

# X-Station 2

## USER GUIDE

Version 1.00

English

EN 102.00.XS2 V1.00A

# CONTENTS

<b>Safety instructions</b>	<b>3</b>	<b>Network</b>	<b>16</b>
Instructional icons	3	Network Settings	16
		Ethernet	16
		Server	17
		Serial Setting	17
<b>Introduction</b>	<b>5</b>		
Components	5	<b>Device</b>	<b>18</b>
Name and function of each part	6	Relay	18
Cables and connectors	7	Date & Time	18
How to scan a QR code/barcode	8	Daylight Saving Time	19
		Device Info	20
		Memory Info	20
		USB Memory	21
		Secure Tamper	22
		Restart Device	22
		Restore Default	22
		User ID Type	22
<b>Admin Menu</b>	<b>9</b>		
All Menus	9	<b>Event Log</b>	<b>23</b>
		Search Log	23
		Delete All Logs	23
		View Log Usage	24
<b>User</b>	<b>10</b>		
Registering user information	10	<b>Troubleshooting</b>	<b>25</b>
Modifying User Information	11	Checklist before reporting a failure	25
Delete All Users	11		
View User Usage	11		
<b>Authentication</b>	<b>12</b>		
Auth Mode	12		
Modifying Auth Mode	12		
Delete Auth Mode	13		
Add Auth Mode	13		
Operation	13		
QR/Barcode Operation	14		
T&A Mode	14		
<b>Display &amp; Sound</b>	<b>15</b>		

# CONTENTS

## **Product specifications** **26**

---

Dimensions	27
XS2-QAPB, XS2-QDPB	27
XS2-APB, XS2-QDPB	27

## **FCC compliance information** **28**

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## **EU Declaration of Conformity (CE)** **28**

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## **Appendices** **29**

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Disclaimers	29
Copyright notice	29
Open Source License	29
GNU General Public License	30
TERMS AND CONDITIONS	30
BoringSSL License	37
OpenSSL License	37
Original SSLeay License	38
Licenses for support code	39
Apache License	40

# Safety instructions

Please read this safety instructions before you use the product to prevent injury to yourself and others and to prevent property damage. The term 'product' in this manual refers to the product and any items provided with the product.

## Instructional icons



**Warning:** This symbol indicates situations that could result in death or severe injury.



**Caution:** This symbol indicates situations that may result in moderate injury or property damage.



**Note:** This symbol indicates notes or additional information.



## Warning

### Installation

**Do not install or repair the product arbitrarily.**

- This may result in electric shock, fire, or product damage.
- Damages caused by any modifications or failure to follow installation instructions can void your manufacturer's warranty.

**Do not install the product in a place with direct sunlight, moisture, dust, soot, or a gas leak.**

- This may result in electric shock or fire.

**Install the product in a well-ventilated and cool place away from direct sunlight to prevent overheating when installing it outside.**

**Do not place the product inside the sealed enclosure when installing it outside.**

- It increases the internal temperature of the enclosure and this may result in electric shock, fire, or malfunction.

**Do not install the product in a location with heat from an electric heater.**

- This may result in fire due to overheating.

**Install the product in a dry location.**

- Humidity and liquids may result in electric shock or product damage.

**Do not install the product in a location where it will be affected by radio frequencies.**

- This may result in fire or product damage.

### Operation

**Keep the product dry.**

- Humidity and liquids may result in electric shock, fire, or product damage.

**Do not use damaged power supply adaptors, plugs, or loose electrical sockets.**

- Unsecured connections may cause electric shock or fire.

**Do not bend or damage the power cord.**

- This may result in electric shock or fire.



## **Installation**

**Do not install the product under direct sunlight or UV light.**

- This may result in product damage, malfunction, discoloration, or deformation.

**Do not install the power supply cable in a location where people pass by.**

- This may result in injury or product damage.

**Do not install the product near magnetic objects, such as a magnet, TV, monitor (especially CRT), or speaker.**

- The product may malfunction.

**Keep the minimum distance between products when installing multiple products.**

- The product may be affected by radio frequencies emitted by other products and the product may malfunction.

**Use only a power supply adaptor of either D.C 24 V and 800 mA or higher or D.C 12 V and 1,500 mA or higher.**

- If the right power supply is not used, the product may malfunction.

**Use a separate power supply for the Secure I/O 2, electric lock, and the product.**

- If connecting and using the same power supply, the product may malfunction.

**Do not connect and use the power supply and Power over Ethernet (PoE) simultaneously.**

- The product may malfunction.

## **Operation**

**Do not drop the product or cause impacts to the product.**

- The product may malfunction.

**Do not disclose the password to others and change it regularly.**

- This may result in illegal intrusion.

**Do not press buttons on the product by force or do not press them with a sharp tool.**

- The product may malfunction.

**Do not store your product in very hot or very cold places. It is recommended to use your product at temperatures from -20 °C to 50 °C.**

- The product may malfunction.

**When cleaning the product, mind the following.**

- Wipe the product with a clean and dry towel.
- If you need to sanitize the product, moisten the cloth or the wipe with a proper amount of rubbing alcohol and gently clean all exposed surfaces including fingerprint sensor. Use rubbing alcohol (containing 70% Isopropyl alcohol) and a clean, non-abrasive cloth like lens wipe.
- Do not apply liquid directly to the surface of the product.

**Do not use the product for anything other than its intended use.**

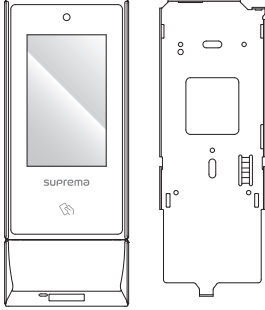
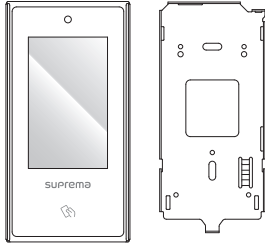
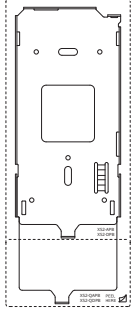

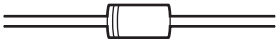

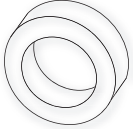



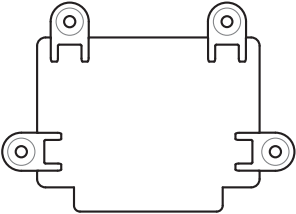

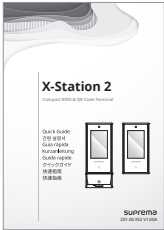

- The product may malfunction.

