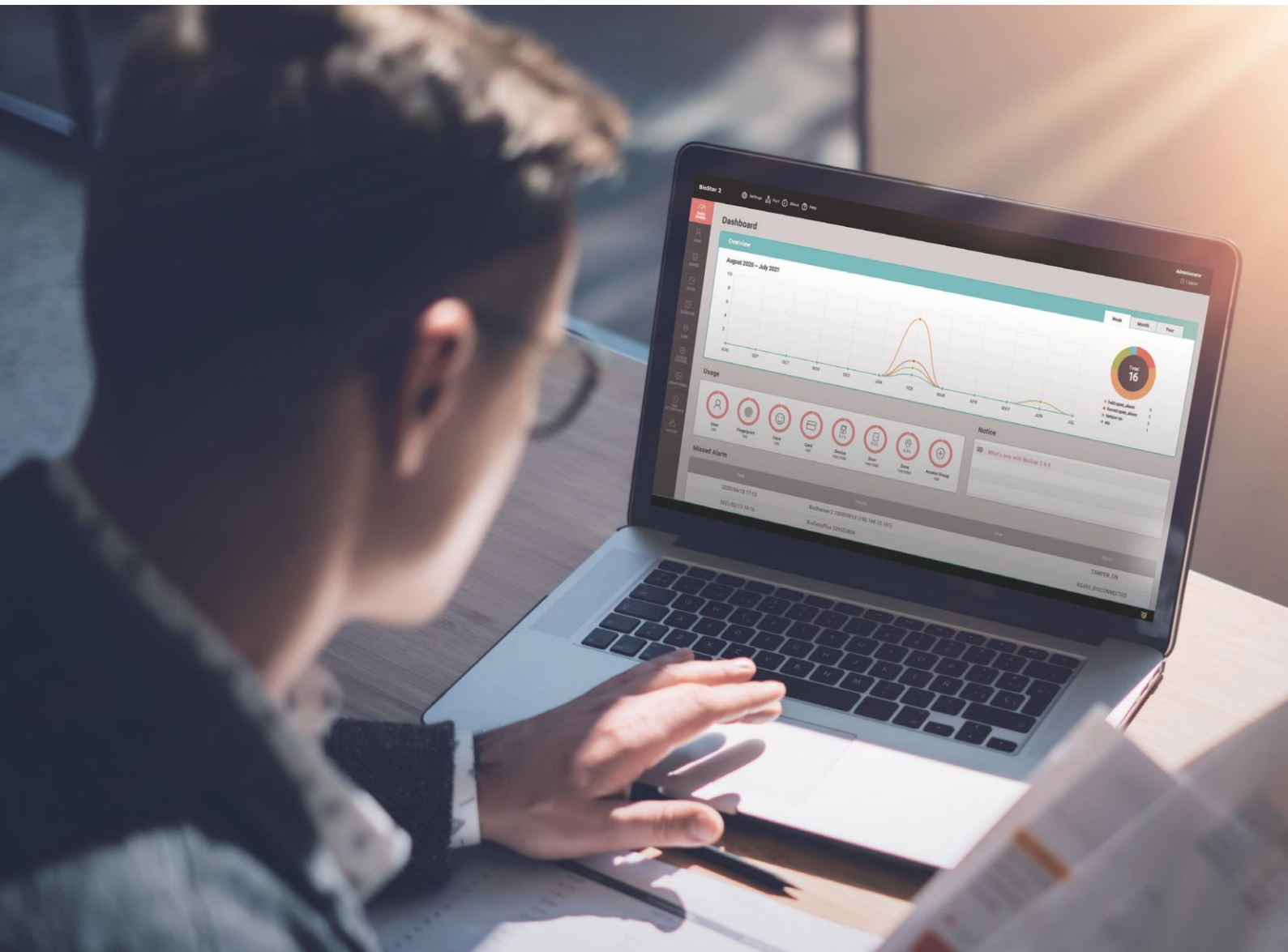# BioStar 2

Web-based Open Integrated Security Platform

BioStar 2 Platform

BioStar 2 is a web-based, open, and integrated security platform that provides comprehensive functionality for access control, time & attendance, visitor management, and video logs. It encrypts every personal data available and supports both SDKs and web APIs to integrate BioStar 2 with 3rd party software. In addition, users can control the BioStar 2 platform remotely