

WEBINAR Suprema Mobile Access

Speaker



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1. What is Suprema Mobile Access?

- General Information
- BLE vs NFC
- Supported Devices

2. Overall Process

- HW Installation
- How to configure with AirFob Portal (Cloud Portal)
- AirFob Patch (Moca Systems)
- Dynamic & Regular License

3. Why Mobile Access (Pre-Sales)

- Cost
- Security
- Covid19
- Access Control Management

4. Potential Customer Cases

- Partner Portal
- Fitness Customer Cases
- Integration



Who we are

 Suprema is a leading global provider of biometrics and security.

By combining world renowned biometric algorithms with superior engineering, Suprema has introduced several technology initiatives and innovations to the security industry over the last couple of decades.

South Korea

Headquarter

Number of Employees

2000

270

Year Established

Top 50

World's TOP 50 Largest Security Company *A&S Security 50 Ranking (2010-2019)

US\$85 million

Annual Turnover (2019)

13%

Average Growth Rate (CAGR 2009-2019)

US\$250 million +

Market Cap (2019) - KOSDAQ

120 +

Countries active through Authorized Partners

1st

EMEA Market Share of Biometric Access Contro

suprema

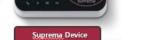




Access Control & Time Attendance software with powerful functionalities and features















Product

The best in biometrics and security

Suprema provides comprehensive security solutions for security.

Whatever you're looking for, you'll find a Suprema's products to suit your needs. From robust outdoor Biometric Readers to discreet

products for sensitive environments, we offer it all.









Suprema's Most Popular Products

- Brand New Generation 2 Devices
- Faster, Smarter and Redesigned
- Facial Biometrics + Fingerprint Biometrics















BioStation 2

BEW 2

FaceStation 2

FaceLite

BioEntry Plus 2

BioLite N2

BioStar 2



Major New Updated Items

New Features of BioStar 2 2.7 / 2.7.14 v

Released in April 2020



1. WHAT IS THE SUPREMA MOBILE?

WHAT IS THE SUPREMA MOBILE?



Suprema, has announced the release of it's new mobile contactless solution, 'Suprema Mobile Access', a complete platform for managing, issuing and tracking Access credentials using smartphones. In recent years, access control systems have evolved beyond physical access cards and access control solutions using a mobile phone as a credential was introduced as an alternative to traditional card-based authentication.

BioStar2 Mobile Card vs Suprema Mobile Access

BioStar 2 Mobile Card is a feature of BioStar2 Mobile App.

- We have decided to discontinue the BioStar 2 Mobile Card at the End of September 2020.
- Please Understand the BioStar 2 Mobile App will still supported:
 - 1. User Management.
 - 2. Log Management
 - 3. Door Management

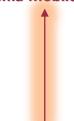








Suprema Mobile Access



The New Suprema Mobile Access is expected to outperform on every aspect,

https://support.supremainc.com/en/support/solutions/articles/24000050338--biostar-2-what-is-the-difference-between-biostar2-mobile-card-and-suprema-mobile-credential

https://support.supremainc.com/en/support/solutions/articles/24000050105--biostar-2-difference-between-biostar-2-mobile-card-and-suprema-mobile-credential





GENERAL INFORMATION

GENERAL INFORMATION

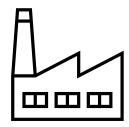
How Card ID of Suprema Mobile Access Generated Is?

General Cards

- EM Card, Mifare Card, DESFire Card HID Prox Card, HID iClass Card



Generated Number by manufactures



Airfob Pass





Generated Number by BioStar 2 administrator (synchronized to Airfob Portal)



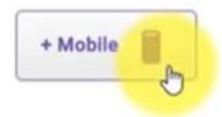
Supported Card ID Type

- CSN (Private ID)

Upcoming features

- Wiegand
- ASCII (TEXT Value)







System Configuration (FAQ)

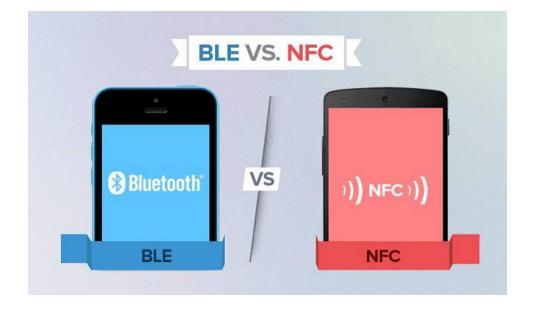
Q1) Suprema Mobile Access can be applied with Centralized Solution or only distributed solution?

You can use it to Centralized System or, you can use it to Distributed System also.

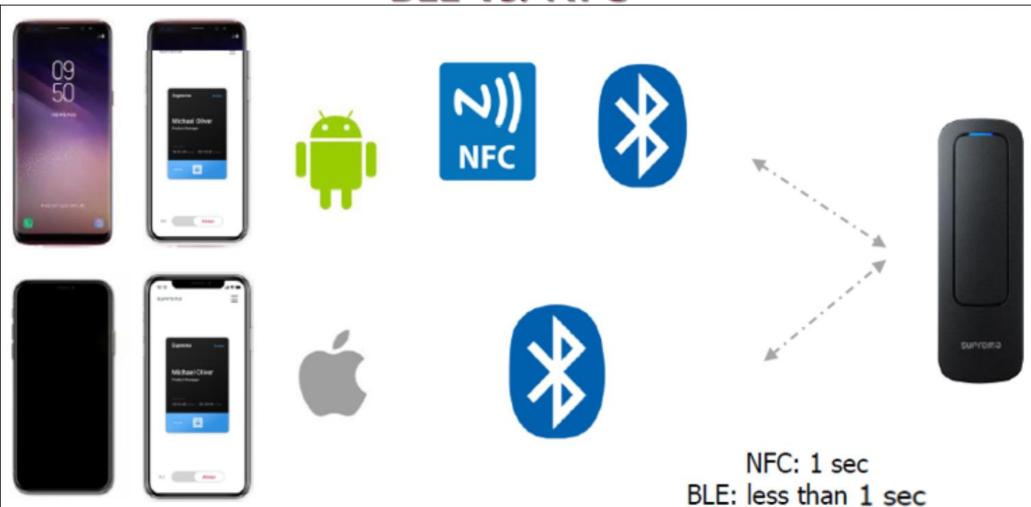
Q2) If I install two readers to In and Out for a door, there will be an issue to open the door?