### **RTC battery**

Discard the battery according to the appropriate regional or international waste regulations. Discard the battery according to the appropriate regional or international waste regulations.

# Introduction

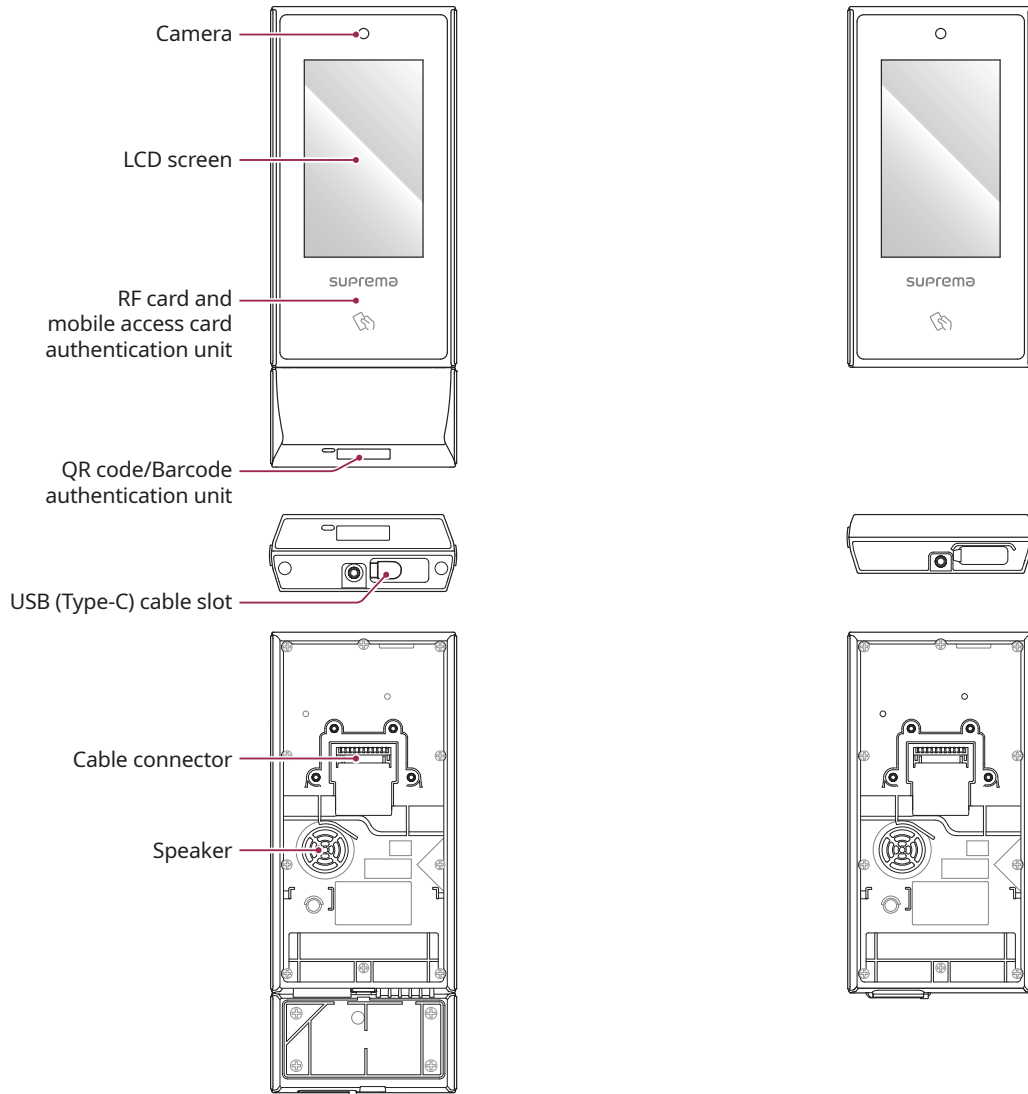
## Components

			
<p><b>Device and Wall Bracket (XS2-QAPB, XS2-QDPB)</b></p>	<p><b>Device and Wall Bracket (XS2-APB, XS2-DPB)</b></p>	<p><b>Drilling Template</b></p>	
			
<p><b>Cables</b></p>	<p><b>Diode</b></p>	<p><b>120 <math>\Omega</math> resistor</b></p>	
			
<p><b>Ferrite Core</b></p>	<p><b>PVC Anchor x2</b></p>	<p><b>Fixing Screw x2</b></p>	<p><b>Bracket Fixing Screw (Star Shaped)</b></p>
			
<p><b>Cable Cover</b></p>	<p><b>Shrink Tube</b></p>	<p><b>Quick Guide</b></p>	<p><b>Open Source Software Guide</b></p>



- Components may vary according to the installation environment.
- When assembling the product with the bracket, you can use the included bracket fixing screw (Star Shaped) instead of the product fixing screw for enhanced security.
- For more details regarding the product, visit the Suprema website (<https://www.supremainc.com>) and refer to the user guide.

