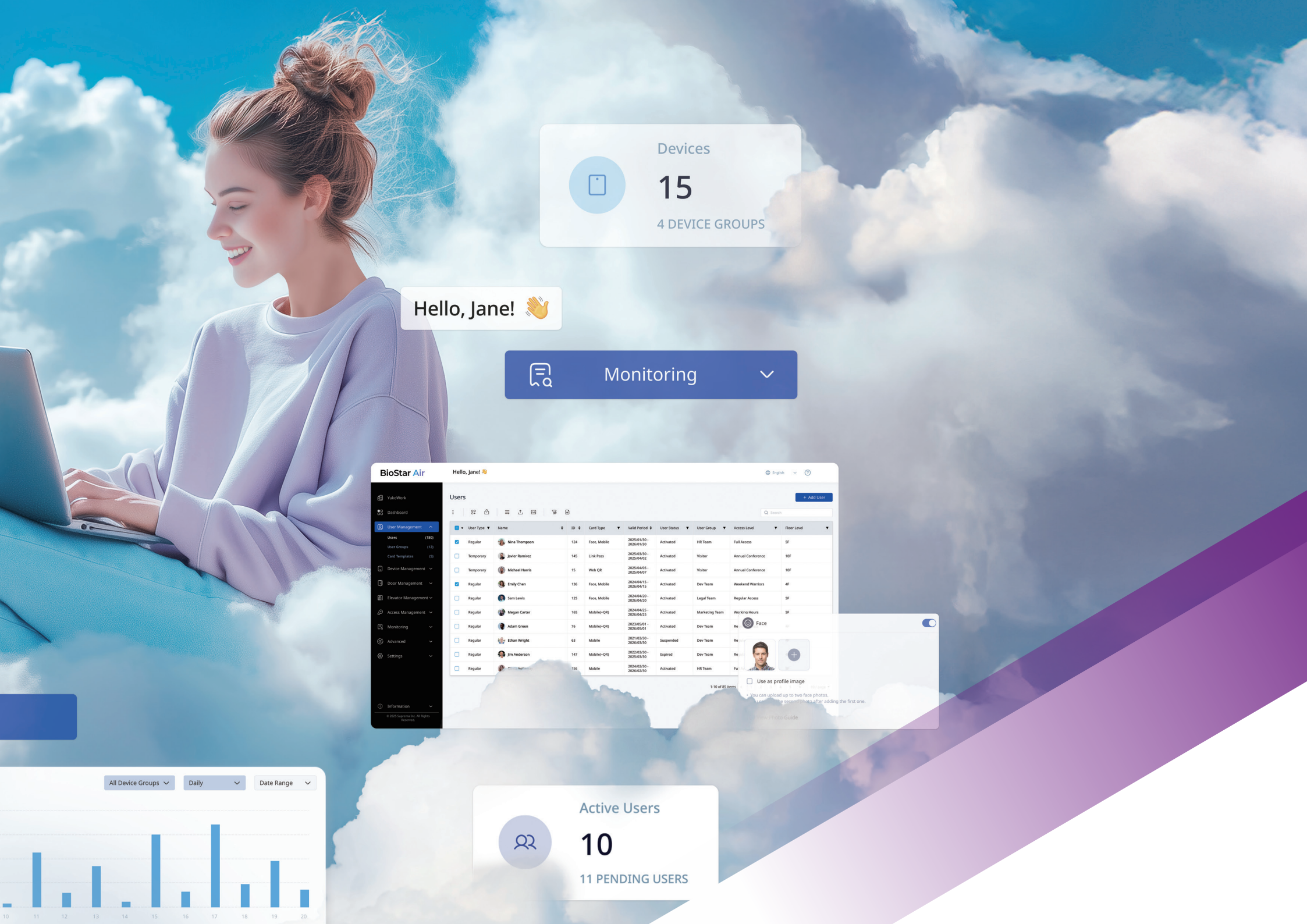
Built by the global leader in biometric security, BioStar Air eliminates the need for door controllers and on-prem servers while offering the most flexible credential options available. Smart readers with cutting-edge design connect seamlessly to its cloud-managed platform, giving you complete control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

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



Today's Attendance  
**88%**  
45 USERS TODAY





Devices

**15**

4 DEVICE GROUPS

Hello, Jane! 🙌

Monitoring

BioStar Air Hello, Jane! 🙌 English

Users

User Type	Name	ID	Card Type	Valid Period	User Status	User Group	Access Level	Floor Level
Regular	Nina Thompson	124	Face, Mobile	2023/01/30 - 2025/01/30	Activated	HR Team	Full Access	SF
Temporary	Javier Ramirez	145	Link Pass	2023/04/05 - 2023/04/02	Activated	Visitor	Annual Conference	10F
Temporary	Michael Harris	15	Web QR	2023/04/05 - 2023/04/07	Activated	Visitor	Annual Conference	10F
Regular	Emily Chen	136	Face, Mobile	2023/04/11 - 2023/04/15	Activated	Dev Team	Weekend Warriors	4F
Regular	Sam Lewis	125	Face, Mobile	2023/04/20 - 2023/04/20	Activated	Legal Team	Regular Access	SF
Regular	Megan Carter	165	Mobile+QR	2023/04/25 - 2023/04/25	Activated	Marketing Team	Worktime Hours	SF
Regular	Adam Green	76	Mobile+QR	2023/05/01 - 2023/05/01	Activated	Dev Team	Face	
Regular	Ethan Wright	63	Mobile	2022/03/30 - 2023/03/30	Suspended	Dev Team		
Regular	Jim Anderson	147	Mobile+QR	2022/03/30 - 2023/03/30	Expired	Dev Team		
Regular	...	156	Mobile	2023/02/30 - 2023/02/30	Activated	HR Team		

1-10 of 85 items

Use as profile image

You can upload up to two face photos. We'll use the second photo after adding the first one.