BLE strength is measured very differently. So, when you tag your reader from outside, it does not work to the inside reader.

BLE vs. NFC



BLE vs. NFC



On the device side, patented technology will be included to significantly improve the performance of BLE communication to make credential read as quick and consistent as a regular card across Android and iOS devices.



NFC is Fast & Reliable But, Many NFC HCE Unsupported Devices

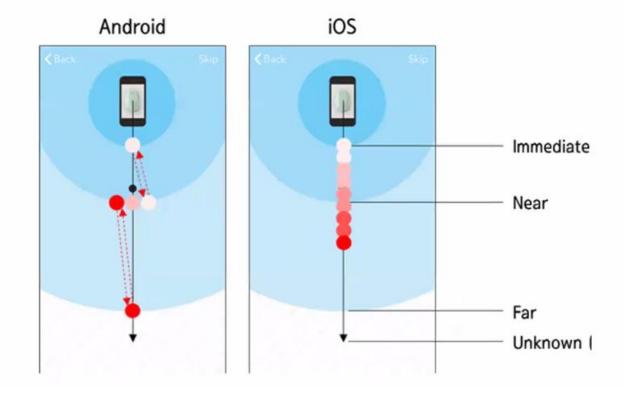
Manufacturer	Model Name	NFC	BLE
Samsung	Galaxy S5 LTE-A	X	0
Samsung	Galaxy Alpha	X	0
LG	LG V30	X	0
LG	LG G6	X	0
LG	LG G5	X	0
LG	LG G4	X	0
LG	LG Wine Smart Jazz	X	0
LG	Google Nexus 5	X	0
LG	Google Nexus 5x	X	0
HTC	HTC One M8	X	0
HUAWEI	Huawei P20 Pro	X	0
HUAWEI	HUAWEI P10 Plus	X	0
HUAWEI	HUAWEI Honor 6X	X	0
ZTE	ZTE BLADE V8	X	0
Xiaomi	Xiaomi Mi A1	X	0
Xiaomi	Hongmi Note3 Pro	X	0
SONY	Xperia XZ Premium	X	0
SONY	Xperia Z2	X	0
Motorola	Moto E4	X	0





BLE vs. NFC

BLE is Optimum & Universal Method But, it's much more difficult, because BLE signal strength is irregular in Android





BLE vs. NFC

iPhone & Android DEMO (BLE & NFC) THE EASIEST WAY TO START MOBILE ACCESS









iPhone (BLE)

Android (BLE)

Android (NFC)



SUPPORTED DEVICES

SUPPORTED DEVICES

The only device that supports the Suprema Mobile Credential is the XPass 2. The support plan for other Generation 2 Devices will be done step by step and here we share the plan by device type and target date.

		BioStar 2 Mobile Card	Suprema Mobile			
	Name	BioStar 2 Mobile	Airfob Pass			
Application	lmage		AF			
Card Type		Smart Card (Secure Credential / Access on Card)	CSN Card			
Issue from		BioStar 2 Server(PC) BioStar 2 Mobile Application	BioStar 2 Server(PC) Airfob Portal			
os	Android	Android 5.0 (Lollipop) or above	Android 6.0 (Marshmallow) or above			
	iOS	iOS 9.0 or above	iOS 11.0 or above			
Protocol	Android	BLE / NFC	BLE / NFC			
	iOS	BLE	BLE			
BioStar 2 Version		BioStar	BioStar 2.7.12 and above			
Supported Device Lists		Xpass S2 Xpass D2 BioStation 2 BioStation A2 BioStation L2 BioEntry W2 FaceStation 2 FaceLite BioLite N2 *BLE is supported ONLY the device model has 'B' at the end of the name.	XPass 2 (<i>January</i> , 2020)			

Product Name	Method	Date
XPass 2	BLE/NFC	Available
XPass D2	BLE/NFC	May 2020
BioLite N2	BLE/NFC	May 2020
BioEntry W2	BLE/NFC	
FaceStation F2	BLE/NFC	
FaceStation 2	BLE/NFC	
FaceLite	BLE/NFC	
BioStation 2	NFC	2Q 2020
BioStation A2	NFC	
BioStation L2	NFC	
BioEntry P2	NFC	
BioEntry R2	NFC	



APass 2

SUPPORTED DEVICES

Support for Connecting Upcoming Devices – XPass D2 (Rev 2)

✓ Upgraded XPass D2 hardware to use Suprema Mobile Access(Credential).



- ✓ Supporting firmware of XPass D2 (Rev 2): v1.4.0
- ✓ To connect XPass D2 (Rev 2) as RS-485 Slave, need to check Master device's firmware compatibility.
- The compatible FW of RS485 master device now is XPass 2 v1.2.0 ONLY.
 (April 2020)

* Notice

Other compatible Master devices' firmware will be released in 2Q 2020

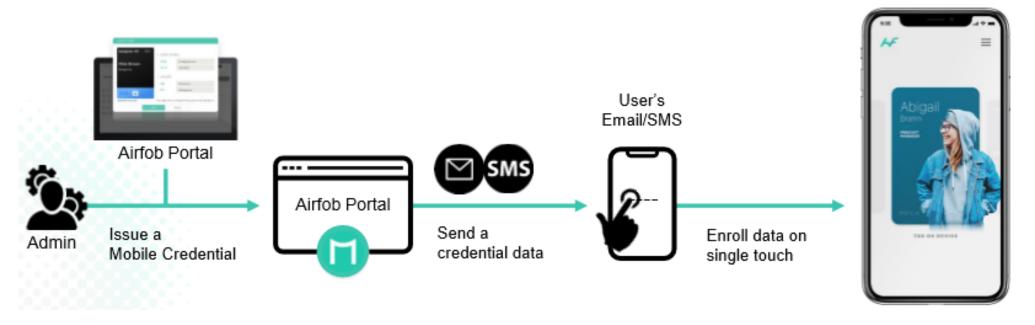
https://support.supremainc.com/en/support/solutions/articles/24000054221--biostar-2-upgraded-hardware-introduction-xpass-d2-rev-2-



BREAK TIME



2. OVERALL PROCESS



Suprema

Mobile Access Requirements

Minimum Requirements

- 1. Requirements of Mobile devices
- *Android OS:
 - ★ Android 6.0 (Marshmallow) or later
 - ★ NFC or BLE supported
- Although both NFC and BLE on Android devices are supported,

NFC only works on devices that support HCE(Host Card Emulation).