with the mobile app for BioStar 2 and manage Suprema Mobile Access, a solution that stores credentials in smartphones.
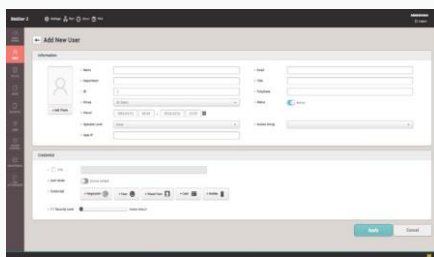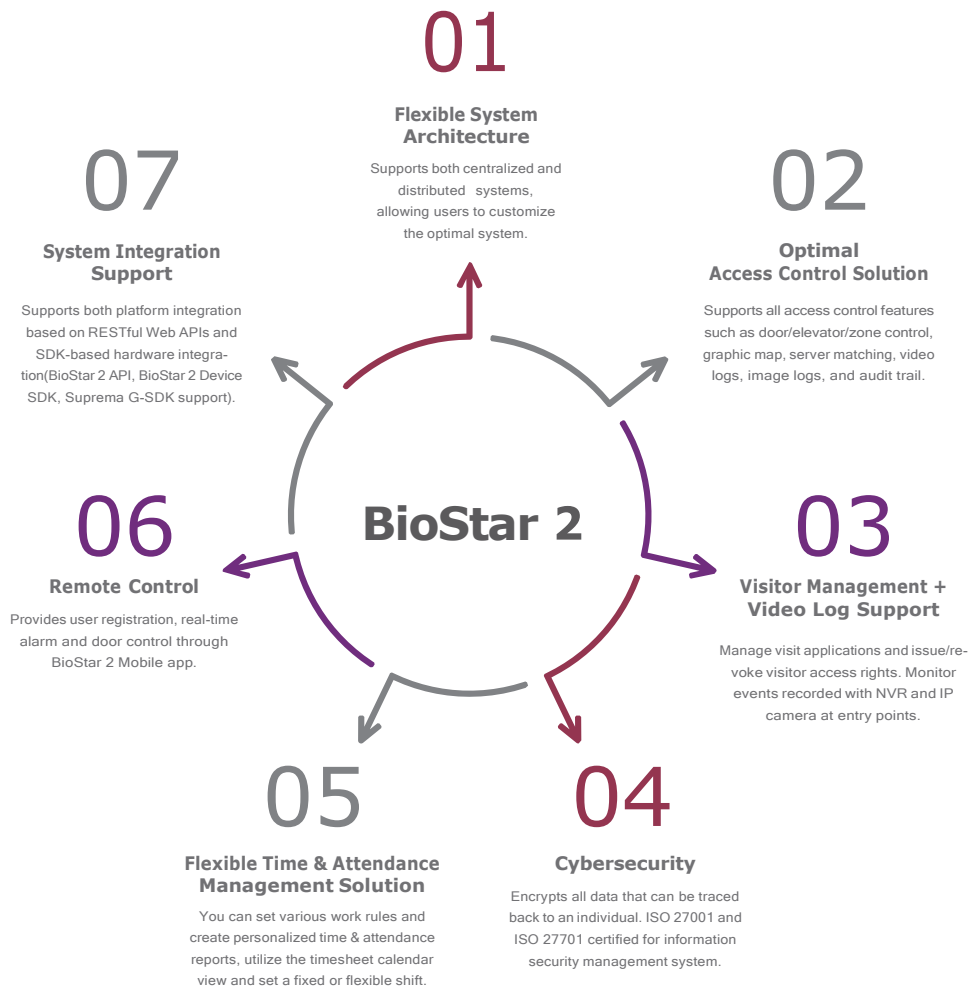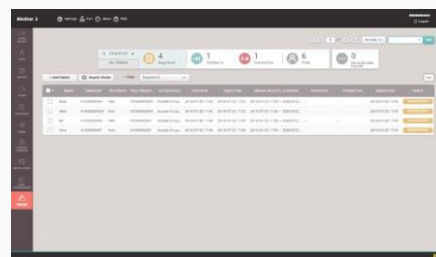
Biometrics-Based

Low Maintenance Cost

Mobile App Support

Remote Control Support

System Integration Tool Support

01
Flexible System Architecture

Supports both centralized and distributed systems, allowing users to customize the optimal system.