View Photo Guide



Active Users

**10**

11 PENDING USERS

# Industry's **widest range** of credentials.

Supports a full range of credentials while enabling hands-free, remote unlocking, and API-based integrations for maximum flexibility.



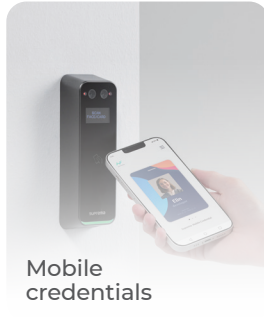
Biometrics  
in the cloud



Zero on-prem  
infrastructure



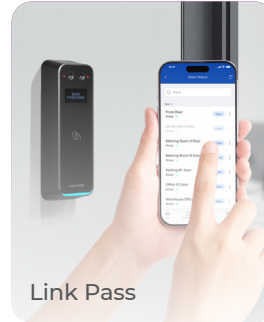
Face



Mobile  
credentials



QR Pass



Link Pass



RFID



PIN

# Effortless access control, **from anywhere.**

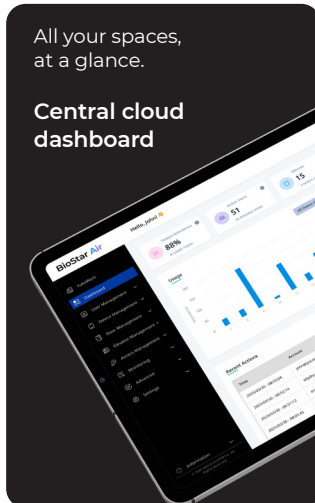
Empowers space owners to rethink access as a driver of new business models while enjoying the luxury of managing their spaces remotely, from anywhere in the world.



On-the-go  
management

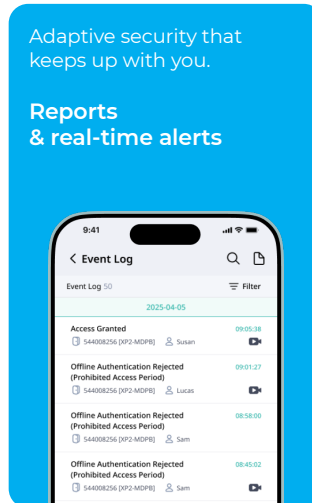


World's easiest  
setup



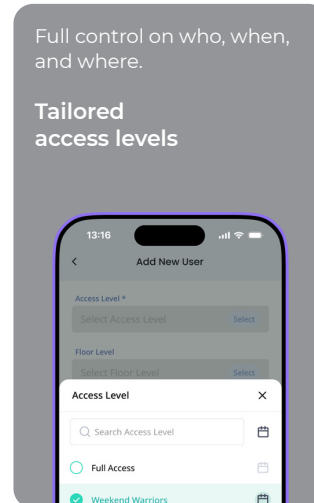
All your spaces,  
at a glance.

**Central cloud  
dashboard**



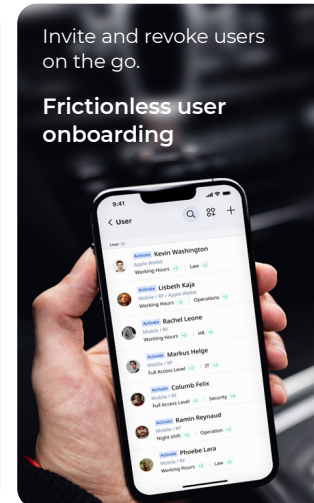
Adaptive security that  
keeps up with you.

**Reports  
& real-time alerts**



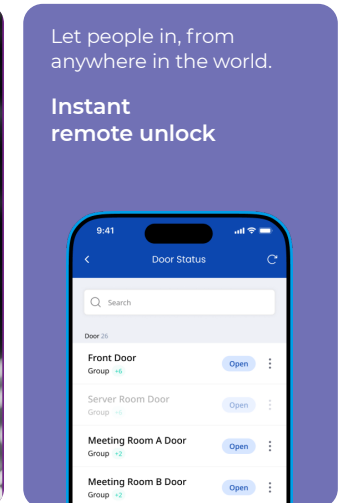
Full control on who, when,  
and where.

**Tailored  
access levels**



Invite and revoke users  
on the go.