Performance of BLE communication may vary depending on mobile devices.

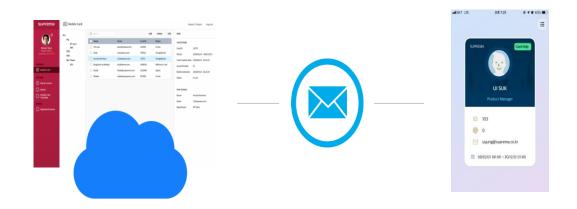
- *iPhone iOS:
 - ★ Version 11.0 or later
 - ★ BLE supported
- 2. Compatible devices and firmware
- Suprema Mobile Credencial only supports XPass 2 with firmware listed below
 - ★ XP2-MDPB Firmware 1.1.0 or later
 - ★ XP2-GDPB Firmware 1.1.0 or later
 - ★ XP2-GKDPB Firmware 1.1.0 or later



[SUPREMA MOBILE ACCESS] Register a Device via APP



Simply create mobile card Invite through email



2. OVERALL PROCESS

Overall Process

Suprema Mobile Credentia app transmits a designated card ID (managed through the portal s ite) to the registered devices.



How to Use – in BioStar 2.7.12

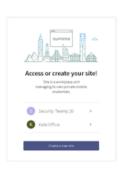
Overall Procedure

1. Join Airfob Portal



3. Configure Airfob Portal information to BioStar 2 Settings

4. Add the device to BioStar 2













5.1 Add a user with an email and card number

5.2 Confirm the email on a mobile 5.3 Activate Mobile Access

6. Authenticate the Mobile Access on the device











 $\frac{https://support.supremainc.com/en/support/solutions/articles/24000050101--biostar-2-sample-steps-of-suprema-mobile-credential-for-running-biostar-2-with-\\ xpass-2-$

 $\underline{\text{https://support.supremainc.com/en/support/solutions/articles/24000050048--biostar-2-how-to-use-suprema-mobile-credential-biostar-2-how-to-use-suprema-mobile-biostar-2-how-to-use-suprema-mobile-biostar-2-how-to-use-suprema-mobile-biostar-2-how-to-use-supr$

How to Use - from BioStar 2.7.14



HW INSTALLATION

HW INSTALLATION

System Diagram

1. When XPass 2 is used as a reader.



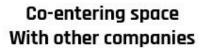


HOW TO CONFIGURE WITH AF PORTAL

The biggest obstacle in mobile credential adoption is

All the existing INFRA







Unfinished Rental Contract Period



High Wiring & Construction Cost



Airfob Patch is

World's First Patch Type
BLE to RF Converter

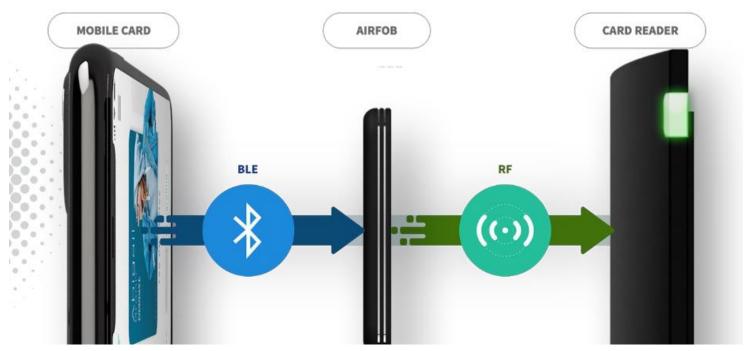


*US Patent Registration Fixed

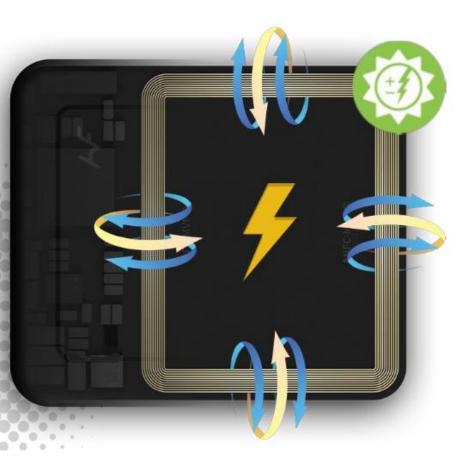
Solves the biggest challenge of starting mobile access

Translate Mobile Access to RF Card Signal

Airfob Patch is an add-on converter which translates BLE communication to RF card signal.

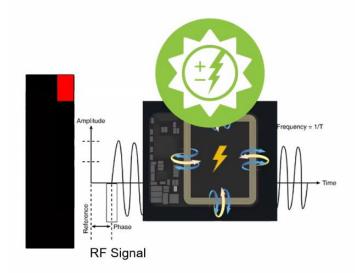


Energy harvesting by itself No Need of Battery Replacement



Airfob Patch is energized by itself by using the existing RF field signals coming out from the RF reader. It changes the RF fields to be its power-source for its operation.

Energy Harvesting by RF Field Signal NO Battery Replacement Needed



THE EASIEST WAY TO START MOBILE ACCESS



FEATURES & SPECIFICATION

AIRFOB PATCH SPEC



Size

Features
I CHEMICO

Power with no battery

45 Energy harvesting

((o)) Wireless communication

Translator of BLE to RF signal

🧩 No additional construction

+ Add on device

Specifications

Energy supply 13.56MHz RF energy harvesting

Wireless communication compatibility BLE

Card compatibility Mifare CSN / Smart card (NFC APDU LEVEL)

30 x 30 x 5 (W, H, D, mm)

LED Power status & card emulation

IP rating IP65 *it can be changed at the initial model

Moca Systems AirFob Product Line-Up

Airfob is for its own service, And also for 3rd party systems







Airfob Pass (Mobile App)



Airfob In-App SDK



Airfob Portal (Cloud Portal)

AIRFOB PORTAL & PASS APP / PARTER PORTAL are already Available and open for everyone.