## Name and function of each part

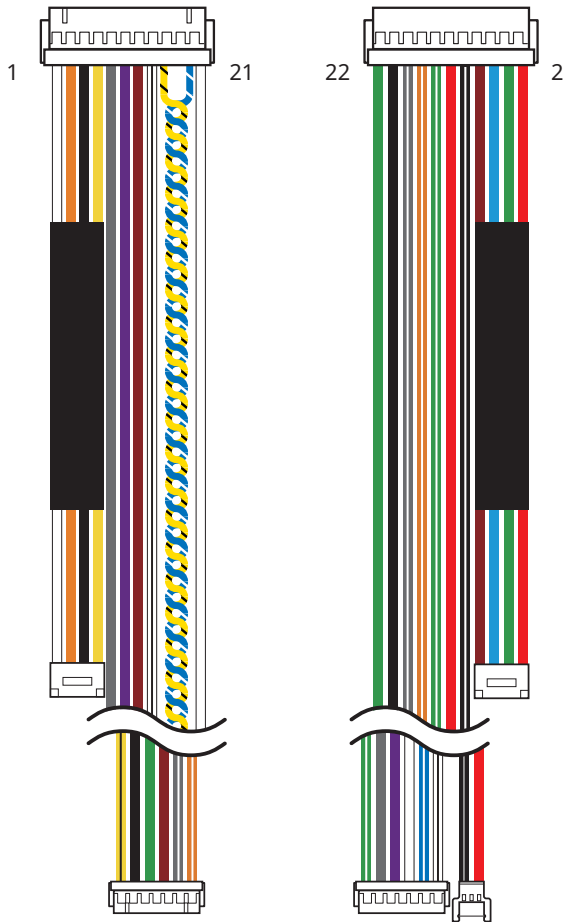


Name	Description
<b>Camera</b>	Captures actual images.
<b>LCD screen</b>	Provides UI for operation.
<b>RF card and mobile access card authentication unit</b>	Part to scan a RFID card or mobile access card for entrance.
<b>QR code/Barcode authentication unit</b>	Part to scan a QR code or barcode for entrance.
<b>USB (Type-C) cable slot</b>	Connects the USB cable.
<b>Cable connector</b>	Connects cables. <ul style="list-style-type: none"> <li>• Power supply</li> <li>• Ethernet + PoE</li> <li>• RS-485</li> <li>• Wiegand input and output</li> <li>• TTL input</li> <li>• Relay</li> </ul>
<b>Speaker</b>	Delivers sound.



Only XS2-QAPB and XS2-QDPB models support barcode and QR code authentication.

## Cables and connectors

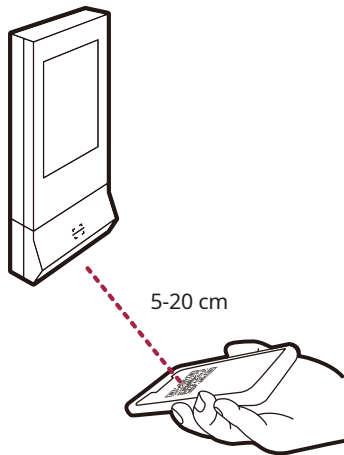


Cable	PIN	Name	Color
RJ-45 (Ethernet + PoE)	1	ENET TXP	White
	3	ENET TXN	Orange
	5	ENET RXP	Black
	7	ENET RXN	Yellow
TTL input	9	TTL GND	Gray
	11	TTL IN0	Purple
	13	TTL IN1	Brown
RS-485	15	485 GND	White (Black stripe)
	17	485 TRXN	Yellow (Black stripe)
	19	485 TRXP	Blue (White stripe)
Wiegand	21	WG D1	White
	22	WG D0	Green
	20	WG GND	Black
Relay	18	RLY NO	Gray (White stripe)
	16	RLY NC	Orange (White stripe)
	14	RLY COM	Green (White stripe)
Power	12	PWR +VDC	Red
	10	PWR GND	Black (White stripe)
RJ-45 (Ethernet + PoE)	8	VB2	Brown
	6	VB2	Blue
	4	VB1	Green
	2	VB1	Red



## How to scan a QR code/barcode

You can issue a QR code/barcode to a user and use it as an authentication method. Scan the QR code/barcode properly by following the instructions on the screen to increase the recognition rate.




- Keep 5 cm to 20 cm of distance between the QR code/Barcode authentication unit of the device and the QR code/barcode.
- Hold the smartphone with the screen facing towards the QR/Barcode code authentication unit and place the guide beam at the center of the QR code.
- When authenticating with the QR code/barcode downloaded to your smartphone, adjust the brightness of your smartphone so that the device can read the QR code/barcode clearly.
- If you do not follow the instructions on the screen, it may take a long time to scan the QR code/barcode, or it may fail.

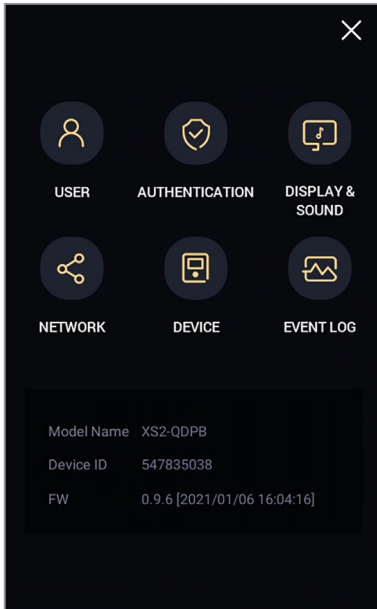



- Only XS2-QAPB and XS2-QDPB models support QR code/barcode authentication.
- You can issue QR codes only on BioStar 2. For more information on how to issue a QR code/barcode, refer to BioStar 2 Administrator's manual.

# Admin Menu

## All Menus



- 1 Press  and authenticate with the Admin level credential.
- 2 Select the desired menu.

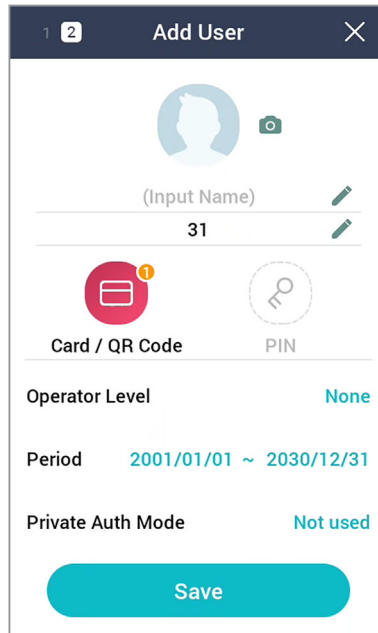
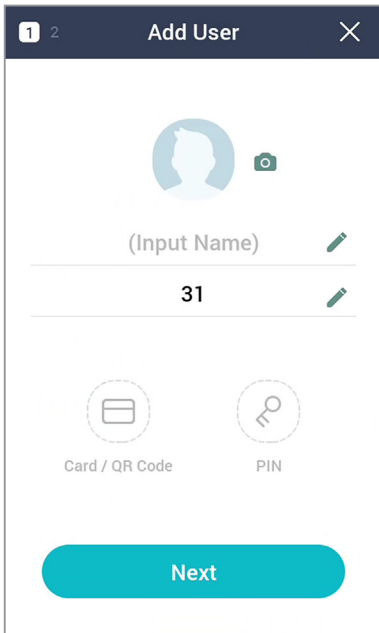





If the administrator has not been designated, the menu screen will be displayed when you press .