**Frictionless user  
onboarding**

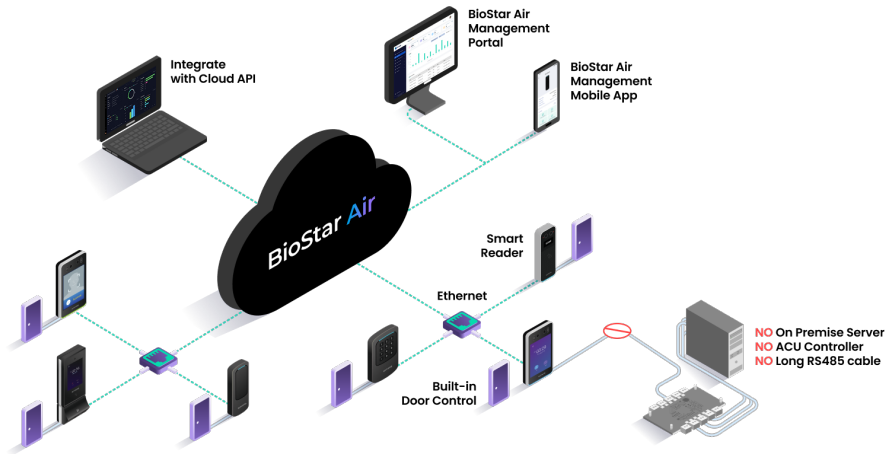


Let people in, from  
anywhere in the world.

**Instant  
remote unlock**

## Secure today, **scalable** for tomorrow.

With its smart access readers and edge architecture, BioStar Air eliminates the need for door controllers. Each reader operates independently with a built-in relay, ensuring seamless scalability.



## Secure Offline Mode.

Temporary network disruptions should never translate into locked doors or compromised operations. BioStar Air maintains full access continuity during connectivity loss, without degrading security posture.

### Mobile credentials: cloud-verified, edge-executed.

When a mobile credential is used, the smartphone validates it with the BioStar Air cloud and then presents a secure, cryptographically signed token to the reader. Even if the reader is offline, whether permanently in remote sites or temporarily due to network issues, access can be verified and granted locally using this token.

### Face and RFID credentials: pre-distributed to the edge.

For biometric (facial authentication) and RFID credentials, BioStar Air continuously synchronizes credential data to each reader. Each reader maintains a local credential cache, allowing access decisions to continue locally using the most recent authorized data if the device goes offline.

### Offline mobile credentials without mobile network.

BioStar Air also supports fully offline mobile access, even when the user's smartphone has no mobile or Wi-Fi connectivity, such as in underground or remote locations. Administrators can define a time-bounded offline acceptance window per reader, allowing mobile credentials to remain valid for a predefined duration while maintaining security through strict time limits and automatic expiration.

## Cloud agility, long-term reliability.

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, 114 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.

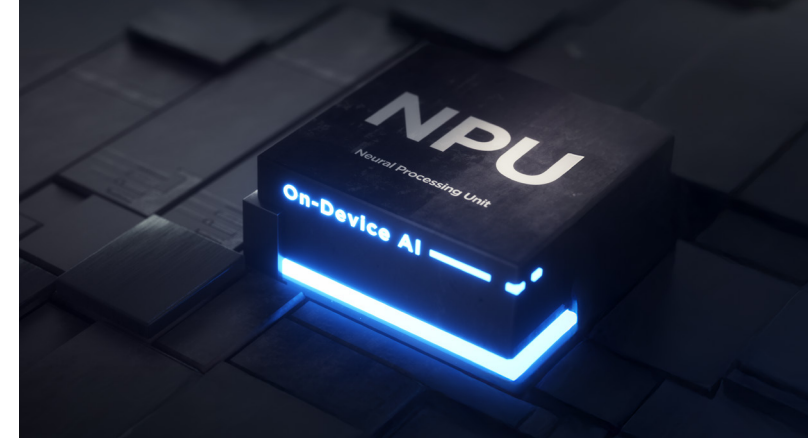
# Biometrics

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.

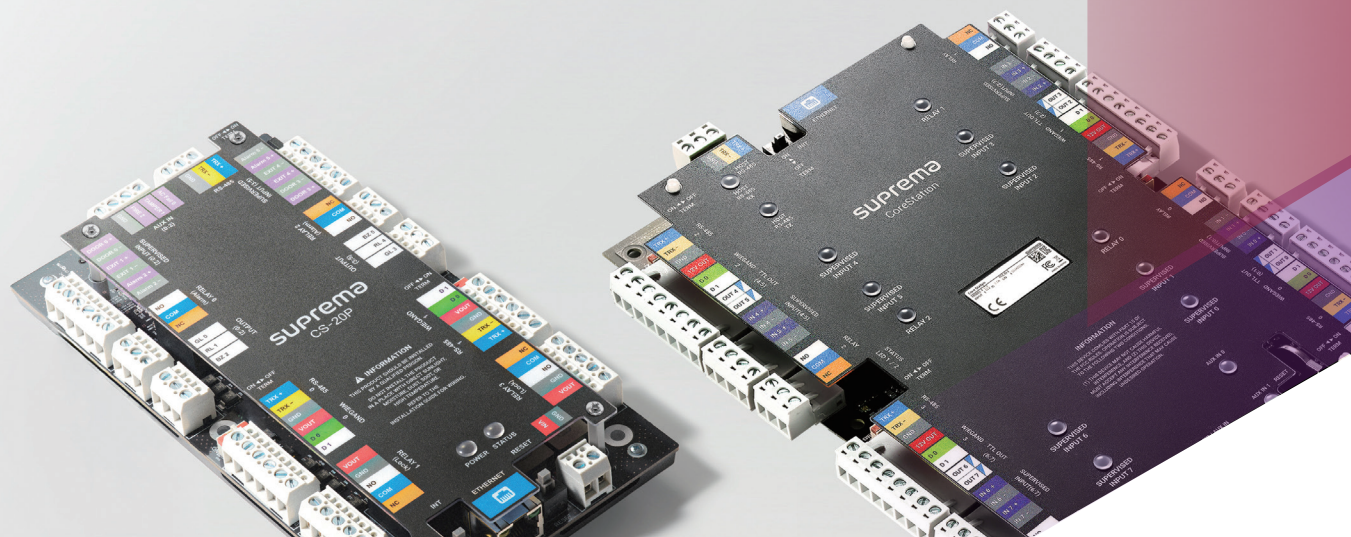
## Fingerprint Recognition

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.