Airfob.com

Free 50 credits for Regular Card
After one-month credit deduction for Dynamic Card



*Suprema devices support Airfob Portal & Pass App



AIRFOB PATCH LAUNCHING PLAN

May 1st Pre-launching Event



Giving Out
Free Sample Units
(Selected Partners Only)
For Market Field Test

June 2nd Pre-launching Event



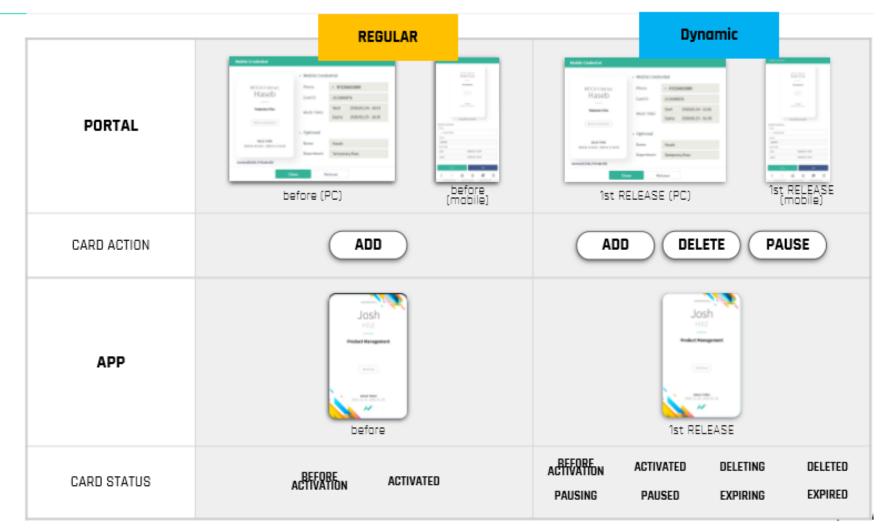
Discount Sales
For Early Testers
(Limited Numbers Only)
For Market Field Test /
Sales Preparation

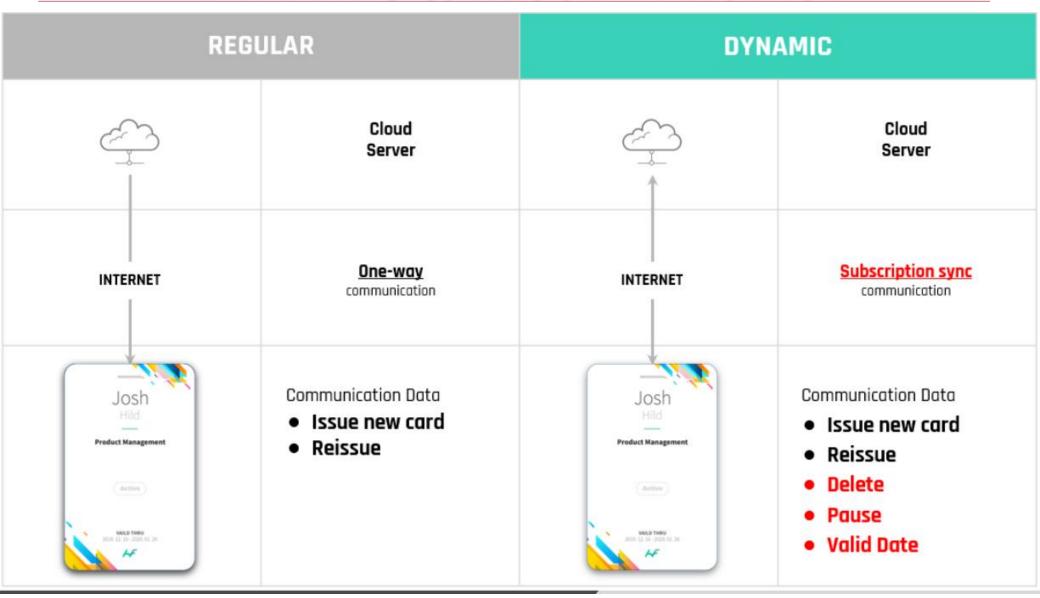
July Official Sales Start



MOCA Starts to Sell Directly to Customers

Dynamic & Regular Major Difference









1 Credit Per 1 Card









Target

Fitness / Membership / Shared Place

Feature

- Unlimited # of mobile card issuance
- Remote Control & Revoke

Communication Data

- Issue new card
- Reissue
- Delete
- Pause
- Valid Date

/*Constant Internet Connection is required for use. (5 mins of disconnecting grace time.)



Target

Fixed Workers

Feature

- · Unlimited time for one mobile card use
- One-time download

Communication Data

- Issue new card
- Reissue

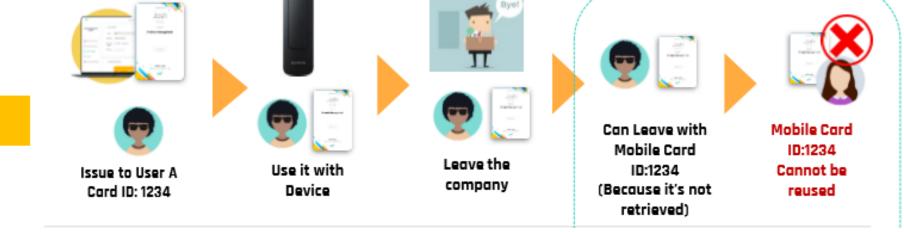
/*Card data can be remained after its download unless users delete the app manually.

Maintenance credit is available for buffer.



REGULAR

Dynamic & Regular Major Difference



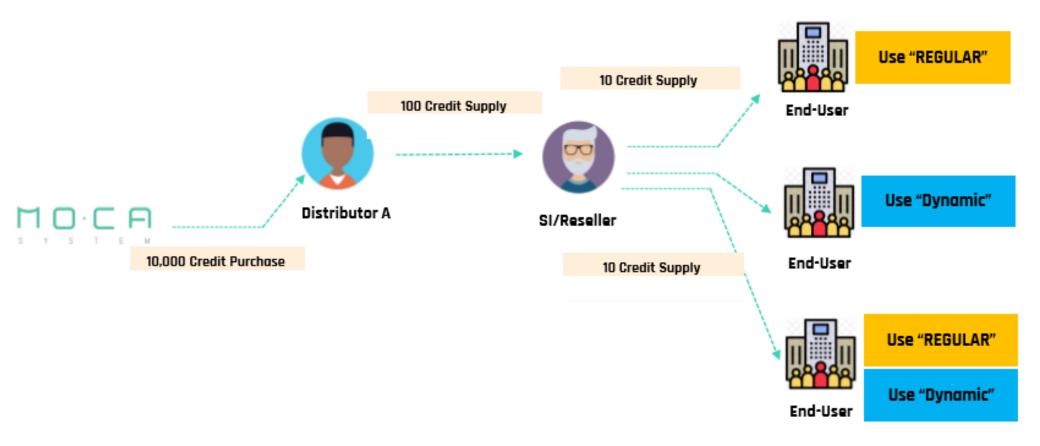
REGULAR

DYNAMIC



DYNAMIC or REGULAR

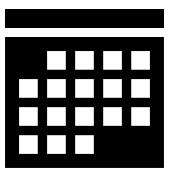
Sell the same credits, and users choose the license mode they want to use



Card Type & License

DYNAMIC

* 1 Credit = 1 Device x 1 Month



X 36 months



X 2 devices (for In/Out)

= 72 Credits!