## Registering user information

The user information including credentials can be registered.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **USER** → , and choose a credential you want to register.  
There are two steps for the user registration. Some options are available after the credential has been registered.



- : Take a picture of a user with the built-in camera.
- **Name:** Enter the username.
- **ID:** Enter a number between 1 and 429467295 to register as the user ID. If User ID Type set to Alphanumeric, a combination of alphanumeric characters and symbols (., -) can be used for the ID. Up to 32 characters can be input.
- **Card / QR Code:** Register a card for user authentication. Press  and scan the card which will be assigned to the user. To register an additional card, press  again. You can issue QR codes only on BioStar 2.
- **PIN:** Enter the PIN you wish to use. Enter the PIN you wish to use, and then enter the same PIN again for confirmation. Enter a number between 4 and 16 digits to prevent leaking.
- **Operator Level:** Select the level you wish to assign to a user.






Available menus vary according to the set user level.

- **None:** This is the general user level and menus cannot be accessed.
- **Administrator:** All menus can be accessed.
- **Configuration:** AUTHENTICATION, DISPLAY & SOUND, NETWORK, DEVICE, and EVENT LOG menus can be accessed.
- **User Management:** USER and EVENT LOG menu can be accessed.

- **Period:** Set an expiry date to use the user account.
- **Access Group:** Select an access group for the user. Access groups can be registered only in BioStar 2.
- **Private Auth Mode:** Change the authentication method according to the user.

## Modifying User Information

User Management or Administrator can modify the registered user information. A card can be added, and PIN and level can be modified.



- 1 Press  and authenticate with the Admin level credential.
- 2 Select **USER** → .
- 3 Select your search terms. You can search for a user by **All**, **User ID**, **Name**, and **Card / QR Code**.
- 4 Select a user you wish to modify.
- 5 Modify the information by referring to **Registering user information** and press **OK**.
  - To delete a user, select  and then press **OK**.



Access Group can be registered in BioStar 2. For detailed contents regarding registering an access group, refer to the BioStar 2 Administrator Manual.



## Delete All Users

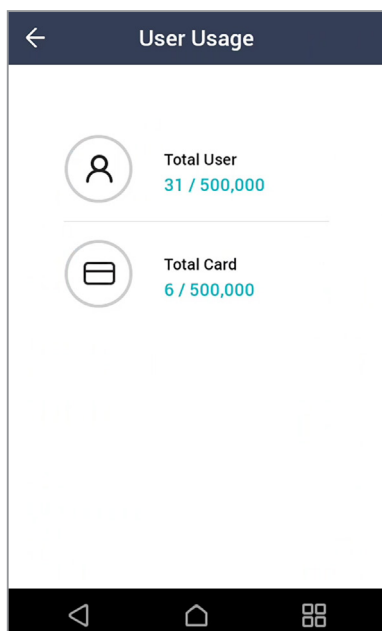
You can delete all registered users at once.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **USER** → .
- 3 Check **Delete All** to delete all registered users and press **OK**.
- 4 When you press **OK**, all registered users will be deleted.

## View User Usage

You can see the number of registered users, and cards at a glance.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **USER** → . User usage information appears.






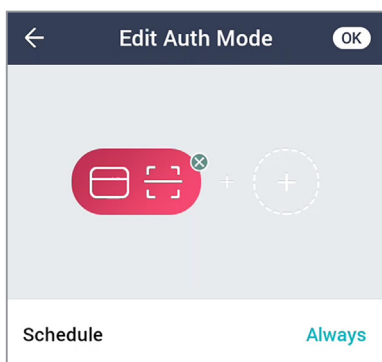
# Authentication

## Auth Mode






### Modifying Auth Mode

You can set the authentication method and schedule according to each credential. You can set up to 3 auth modes.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **AUTHENTICATION** → **Auth Mode**.
- 3 Select the authentication mode to modify.
- 4 When you press , the selected credential will be deleted, and when you press , available credentials to be added will be displayed on the screen.



- 5 Set the desired auth mode and select a schedule.



Category	Description
Card / QR Code	<ul style="list-style-type: none"> <li>•  : Mode to use a card or QR code only.</li> <li>•  +  : Mode to authenticate with a card or QR code, and then enter PIN.</li> </ul>
User ID	<ul style="list-style-type: none"> <li>•  +  : Mode to enter ID and then enter PIN.</li> </ul>

- 6 When you press **OK**, settings will be saved.






- The icon image may differ depending on the model you use.
- A schedule can be set in BioStar 2. If there is no set schedule, only can be selected.
- For detailed contents regarding setting a schedule, refer to BioStar 2 Administrator's manual.

## Delete Auth Mode


- 1 Press  and authenticate with the Admin level credential.
- 2 Select AUTHENTICATION → Auth Mode.
- 3 Press  and select the authentication mode to delete. You can select multiple options.
- 4 Press OK. To delete the selected option, press OK. Or, press Cancel to cancel the deletion.

## Add Auth Mode

You can register up to 3 auth modes.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select AUTHENTICATION → Auth Mode.
- 3 Press .
- 4 Set the desired auth mode by pressing , and then select a schedule.
- 5 When you press OK, the auth mode will be added.


## Operation

- 1 Press  and authenticate with the Admin level credential.
- 2 Press AUTHENTICATION and then modify items below Operation.