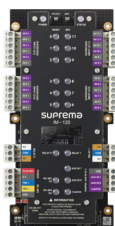


## CoreStation (CS-40) | Intelligent Biometric Controller

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.

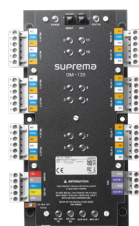
## CoreStation 20 (CS-20, CS-20P) | 2 Door Controller

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

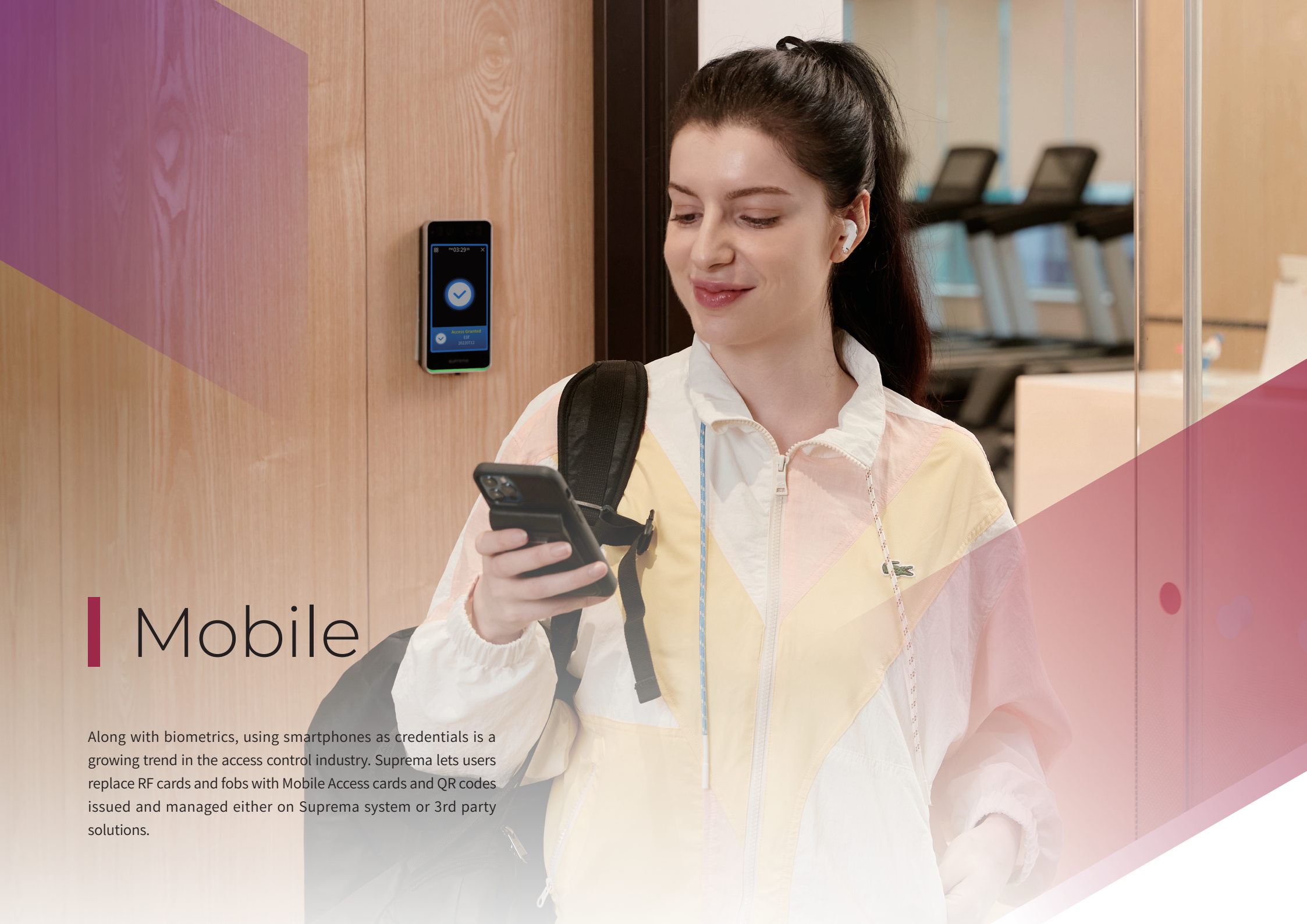


### XPass D2

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.