Credit Price & Margin Simulation

End-User Price for RFID Cards:

(with a cardholder & case)





SI/Reseller Margin

>Almost Fixed Margin

End-User Price for Airfob Pass Mobile Access: \$Flexible





SI/Reseller Margin

> Flexible Margin

(Case Study)
End-User Price for
Airfob Pass Mobile Access:





SI/Reseller Margin

MOCACVI

Custom Card Design Support

- Dynamic Card License is required currently.
- > User can add the field of user information on the card.



















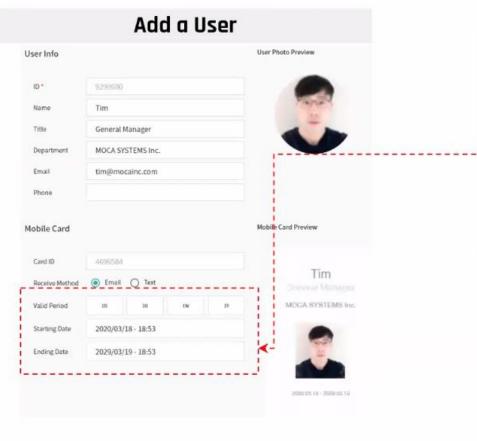


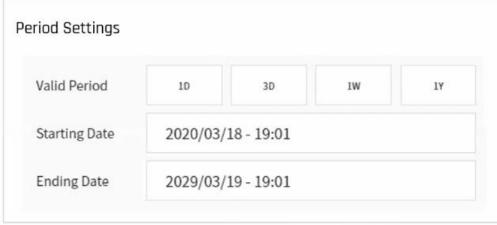




DYNAMIC

Mobile Card Valid Period – Automatically disable mobile card by the ending date & time







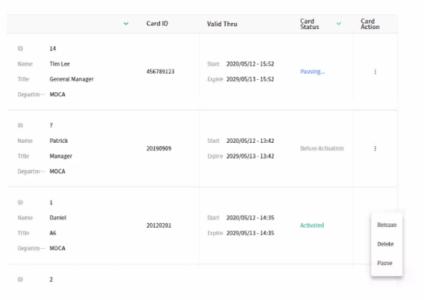


by MOCA SYSTEM

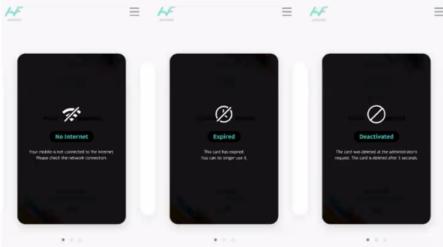


DYNAMIC

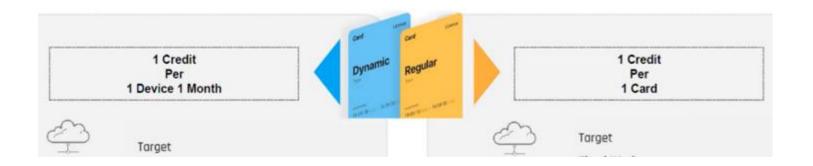
Remote Mobile Card Status Control – Block & Restore the access right with mobile card alone







List The Communication Data For Dynamic Card? (Dynamic & Regular Card)



- Issue New Card
 - Reissue

- Valid Date
- Re-issue Card
- Issue New Card

A

B

- Issue new card
 - Reissue
 - Delete
 - Pause
 - Valid Date

List The Communication Data For Dynamic Card? (Dynamic & Regular Card)



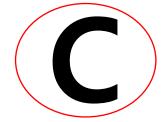
- Issue New Card
 - Reissue

- Valid Date
- Re-issue Card
- Issue New Card

A

B

- Issue new card
 - Reissue
 - Delete
 - Pause
 - Valid Date



Which one of the Devices below supports BLE & Supreme Mobile Access?











BioStation 2

BioEntry W2

FaceStation 2

BioEntry Plus 2

XPass 2

XPass 2



BioStation 2

B

FaceStation 2

Which one of the Devices below supports BLE & Supreme Mobile Access?











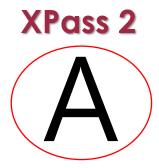
BioStation 2

BioEntry W2

FaceStation 2

BioEntry Plus 2

XPass 2



BioStation 2

B

FaceStation 2

C

BREAK TIME



3. WHY MOBILE ACCESS (Pre-Sales)

COST

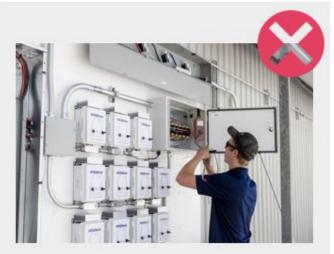
COST

NO Additional Wiring

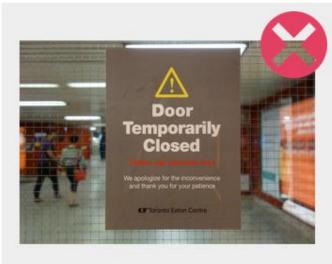
Just attach on the RF antenna



NO Additional HW Installation



NO Additional Settings or SW / FW Upgrade









Highly convenient just like card.

Less cost on card issuing and maintanence.

Secure management when phone is lost.