02
Optimal Access Control Solution

Supports all access control features such as door/elevator/zone control, graphic map, server matching, video logs, image logs, and audit trail.

03
Visitor Management + Video Log Support

Manage visit applications and issue/revoke visitor access rights. Monitor events recorded with NVR and IP camera at entry points.

04
Cybersecurity

Encrypts all data that can be traced back to an individual. ISO 27001 and ISO 27701 certified for information security management system.

05
Flexible Time & Attendance Management Solution

You can set various work rules and create personalized time & attendance reports, utilize the timesheet calendar view and set a fixed or flexible shift.

06
Remote Control

Provides user registration, real-time alarm and door control through BioStar 2 Mobile app.

07
System Integration Support

Supports both platform integration based on RESTful Web APIs and SDK-based hardware integration(BioStar 2 API, BioStar 2 Device SDK, Suprema G-SDK support).
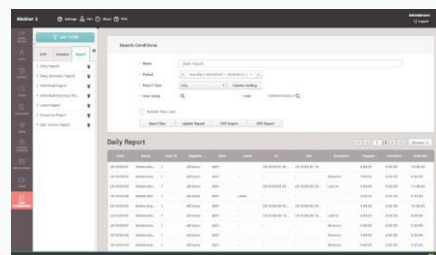
BioStar 2

Subdivided user information registration

Visitor Management Portal

Enhanced monitoring capabilities

Multi-functional time & attendance management reports

suprema

BioStar 2 Mobile

BioStar 2 Mobile enables you to freely control BioStar 2 anywhere, anytime on your smart device. Developed based on BioStar 2's web APIs, BioStar 2 Mobile provides services which cater to the mobile era, including user information registration, BioMini-based fingerprint registration, door control, real-time door and zone status notification, and access control event monitoring.

Remote User Registration

Remote Door Control

Real-time Door and Zone Status Notification

Access Control Event Monitoring

Suprema Mobile Access

With Suprema Mobile Access, you can use your smartphone as an access card to access doors, facilities, and more. This solution for access control significantly improves user convenience and supports 3rd party systems in an easier way. By linking BioStar 2 and Suprema Airfob Portal, you can issue mobile access cards to users in BioStar 2. And users who are registered with BioStar 2 can be issued with mobile access cards through a link received by email without signing up for a portal or registering mobile access cards separately.

Secure Communication

Contactless Mobile Solution

Remote Issuance

3rd-party Integration

Low Installation and Maintenance Costs

With Suprema's exclusive security solutions, entire process is protected by ISO 27001 certified system architecture. Users are less likely to handle over their smartphones, so it prevents unauthorized person from entering your property.

Suprema Mobile Access enables smartphones to communicate with card readers via BLE and NFC.

BLE Bluetooth Low Energy
- Communicates via BLE in Android
- Protecting data communications using the AES encryption algorithm
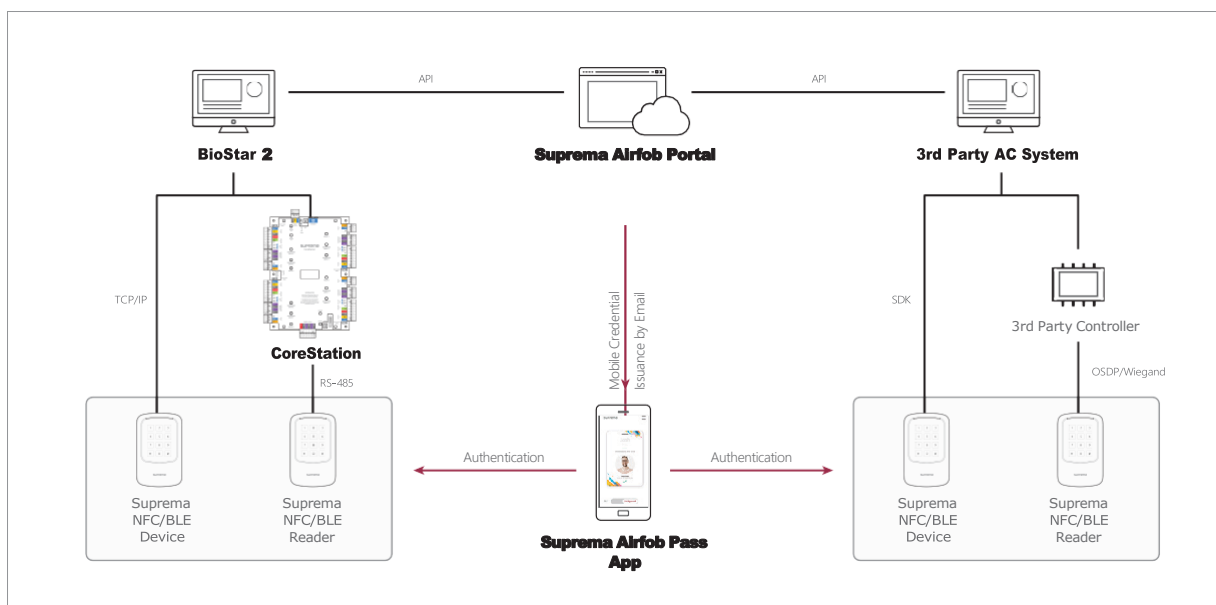
NFC Near Field Communication
- Communicates via NFC's HCE in Android
  * Note that HCE is not available from all Android smartphones.
    It is recommended to check the specification of smartphones,
    but it is supported mostly latest models.
- Protecting data communications using the AES encryption algorithm