Operation	
Face Detection	Not Used
Auth Timeout	10 Sec
Server Matching	<input type="checkbox"/>

- **Face Detection:** When you set Face Detection, X-Station 2 can detect real face, and authentication can be done only when a face is detected after authenticating with a card, QR code, or PIN.
- **Auth Timeout:** If the authentication is not completed during a set time, the authentication will fail. You can set a time between 3 seconds and 20 seconds.
- **Server Matching:** When you set Server Matching, the user authentication is not carried out in the device, but instead is carried out in BioStar 2. Server Matching can be useful when there is a large amount of user information in the device or you do not wish to publicly expose the device where user credential information is saved.

## QR/Barcode Operation


- 1 Press  and authenticate with the Admin level credential.
- 2 Press **AUTHENTICATION** and then modify items below **QR/Barcode Operation**.

QR/Barcode Operation	
QR/Barcode	<input checked="" type="checkbox"/>
QR/Barcode Scan Timeout	4 Sec


- **QR/Barcode:** Set to use QR code or Barcode to authenticate.
- **QR/Barcode Scan Timeout:** If you do not scan the QR code or Barcode within the set time, the authentication will fail. You can set a time between 4 seconds and 10 seconds.

## T&A Mode

You can set how to register T&A Mode.


- 1 Press  and authenticate with the Admin level credential.
- 2 Press **AUTHENTICATION** and then modify items below **T&A Mode**.

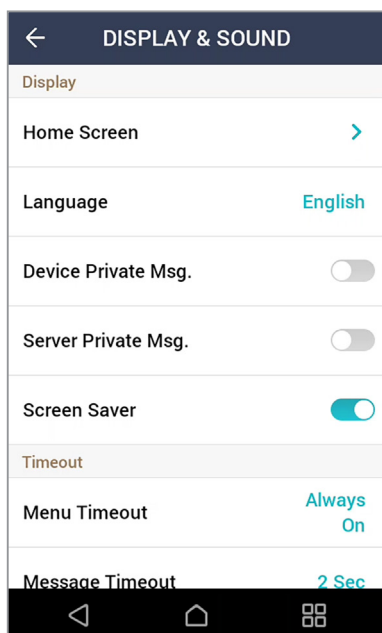
T&A Mode	
T&A Mode	Fixed
T&A Code	0
Fixed T&A Key	Code 1(In)
Job Code	<input type="checkbox"/>

- 3 Select and set the desired item.
  - **T&A Mode:** Set the method to use T&A mode.
  - **T&A Code:** You can register T&A events. Select **T&A Code** →  to register a T&A event and set an icon, name of T&A event, and schedule.
  - **T&A Required:** Set to require a user to select a T&A event when authenticating.
  - **Fixed T&A Key:** Set to use only a T&A event selected by the administrator. This option can be used when **Fixed** is set for **T&A Mode**.
  - **Job Code:** Select whether to use **Job Code**.
- 4 To save settings, press **OK**.

# Display & Sound

You can change the display and sound settings of the device.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DISPLAY & SOUND**.
- 3 Change the desired item.



- **Home Screen:** Select items to be displayed in the background of the home screen.
- **Language:** Set the language you wish to use.
- **Device Private Msg.:** Set whether to use a Private Message, which will be displayed on the screen when the user authenticates. You can set **Device Private Msg.** by using the BioStar 2 Device SDK.
- **Server Private Msg.:** Set whether to use a Private Message, which will be displayed on the screen when the user authenticates. You can set the **Server Private Msg.** by using the BioStar 2 API. If you have not set it on the server, the device does not display a message when authentication is successful even if **Server Private Msg.** is enabled on the device.
- **Screen Saver:** Set this option to use the screen saver feature. It reduces unnecessary energy consumption by lowering the brightness of the LCD screen when the device is not in use.
- **Menu Timeout:** Set the time (sec) for the menu screen to disappear automatically. If there is no button input during a set time, the screen will return to the home screen.
- **Message Timeout:** Set the time (sec) for a setting complete message or information message to disappear automatically.
- **Backlight Timeout:** Set the time (second) to turn off the lighting of LCD screen.
- **Voice Instruction:** Set to use the voice instruction instead of alarm sounds.
- **Volume:** Set the volume.



Refer to the BioStar 2 Device SDK webpage on the Suprema Knowledge Base website ([kb.supremainc.com/bs2sdk/](http://kb.supremainc.com/bs2sdk/)) for more information on the BioStar 2 Device SDK.




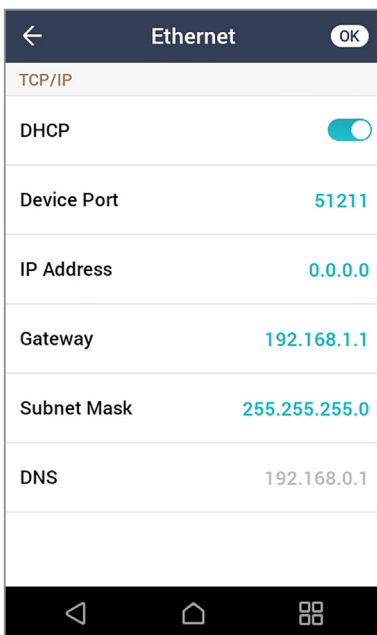
# Network

## Network Settings

You can change the network settings of the device.


### Ethernet

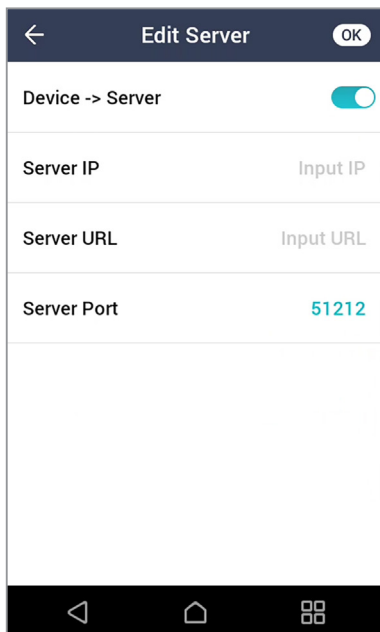
- 1 Press  and authenticate with the Admin level credential.
- 2 Select **NETWORK** → **Ethernet**.
- 3 Change the desired item.