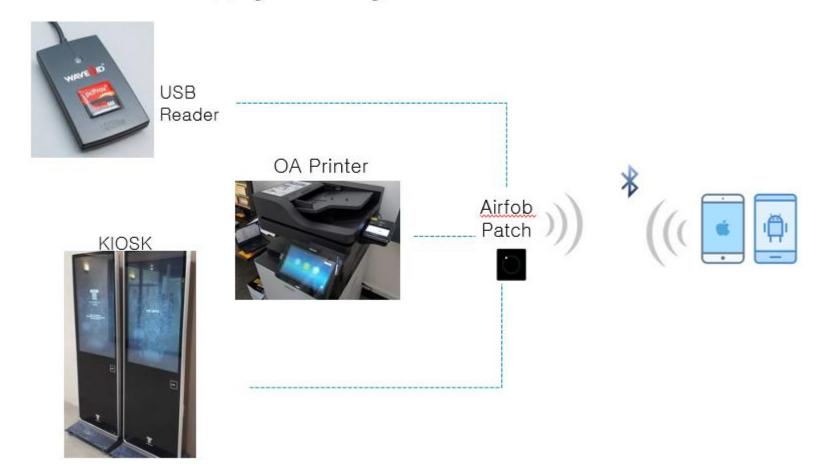
Access workplaces with phones just like tapping with physical RF cards.

Save cost of issuing cards and maintenance in comparison to physical RF cards. Revoke mobile access and restrict access permission when phone is lost.





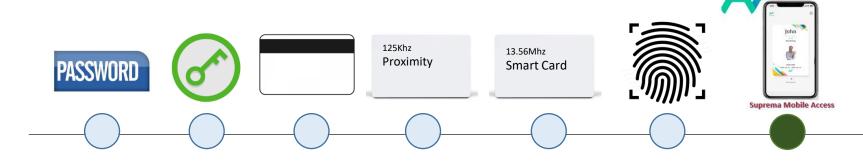
Apply to everywhere RF card is used



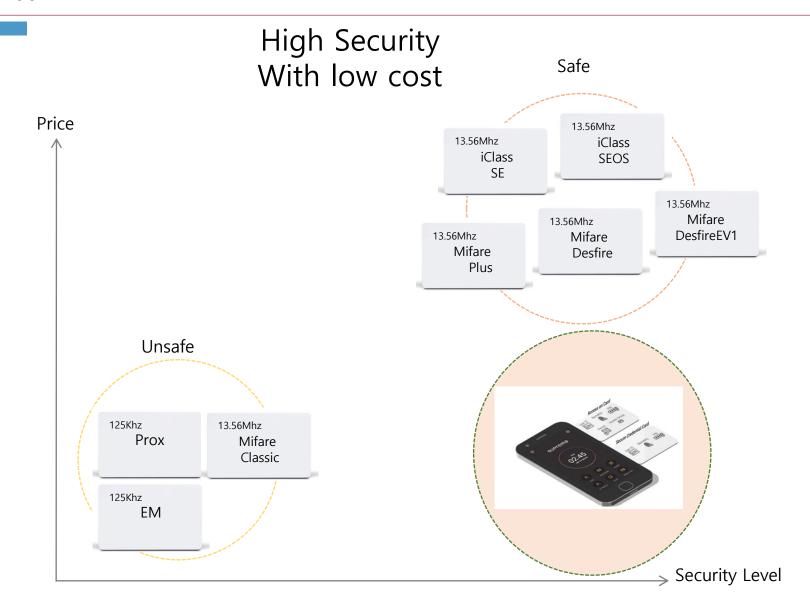
EVOLUTION OF CREDENTIAL

EVOLUTION OF CREDENTIAL



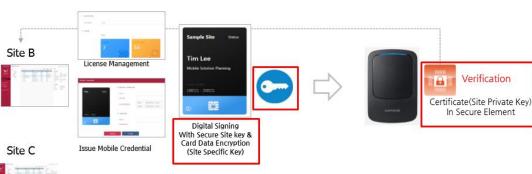


Security & Convenience



- Convenience & more security
- 1) Can use it by tagging your smart phone
- 2) Not need to meet employees to issue the mobile access card
- 3) AES 128 encryption & ISO 27001 certified system/operation

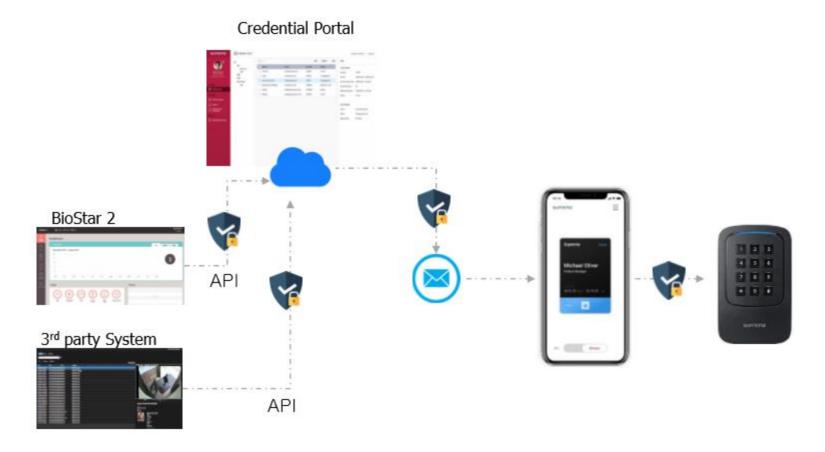






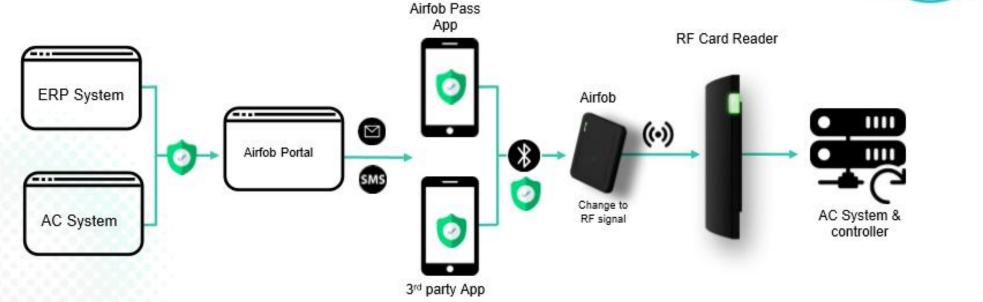


Highest security measures taken at every single point (*ISO27001 certificate will be achieved in Q3 2019)



Airfob provides end-to-end mobile access solution with high security





Security Measures

MOCA's Airfob system applies the most strong security measures to all of its communication sections and data storage parts.