BLE Bluetooth Low Energy
- Communicates via BLE in iOS
- Protecting data communications using the AES encryption algorithm

BioStar 2 — API — Suprema Airfob Portal — API — 3rd Party AC System

TCP/IP

CoreStation

RS-485

Mobile Credential Issuance by Email

SDK

3rd Party Controller

OSDP/Wiegand

Authentication ← Suprema Airfob Pass App → Authentication

Suprema NFC/BLE Device | Suprema NFC/BLE Reader | Suprema NFC/BLE Device | Suprema NFC/BLE Reader

Distributed System Ⅰ Access Control and Time & Attendance

In distributed systems, the IP terminal and readers perform the roles of controller and reader simultaneously. This design simplifies functions such as user management, access control management, and biometrics by using a single terminal. Suprema's IP terminals and readers improve system reliability with user friendly system configuration and distributed management. It also provides the benefits of simple wiring and low installation/ maintenance costs.

Elevator Control

Grants floor access rights to users and controls the floor buttons in the elevators.

Easy System Connectivity & Easy Maintenance

Distributed systems provide easy system connectivity and simple maintenance.

Access Control and Time & Attendance Management

Provides a wide range of access control and time & attendance management features and also supports mobile cards.

Outstanding Performance & Contactless Authentication

Provides superior performance based on the world's best/industry leading biometric algorithms and hardware as well as the benefits of contactless authentication via FaceStation 2.

Supported Products

Fusion Multimodal Terminal **FaceStation F2**	IP Face Recognition Terminal **FaceStation 2**	Compact IP Face Recognition Terminal **FaceLite**	IP Fingerprint Terminal **BioStation A2**	Outdoor IP Fingerprint Terminal **BioStation 2**
IP Fingerprint Terminal **BioStation L2**	Outdoor IP Fingerprint Terminal **BioLite N2**	Outdoor IP Fingerprint Device **BioEntry W2**	Compact IP Fingerprint Device **BioEntry P2**	
Versatile Intelligent Terminal **X-Station 2**	Outdoor Compact RFID Device **XPass 2**	IP RFID Device **XPass S2**	Compact Single Door I/O Module **Secure Module**	Multiple Output Extension Module **Output Module**

Centralized System   Ⅰ Access Control and Time & Attendance

With Suprema's CoreStation and readers, you can build a centralized system, which is a system based on access control units (ACU). Suprema's centralized system not only provides the benefits of biometrics, but it also provides enhanced security and excellent system scalability. In addition, the centralized system also enables you to upgrade your existing systems at lower installation cost. Integrated with BioStar 2, this system safely stores all information about each user including the user's name, ID, PIN, access rights and fingerprint data by storing it on a single device. Suprema's intelligent biometric controller, CoreStation, is capable of performing fingerprint matching as well as RFID cards. It provides differentiated performance and features based on a 4-channel module that boasts superior hardware performance and scalability.