- **DHCP:** Set whether to use DHCP. If DHCP setting is disabled, the user can modify **Port**, **IP Address**, **Gateway**, **Subnet Mask**, and **DNS**.
  - **Device Port:** Set the device port.
  - **IP Address:** View the IP address of the device. To modify, disable DHCP setting.
  - **Gateway:** View the gateway of the device. To modify, disable DHCP setting.
  - **Subnet Mask:** View the subnet mask of the device. To modify, disable DHCP setting.
  - **DNS:** Set the DNS server address.
- 4 To save settings, press **OK**.

## Server

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **NETWORK** → **Server**.
- 3 Change the desired item.




Edit Server	
Device -> Server	<input checked="" type="checkbox"/>
Server IP	Input IP
Server URL	Input URL
Server Port	51212

- **Device → Server:** You can send a connection signal from the device to a server with the input information directly. When you select **Server → Device**, **Server IP**, **Server URL** and **Server Port** cannot be entered.
- **Server IP:** Enter the IP address of the PC on which BioStar 2 is installed. Input is accepted only when **Device → Server** is set for **Connection Mode**.
- **Server URL:** Enter server URL instead of **Server IP**. Input is accepted only when **Device → Server** is set for **Connection Mode**.
- **Server Port:** Enter the port of the PC on which BioStar 2 is installed. Input is accepted only when **Device -> Server** is set for **Connection Mode**.

- 4 To save settings, press **OK**.

## Serial Setting

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **NETWORK**.
- 3 Change the desired item.



Serial Setting	
RS-485	Default
Baud Rate	115200


- **RS-485:** Select the RS-485 mode.
- **Baud Rate:** Select the desired baud rate.

- 4 To save settings, press **OK**.

# Device


## Relay

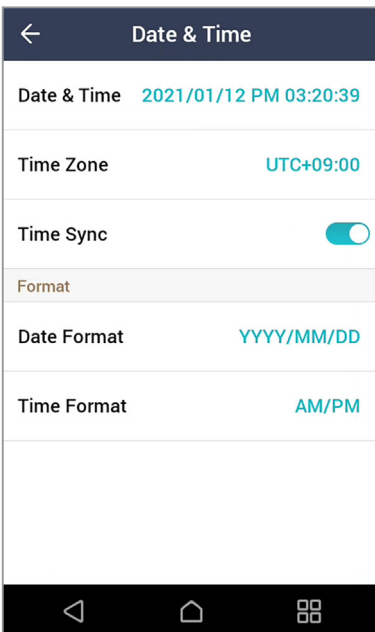
You can set the open time and the input port of the exit button in the device.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Relay**.
  - **Relay:** You can set whether relay is enabled or not. To set the open time and the input port of the exit button, activate this option.
  - **Open Time:** Set the duration for the door to remain open when standard user authentication has been carried out.
  - **Exit Button:** Select the input port where the exit button is connected.
  - **Switch:** Select the relay type (N/O or N/C).

## Date & Time

You can set the open time and the input port of the exit button in the device.



- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Date & Time**.
- 3 Change the desired item.

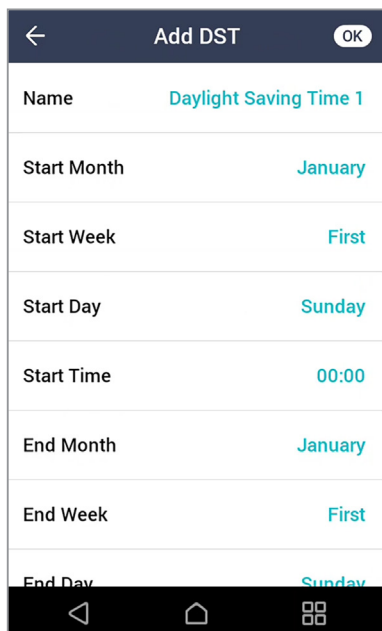


- **Date & Time:** Check the current date and time. To modify it manually, disable **Time Sync**.
- **Time Zone:** Set the time reference of the current location.
- **Time Sync:** Synchronize the server and the time. If you wish to synchronize the server and the time, enable Time Sync.
- **Date Format:** Set the date format. You can select among **YYYY/MM/DD**, **MM/DD/YYYY** and **DD/MM/YYYY**.
- **Time Format:** Set the time format. You can select either **24-Hour** or **AM/PM**.

## Daylight Saving Time

You can use the device by applying daylight saving time. Set the start and end time correctly.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Daylight Saving Time** and press  to add additional daylight-saving time.
- 3 Select the desired item and change the setting.




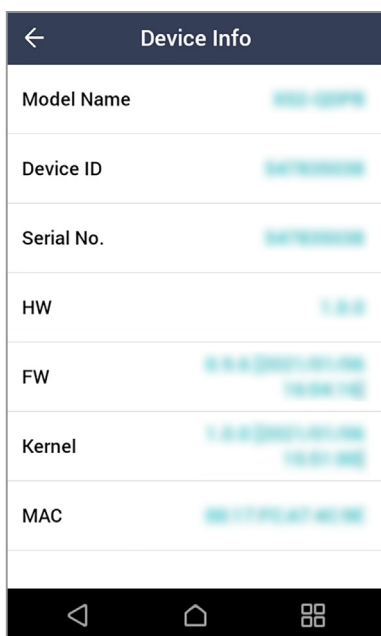
Add DST	
Name	Daylight Saving Time 1
Start Month	January
Start Week	First
Start Day	Sunday
Start Time	00:00
End Month	January
End Week	First
End Day	Sunday

- **Name:** Set the name of daylight-saving time.
  - **Start Month / Start Week / Start Day / Start Time:** Set details of when the daylight-saving time option begins.
  - **End Month / End Week / End Day / End Time:** Set details of when the daylight-saving time ends.
- 4 To save settings, press **OK**.

## Device Info


You can view the model name, device ID, serial number, firmware version of device ID, and MAC address.