- 

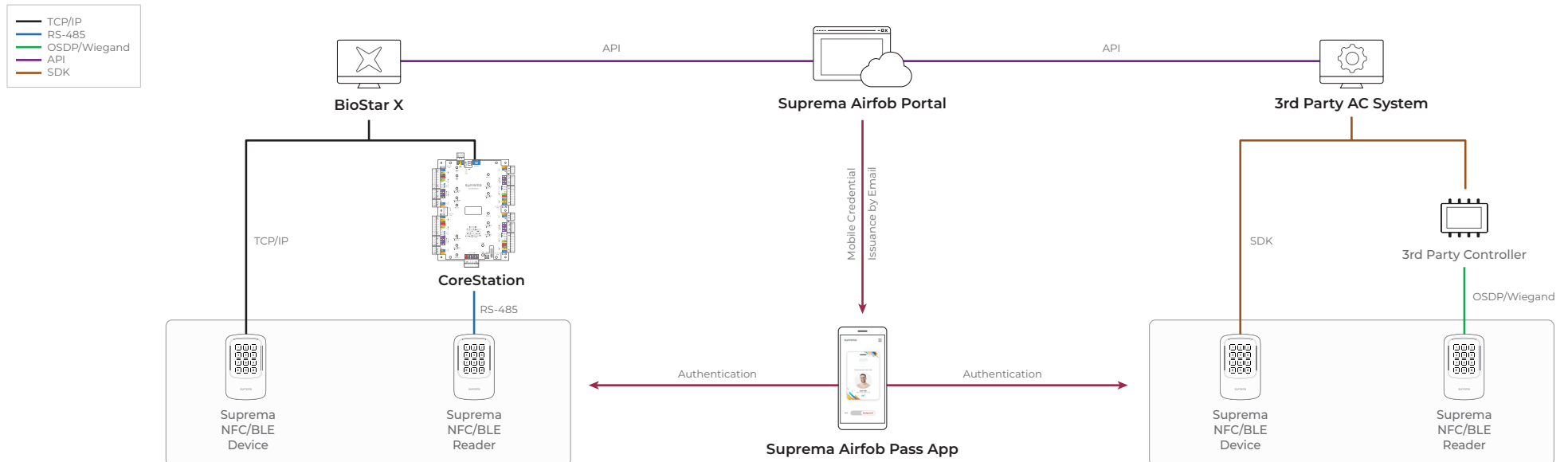
Fast and easy contactless solution
- 

Support both NFC & BLE (Bluetooth 4.2 or above)
- 

Remote management via web portal
- 

Background mode (BLE, Standby mode)
- 

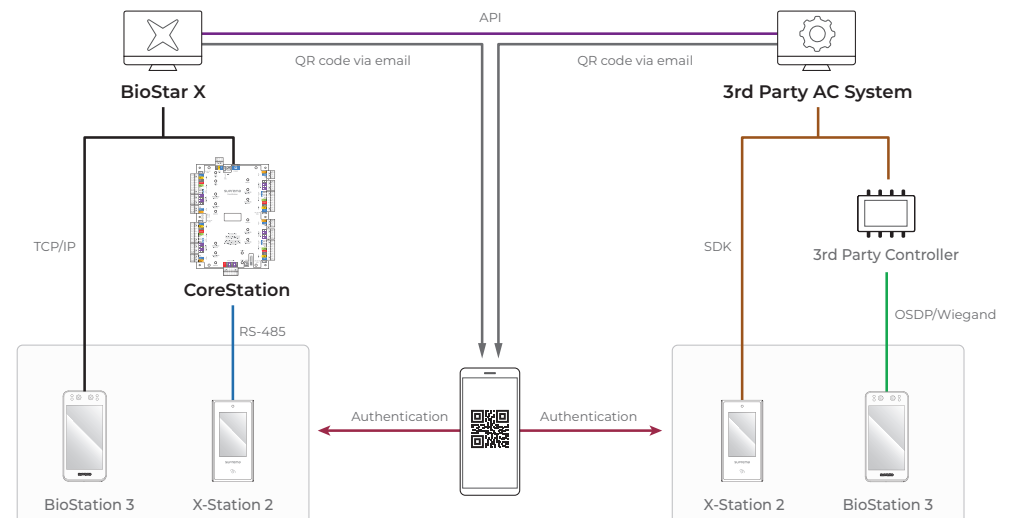
Compatible with Android (9.0 or above) & iOS (7.0 or above)





## 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** Quick

**All Users (207)** Select All Select User: 2 Batch Edit Delete + New User

ID	First Name	Last Name	Group	Access Group	Start Date	End Date	Card	Mobile	Face	Finger	Status
EMP202400001	Rah	Ahmed	Administrative	Lab1	2021/01/31	2021/12/31	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	2030/03/14	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	Muhammad	Hassan	Administrative	Management	2018/03/01	2027/03/01	1	1	1	1	
EMP202400015	Chester	Gullan	Administrative	Management	2019/06/07	2030/09/06	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	2015/05/04	2025/06/06	1	1	1	1	
EMP202400019	Chloe	Grace	Security	Management	2019/04/15	2025/09/04	2	1	2	1	
EMP202400020	Natalie	Zoey	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	Zoey	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	-	1	inactive
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	Hulley	Nirman	Second Shift	Lobby	2022/01/23	2030/05/01	-	1	-	-	

**User | Sophie Madison**



ID: EMP202400013  
 Name: Sophie Madison  
 Email: soma@stratostech.com  
 Telephone: +1 201 359 3986  
 Department: HR  
 Title: Manager  
 Group: Administrative  
 Period: 2022/01/21 00:00 - 2028/12/31 24:00

[See More](#)

**Trace**

Datetime	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 10:55:23	HR Department Entry	Door Locked
2024/01/01 10:55:23	HR Department Entry	Door Unlocked





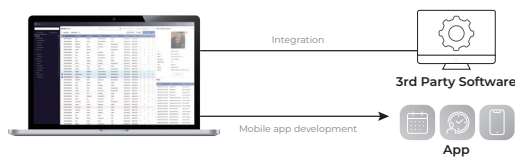
# Development Tools

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.