- A. API communication between Airfob Portal and 3rd party Server
- B. Mobile access card ID encryption in data set
- C. Mobile access card data encryption in mobile devices
- D. Preventing mobile card data replay attack
- E. Preventing mobile card data forgery
- Airfob system achieves ISO27001 certification as a proof its security measures across its entire platform and system.
- A. API communication between Airfob Portal and 3rd party Server

REST API communication side is protected by HTTPS only communication measures with a token method. The token has a time limit for one hour as default. Also, Airfob Portal uses AWS's API gateway services for network throttling as a pre-emptive measure to avoid brutal network attacks.



COVID19

COVID19

The Market is now looking for an alternative solution.

Mobile Access is being **EXPEDITED** by Corona Virus because Of the below reasons:

"Access Control Without human contact"



"Need to wear Facial mask all the time"



"Do not want to go back To RF Cards own Risk" T&A Time Theft

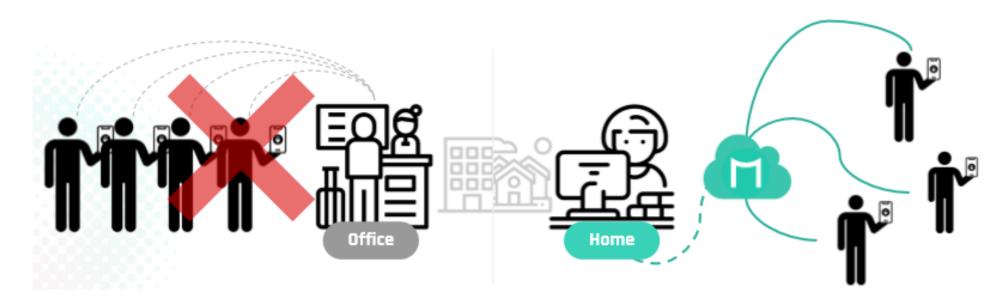


ACCESS CONTROL MANAGEMENT

ACCESS CONTROL MANAGEMENT

<u>Unmanned</u> Access Control Management With Airfob Mobile Access

"Won't need to stay at the place for publishing RF Cards."

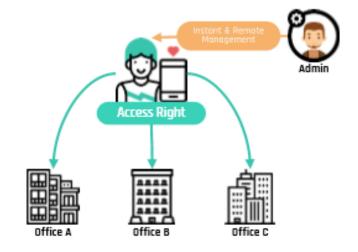


ACCESS CONTROL MANAGEMENT

The most effective access management in an era of workforce mobility

RF Card cannot have multiple access permission to different physical sites with each of their own access control system. Mobile can integrate several access permission on one mobile device with one access control system.





Which AIRFOB License would you recommend for a Sport & Fitness GYM?

What AirFob Portal License would you select for a Sport Fitness Centre?

Answer is Dynamic License





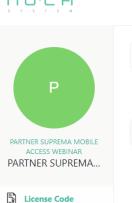


BREAK TIME



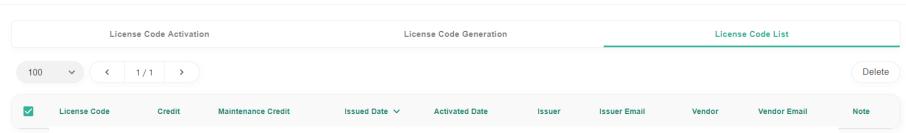
4. POTENTIAL CUSTOMERS CASE

https://partner.mocainc.com



蟲 Admin

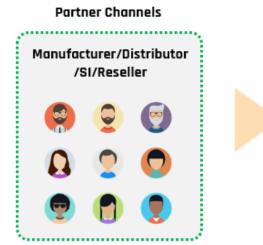
PARTNERS PORTAL



Partners can manage its sales through MOCA Partner portal

https://partner.mocainc.com







Credits 0 / Maintenance Credits 0



Buy More at Low, Sell More at High through Partner Portal

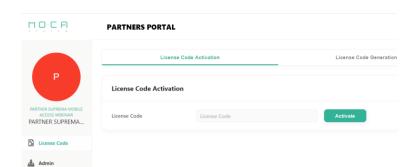
Partner Platform

- Credit Stock Management
- -Self License Code Generation
- -License Code Resell/Purchase