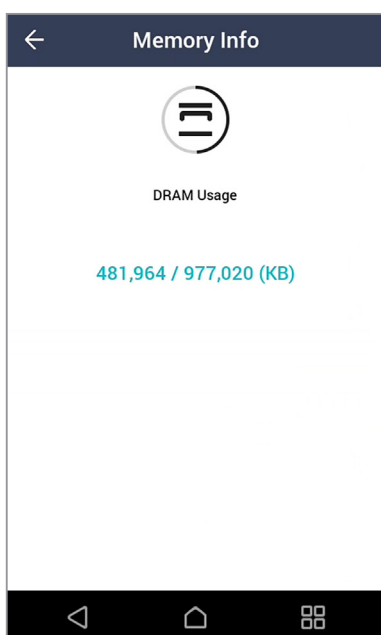
- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Device Info**. You can view the information including **Model Name**, **Device ID**, **Serial No.**, **HW**, **FW**, **Kernel**, and **MAC**.



## Memory Info


View the status of memory usage.

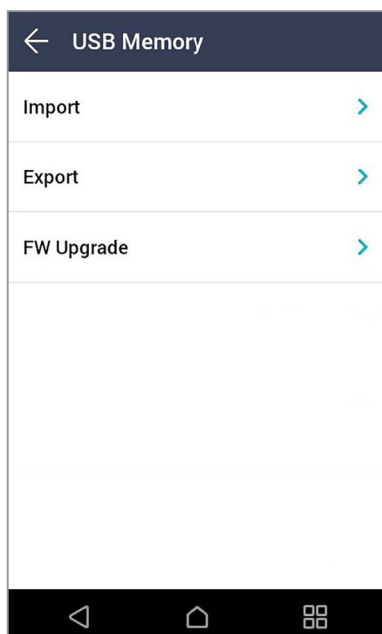
- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Memory Info**. You can view the memory usage status of the device.



## USB Memory

Connect USB Memory and import user information to the device or export log and user information from the device. Upgrade the firmware.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **USB Memory**.
- 3 Select the desired item and change the setting.



- **Import:** Import user information from the connected USB memory.
- **Export:** Select information you wish to export to the connected USB memory.
- **FW Upgrade:** Upgrade the firmware if the firmware files are saved in the connected USB memory.




The type of supported USB memory is as follows. If you use a different type of USB memory, the function may not operate normally.

- Samsung Electronics: SUM-LSB 8 GB, SUM-PSB 8 GB, SUM-PSB 16 GB, SUM-BSG 32 GB
- LG Electronics: XTICK J3 WINDY 8 GB, SMART USB MU1 White 8 GB, MU 1 USB 32 GB, MU28GBC 32 GB, XTICK MOBY J1 16 GB
- SanDisk: Cruzer 16 GB, Cruzer Blade CZ50 4 GB, Cruzer Blade CZ50 32 GB, CZ48 Ultra USB 3.0 64 GB, CZ80 USB3.0 64 GB, CZ52 64 GB, Cruzer Glide Z60 128 GB, Cruzer Force CZ71 32 GB
- Sony: Micro Vault Click 8 GB, MicroVault CLICK 16 GB, USM-SA1 32 GB
- Transcend: JetFlash 760 8 GB, JetFlash 760 32 GB, JetFlash 500 8 GB
- Memorette: MINI500 8 GB
- A-DATA: S102 PRO 8 GB
- Trigem Pastel 8 GB


## Secure Tamper

When the tamper is turned on, you can set to delete the entire user, the entire log, and the security key.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE**.
- 3 Activate **Secure Tamper** to delete data of all registered users, all logs, and secure keys when a temper event occurs.


## Restart Device

The user can restart the device.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Restart Device**.
- 3 To restart the device, press **OK**. To return to the previous screen, press **Cancel**.

## Restore Default

Device settings, network settings, and operator levels will be reset.


- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Restore Default**.
  - **All settings**: You can reset all settings stored on the device. Press **OK** to reset all device settings.
  - **Keep Network Settings**: You can reset all settings except network settings. Press **OK** to reset all settings except network settings.
  - **Factory Default**: You can delete all the information saved in the device and the root certificate and restore default settings.
  - **Delete the Root Certificate**: You can delete the root certificate saved in the device.
- 3 If you proceed to restore the defaults, the device will restart.



- When you reset, the operator level will be reset as well. After resetting, make sure to set the operator level again.
- Language setting will not change after resetting.
- **Factory Default** menu can be used when the root certificate is saved in the device.
- **Delete the Root Certificate** menu can be used only when the root certificate is saved in the device and Administrator has been designated.

## User ID Type



You can set the type of user ID to be registered on the device to a combination of alphabetic characters, numbers, and symbols (., -).

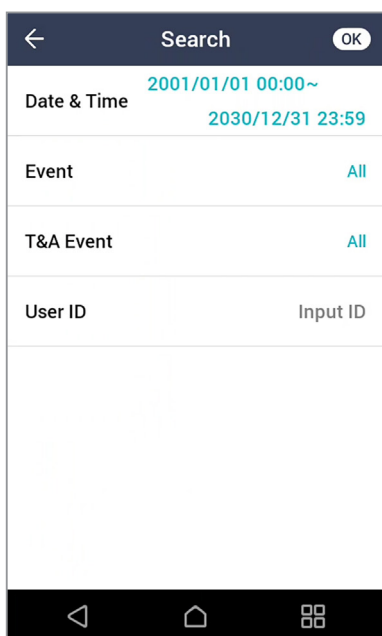
- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **User ID Type**.
- 3 Change to the desired item and press **OK**.

# Event Log

## Search Log

You can set a condition and search a log.



- 1 Press  and authenticate with the Admin level credential.
- 2 Select **EVENT LOG**. All event logs appear.
- 3 Press  to search a specific log and change the condition.



- 4 Press **OK**. A log that matches the condition will be displayed on the screen.

## Delete All Logs



You can delete all saved logs.