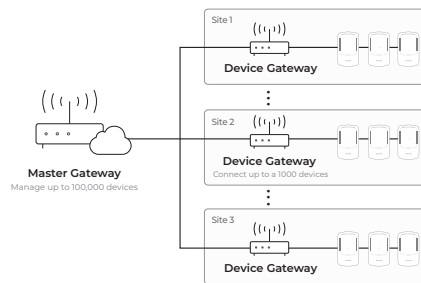
## BioStar X API

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.



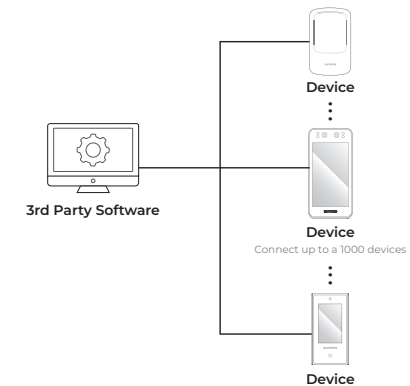
## Suprema G-SDK





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	<b>BS3M-DB, ODB:</b> 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>(3)</sup> , FeliCa <b>BS3M-APB, OAPB:</b> 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>(3)</sup> , FeliCa, iCLASS SE/SR/Seos	<b>BS3-DB:</b> 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>(3)</sup> , FeliCa <b>BS3-APWB:</b> 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>(3)</sup> , FeliCa, iCLASS SE/SR/Seos	<b>BEW3-DB:</b> 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>(3)</sup> , FeliCa <b>BEW3-APB:</b> 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>(3)</sup> , FeliCa, iCLASS SE/SR/Seos	<b>BS2A-ODPB:</b> 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>(3)</sup> , FeliCa <b>BS2A-OAPWB:</b> 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>(3)</sup> , FeliCa, iCLASS SE/SR/Seos, FeliCa
	Mobile	NFC, BLE	NFC, BLE	NFC, BLE	NFC, BLE
Capacity	Max. User <sup>(1)</sup>	100,000	100,000	100,000	500,000
	Max. Credential (1:N) <sup>(4)</sup>	Face: 50,000 Fingerprint: 100,000 ( <b>BS3M-ODB, OAPB</b> only) Card: 100,000	Face: 50,000	Face: 30,000 Card: 100,000	Fingerprint: 100,000
	Max. Credential (1:1) <sup>(4)</sup>	Face: 100,000 Fingerprint: 100,000 ( <b>BS3M-ODB, OAPB</b> 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	-	<b>BS3-DB:</b> - / <b>BS3-APWB:</b> 802.11 b/g/n 2.4 GHz	-	<b>BS2A-ODPB:</b> - / <b>BS2A-OAPWB:</b> 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
Hardware	USB	USB 2.0 (Type C)	USB 2.0 (Host)	USB 2.0 (Type C), only FW-Upgrade	USB 2.0 (Host)
	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	<b>BS3M-DB, ODB:</b> - <b>BS3M-APB, OAPB:</b> PoE+, IEEE 802.3at compliant	<b>BS3-DB:</b> - <b>BS3-APWB:</b> PoE+, IEEE 802.3at compliant	<b>BEW3-DB:</b> - <b>BEW3-APB:</b> IEEE 802.3af compliant	IEEE 802.3af compliant
Dimensions (W x H x D mm)	<b>BS3M-DB, APB:</b> 119.8 x 233 x 23.5 <b>BS3M-ODB, OAPB:</b> 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	<b>BS3-DB:</b> CE, UKCA, KC, FCC, IC, RCM, BIS, SIG, RoHS, REACH, WEEE, MIC, TELEC <b>BS3-APWB:</b> 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) DESFire EV2 cards are supported by having backward compatibility of DESFire EV1 cards. CSN and smart card functions are compatible with Suprema devices.