Manufacturer/Disti/SI/Reseller

Manufacturer/Disti/SI/Reseller















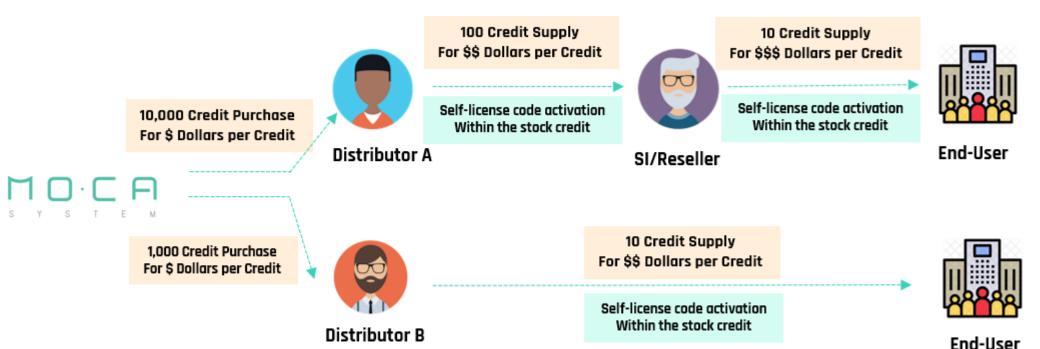








Partners can manage their stocks and sell it their own way





FITNESS CUSTOMERS CASES

FITNESS CUSTOMERS CASES

Fitness Customer Cases

16 Gyms with 60,000 users, 200 employees
With 3 doors (One for all, Two for only employees)

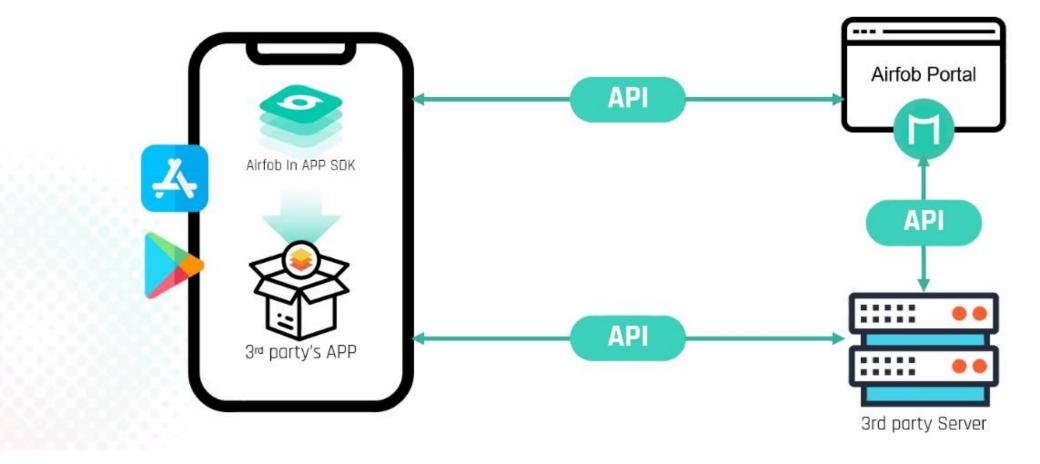


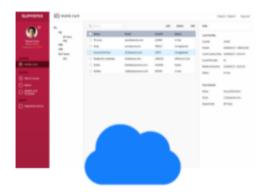
"Mixed use for the best combination"



Open API & In-APP SDK

- 3rd party service integration





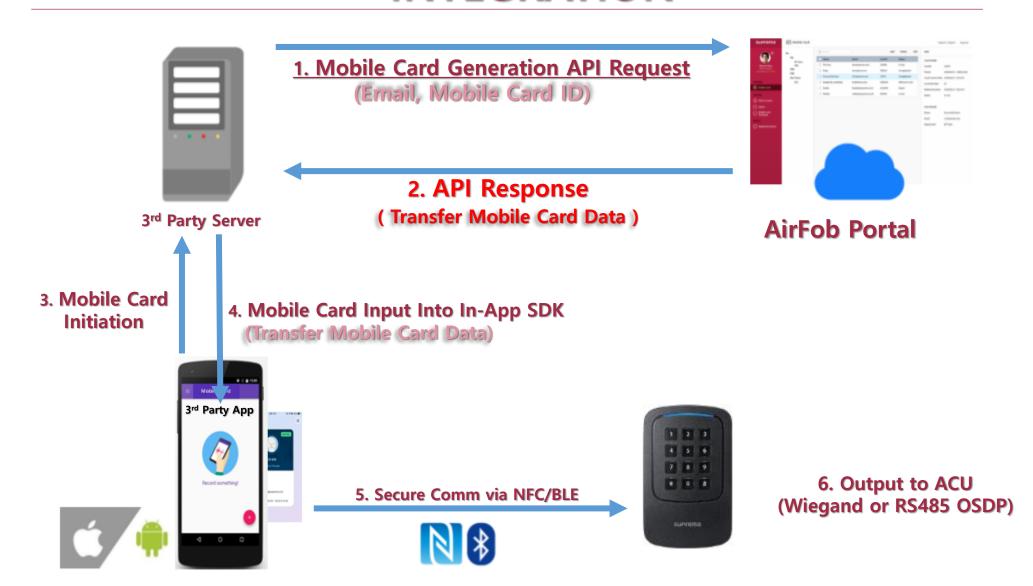
AIRFOB PORTAL





Mobile Card Core In-App Native SDK

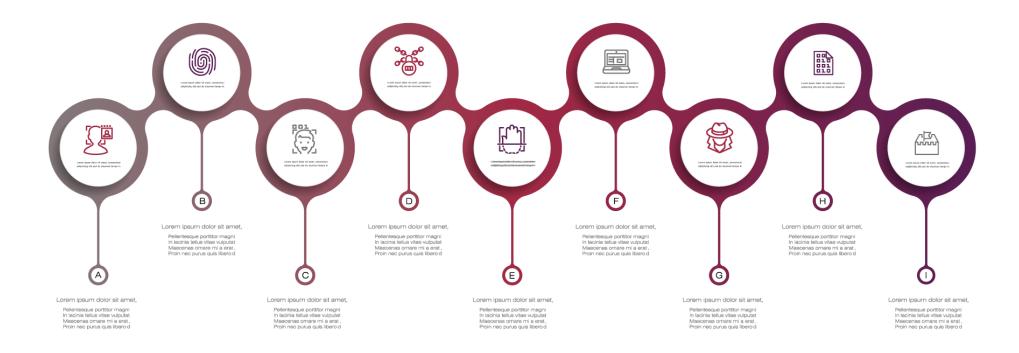




Platform

Biometrics Platform with Easy Use, Installation and Integration

BioStar2, Web-based open integrated security platform.



BioStar 2 FAQs



GENERAL INFORMATION

Card Type & License (FAQ)

Q1) When ordering how will we define dynamic from fixed?

When you order, you can just order a credit. How to define is decided when you apply in Regular type site or dynamic type in your Airfob site at first.

Q2) In line with dynamic. If i have 10 credits, then it is equivalent up to 10 device valid for 1 month?

Yes, you are right. Or 1 devices x 10 months

Q3) In a dynamic type means it is not recommended to use for a regular employee, right? This is design more on membership and events only?

Yes, you are right. It's for membership management.



GENERAL INFORMATION

Q1) Suprema Mobile Access can be applied with Centralized Solution or only distributed solution?

You can use it to Centralized System or, you can use it to Distributed System also.

Q2) If I install two readers to In and Out for a door, there will be an issue to open the door?

BLE strength is measured very differently. So, when you tag your reader from outside, it does not work to the inside reader.

FAQs

Q4

What happens to the existing customer after Airfob Portal changed?

No affect on the existing license and functionalities. Only UI changes.

Q5

What happens to the existing BioStar 2 integration & API Calls?

 Existing customers can use the same settings & API URLs. No changes are needed.

Q6

Can a regular card use the custom card?

Not currently. We will add this feature later.



FAQs

Q7 Would multi card work for regular cards?

Yes, multi card is supported regardless of regular or dynamic.

What happens to the URL address after Airfob Portal changed?

The previous https://mc.suprema.io will just redirect to the new portal address, https://mc.mocainc.com.

Q9 Can we import CSV file to get user information?

We are working on that feature. We will keep you updated once it is ready.



ANY QUESTIONS?



PLEASE! HOLD ON! CAN YOU TAKE PART IN OUR SURVEY/POLL ON THE SCREEN.

Thank you!