Strength in numbers

- Performs 400,000 times of fingerprint matching within 1 second
- Stores information about up to 500,000 users and RFID cards
- Stores up to 5,000,000 text logs
- Controls up to 132 Wiegand devices (DM-20 connection required)
- Controls up to 64 RS-485 devices
- Processes fingerprint authentication on up to 8 devices simultaneously within 1 second

CoreStation Specs	
CPU	1.4 GHz Octa Core
Memory	8 GB Flash + 1 GB RAM
Maximum No. of Users	500,000 (1:1) and 100,000 (1:N)
Maximum No. of Templates	1,000,000 (1:1) and 200,000 (1: N)*
Maximum No. of Text Logs	5,000,000 (text)
Serial Communication Protocol	OSDP V2
Ethernet	10/100 Mbps and Auto MDI/MDI-X
RS-485	5ch
Wiegand	4ch Input
Relay	4 Relays
TTL Input	8ch (Supervised input selectable)
TTL Output	8ch
AUX Input	2ch (AC power fail and tamper)

*Two templates per finger

Intelligent Biometric Controller	Compact Fingerprint Reader	Outdoor Compact RFID Reader	Multiple Output Extension Module	Secure Multi Door I/O Module	Enclosure for CoreStation
CoreStation	BioEntry R2	XPass D2	Output Module	Door Module	Enclosure

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Outstanding Scalability

You can manage a compartmentalized building such as a research centers or hotel with a single CoreStation.

Elevator Control

Grants floor access rights to users and controls the floor buttons in the elevators.

High-speed Authentication

Simultaneous authentication on as many as 8 devices can be completed within 1 second, and up to 400,000 fingerprint matching can be performed per second.

Access Control and Time & Attendance Management

Provides a wide range of access control and time & attendance management features and also supports mobile cards.

BioStar 2 License Policy

Access Control License

	Item	Starter (free of charge)	Basic	Standard	Advanced	Professional	Enterprise
Access Control	Maximum No. of Doors	5	20	50	100	300	1,000
	Maximum No. of Connected Devices	1,000	1,000	1,000	1,000	1,000	1,000
	Maximum No. of Access Levels [1]	2,048	2,048	2,048	2,048	2,048	2,048
	Maximum No. of Access Groups [1]	2,048	2,048	2,048	2,048	2,048	2,048
	Maximum No. of Access Groups per User	16	16	16	16	16	16
	Maximum No of Access Levels per Access Group	128	128	128	128	128	128
	Access Group Auto Sync	●	●	●	●	●	●
Users	Maximum No. of Cards per User	8	8	8	8	8	8
	Maximum No. of Fingerprints per User	10	10	10	10	10	10
	User Auto Sync	●	●	●	●	●	●
	Access-on-Card	●	●	●	●	●	●
	Security Credential Cards	●	●	●	●	●	●
	iCLASS Seos Card	●	●	●	●	●	●
	Long-term Idle Users Management	●	●	●	●	●	●
	Custom Field	●	●	●	●	●	●
Elevator Control	Elevators	-	-	-	●	●	●
	Maximum No. of Floors per Elevator	-	-	-	192	192	192
	Maximum No. of Floor Levels	-	-	-	2,048	2,048	2,048
Zones	Anti-Passback	▲(Door)	▲(Door)	●	●	●	●
	Fire Alarm	-	-	●	●	●	●
	Schedule Lock/Unlock	-	-	●	●	●	●
	Intrusion Alarm Zone	-	-	●	●	●	●
	Interlock Zone	-	-	●	●	●	●
	Muster Zone	-	-	●	●	●	●
	Occupancy Limit Zone	-	-	●	●	●	●
Advanced Features	Dashboard	●	●	●	●	●	●
	Cloud	-	-	●	●	●	●
	New Local API	●	●	●	●	●	●
	Server Matching	-	-	-	●	●	●
	Audit Trail	●	●	●	●	●	●
	Daylight Saving Time	●	●	●	●	●	●
	Dual Authentication	●	●	●	●	●	●
	Active Directory	-	-	-	●	●	●
Monitoring	Graphic Map	-	-	-	●	●	●

[1] Available from BioStar 2.8.9. (Requires latest firmware)   ● : Yes or supported.

Time & Attendance Management License

Items	Starter (free of charge)	Standard	Advanced	Professional
No. of Users	100	500	1,000	unlimited

Video Log License

Items	Starter (free of charge)	Video License
Video Log	-	●

Visitor Management License

Items	Starter (free of charge)	Visitor License
Visitor Management	-	●