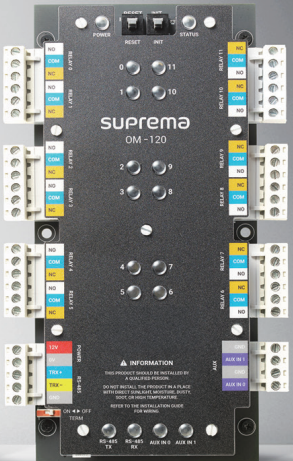
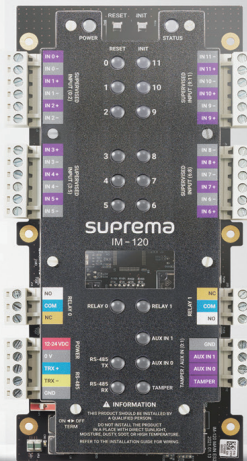
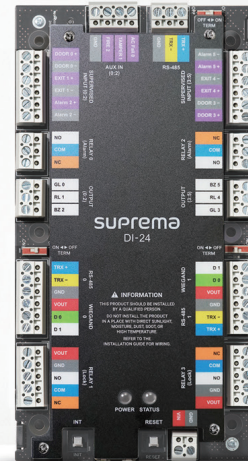
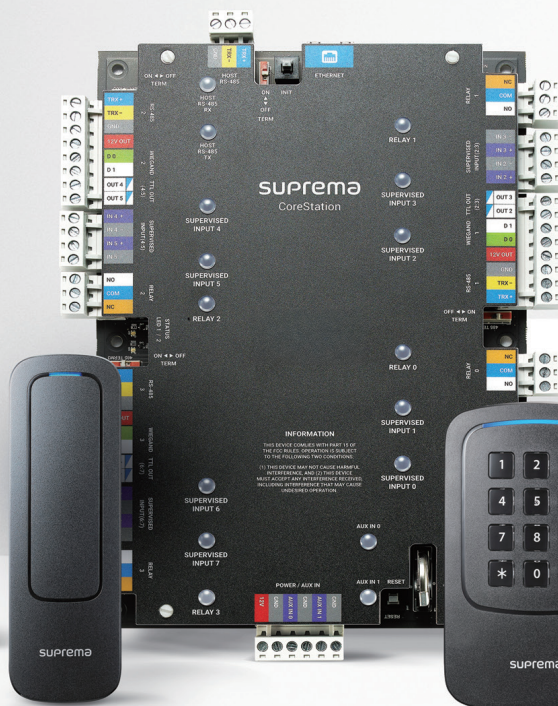
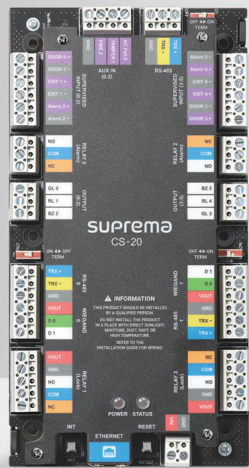
(3) DESFire EV2/EV3 cards are supported by having backward compatibility of DESFire EV1 cards. CSN and smart card functions are compatible with Suprema devices.



(4) If FaceStation F2, BioStation 3 and FaceStation 2 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 W2 <sup>(5)</sup>	BioEntry P2	X-Station 2	XPass Q2	XPass 2	XPass S2
Fingerprint	Fingerprint	Fingerprint	<b>Fingerprint:</b> XS2-ODPB, OAPB	-	-	-
Supported (SW-based)	Supported (HW + SW-based)	Supported (SW-based)	<b>XS2-ODPB, OAPB:</b> Supported (SW-based)	-	-	-
IP67	IP67, IK09	-	IP65	IP65	IP65, IP67, IK08	IP65
<b>BLN2-ODB:</b> 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>®</sup> , FeliCa <b>BLN2-OAB, PAB:</b> 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>®</sup> , FeliCa, iCLASS SE/SR/Seos	<b>BEW2-OHPB:</b> 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>®</sup> , FeliCa <b>BEW2-ODPB:</b> 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>®</sup> , FeliCa <b>BEW2-OAPB:</b> 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>®</sup> , FeliCa, iCLASS SE/SR/Seos	<b>BEP2-OD:</b> 125KHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>®</sup> , FeliCa <b>BEP2-OA:</b> 125KHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>®</sup> , FeliCa, iCLASS SE/SR/Seos	<b>XS2-ODPB, DPB:</b> 125 kHz EM & 13.56 MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>®</sup> , FeliCa <b>XS2-OAPB, APB:</b> 125 kHz EM, HID Prox & 13.56 MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>®</sup> , FeliCa, iCLASS SE/SR/Seos	<b>XPQ2-DB:</b> 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>®</sup> , FeliCa	<b>XP2-MDPB, GDPB, GKDPB:</b> 125 kHz EM & 13.56 MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>®</sup> , FeliCa <b>XP2-MAPB:</b> 125 kHz EM, HID Prox & 13.56 MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>®</sup> , 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 <sup>(6)</sup>	200,000	50,000
Fingerprint: 10,000	Fingerprint: 100,000	Fingerprint: 10,000	Fingerprint: 100,000 ( <b>XS2-ODPB, OAPB</b> 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 ( <b>XS2-ODPB, OAPB</b> only) Card: 500,000 PIN: 500,000	Card: 200,000	Card: 200,000 PIN: 200,000 ( <b>XP2-GKDPB</b> 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
<b>BLN2-ODB, OAB:</b> -20°C ~ 50°C (-4°F ~ 122°F) <b>BLN2-PAB:</b> -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	<b>XS2-ODPB, OAPB:</b> 82 x 208.5 x 53 (Bottom) / 25.9 (Top) <b>XS2-DPB, APB:</b> 82 x 159 x 25.9	50 x 150 x 40.2	<b>XP2-MDPB, MAPB:</b> 48 x 144.7 x 27 <b>XP2-GDPB, GKDPB:</b> 80 x 130 x 25	80 x 120 x 11.4
CE, UKCA, KC, FCC, IC, RCM, BIS, SIG, RoHS, REACH, WEEE	<b>BEW2-OHPB, ODPB:</b> CE, UKCA, KC, FCC, IC, RCM, BIS, ANATEL, SIG, RoHS, REACH, WEEE <b>BEW2-OAPB:</b> 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	<b>XS2-ODPB, OAPB:</b> CE, UKCA, KC, FCC, IC, RCM, BIS, ANATEL, SIG, RoHS, REACH, WEEE <b>XS2-DPB, APB:</b> 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	<b>XP2-MDPB, GDPB:</b> CE, UKCA, KC, FCC, IC, RCM, BIS, SIG, RoHS, REACH, WEEE, ETL Listed to UL 294 <b>XP2-GKDPB:</b> CE, UKCA, KC, FCC, IC, RCM, BIS, SIG, TELEC, RoHS, REACH, WEEE, ETL Listed to UL 294 <b>XP2-MAPB:</b> CE, UKCA, KC, FCC, RCM, BIS, RoHS, REACH, WEEE	CE, UKCA, KC, FCC, BIS, RoHS, REACH, WEEE




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

(6) Based on users registered without credentials.

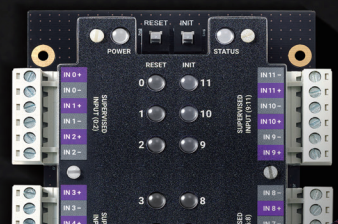
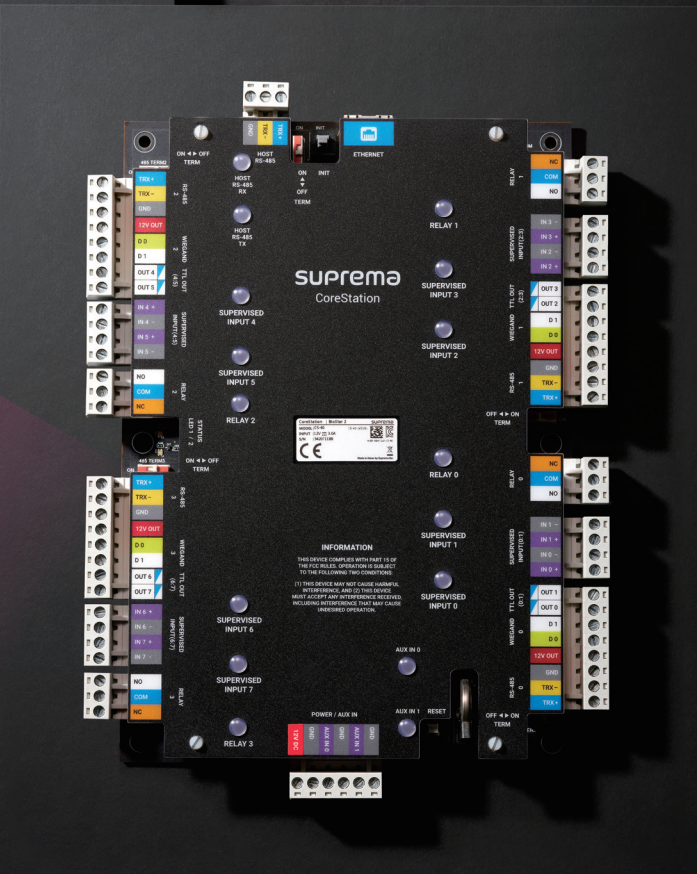
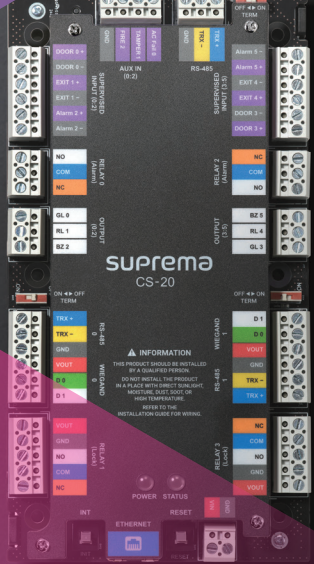


Product			
Product Name		CoreStation (CS-40)	CoreStation 20 (CS-20   CS-20P)
Capacity	Max. User	500,000	500,000
	Max. Credential (1:N)	Face: 4,000 Fingerprint: 100,000 <sup>(7)</sup>	-
	Max. Credential (1:1)	Face: 30,000 Fingerprint: 500,000 <sup>(7)</sup> Card: 500,000 PIN: 500,000	Card: 500,000 PIN: 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. 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	<b>BER2-OD:</b> 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire EV1/EV2/EV3 <sup>(8)</sup> , FeliCa	<b>XP2-MDB, GDB, GKDB:</b> 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3 <sup>(8)</sup> , FeliCa
	Mobile	<b>BER2-OD:</b> NFC	<b>XP2-MDB, GDB, GKDB:</b> 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	<b>XP2-MDB:</b> 48 x 144.7 x 27 <b>XP2-GDB, GKDB:</b> 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	-
Hardware	AUX Input	2 ch (AC POWER FAIL)	2 ch Dry Contact Input	3 ch (AC POWER FAIL, Tamper, Fire)	-
	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	CE, UKCA, KC, FCC, RCM, IC, RoHS, REACH, WEEE, EAC	CE, UKCA, KC, FCC, RoHS, REACH, WEEE, ETL Listed to UL 294	

(7) If a device with a fingerprint sensor is connected as a slave, the slave device can be used for fingerprint authentication. (8) DESFire EV2/EV3 cards are supported by having backward compatibility of DESFire EV1 cards. CSN and smart card functions are compatible with Suprema devices.



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