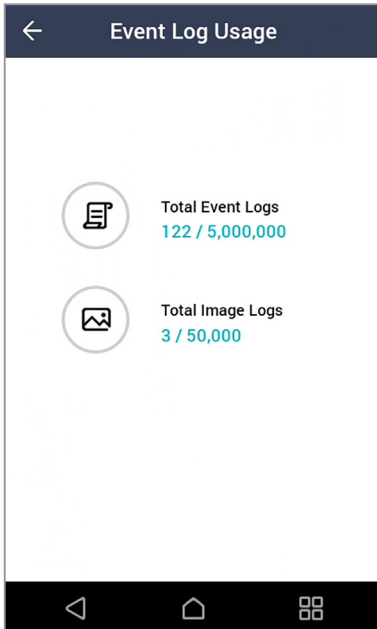
- 1 Press  and authenticate with the Admin level credential.
- 2 Select **EVENT LOG**.
- 3 To delete all logs, select  and then press **OK**. To return to the previous screen, press **Cancel**.



## View Log Usage

You can check the status of log usage.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **EVENT LOG** → . You can check the capacity of event and image logs on the device.



# Troubleshooting

## Checklist before reporting a failure

Category	Problem	Solution
Power	The power is being supplied but the device does not operate.	<ul style="list-style-type: none"><li>• If the terminal and the bracket are far away from each other, the device may not operate due to the temper switch.</li><li>• Check the adaptor or the power cable.</li></ul>
PIN	I lost my PIN.	<ul style="list-style-type: none"><li>• For a normal user PIN, request it from the administrator and enter it again.</li><li>• If you have lost the Admin PIN, contact the installation company.</li></ul>
	I entered my PIN and pressed the OK button, but I still cannot open the door.	<ul style="list-style-type: none"><li>• Check if you have entered the registered PIN correctly.</li><li>• Check if you have changed the PIN recently.</li><li>• If you cannot remember the PIN, request it from the administrator and enter it again.</li></ul>
QR/Barcode	It fails to scan a QR code/ barcode.	<ul style="list-style-type: none"><li>• Refer to <a href="#">How to scan a QR code/barcode</a> and try again.</li><li>• Place the guide beam at the center of the QR code.</li><li>• Adjust the brightness of your smartphone so that the device can read the QR code/barcode clearly and try again.</li><li>• If the problem persists, contact the administrator who issued the QR code/barcode.</li></ul>
Door Lock	The door cannot be locked when I close the door.	<ul style="list-style-type: none"><li>• The electric lock may be malfunctioning. Have an inspection through the installation company.</li></ul>
Time	Suddenly the time has become incorrect.	<ul style="list-style-type: none"><li>• X-Station 2 is equipped with a built-in battery but if power is not supplied for a long time, the built-in battery may die, causing the time to become incorrect. You can correct the time by referring to <a href="#">Date &amp; Time</a>.</li></ul>
Admin Access	I lost my Admin PIN, so I cannot access the Admin mode.	<ul style="list-style-type: none"><li>• The administrator grants an access permission in X-Station 2, so only the administrator can access the Admin menu.</li><li>• If you have lost the Admin PIN, contact the installation company.</li></ul>

# Product specifications

Category	Feature	Specification
	RF Option	<ul style="list-style-type: none"> <li>XS2-DPB, XS2-QDPB: 125 kHz EM &amp; 13.56 MHz MIFARE, MIFARE Plus, DESFire EV1/EV2*, FeliCa</li> <li>XS2-APB, XS2-QAPB: 125 kHz EM, HID Prox &amp; 13.56 MHz MIFARE, MIFARE Plus, DESFire EV1/EV2*, FeliCa, iCLASS SE/SR/Seos</li> </ul>
	RF read range*	MIFARE, DESFire, iCLASS, HID Prox, EM: 50 mm / Felica: 30 mm
	Mobile	NFC, BLE
	Barcode and QR code	Supported (XS2-QDPB, XS2-QAPB)
General	CPU	1.5 GHz Quad Core
	Memory	16 GB Flash + 1 GB RAM
	LCD type	4" IPS color LCD
	LCD resolution	480 x 800
	Sound	24 bit
	Operating temperature	-20°C – 50°C
	Storage temperature	-40°C – 70°C
	Operating humidity	0 % – 80 %, non-condensing
	Storage humidity	0 % – 90 %, non-condensing
	Camera type	CMOS 2M pixels
	Camera resolution	1600 x 1200
	Dimension (W x H x D)	<ul style="list-style-type: none"> <li>XS2-DPB, XS2-APB: 82 mm x 159 mm x 27.2 mm</li> <li>XS2-QDPB, XS2-QAPB: 82 mm x 203 mm x 35.2 mm</li> </ul>
	Weight	Device <ul style="list-style-type: none"> <li>XS2-DPB, XS2-APB: 280 g</li> <li>XS2-QDPB, XS2-QAPB: 343 g</li> </ul> Bracket <ul style="list-style-type: none"> <li>XS2-DPB, XS2-APB: 67 g (Including washer and bolt)</li> <li>XS2-QDPB, XS2-QAPB: 88 g (Including washer and bolt)</li> </ul>
IP rating	IP65	
Certificates	KC, CE, FCC (Compliance: RoHS, REACH, WEEE)	
Capacity	Max. User	500,000
	Max. Card	500,000
	Max. Text Log	5,000,000
	Max. Image Log	50,000
Interface	Ethernet	Supported (10/100 Mbps, auto MDI/MDI-X)
	RS-485	1 ch Host or Slave (Selectable)
	Wiegand	1 ch Input or Output (Selectable)
	TTL input	2 ch Inputs
	Relay	1 Relay
	USB	USB 2.0 (Host)
	PoE	Supported (IEEE 802.3af compliant)
	Tamper	Supported
Electrical	Power	DC 12 V (Max. 0.8 A) or DC 24 V (Max. 0.45 A)
	Switch input VIH	Min.: 3 V Max.: 5 V
	Switch input VIL	Max.: 1 V
	Switch Pull-up resistance	4.7 kΩ (The input pots are pulled up with 4.7 kΩ.)
	Wiegand output VOH	More than 4.8 V
	Wiegand output VOL	Less than 0.2 V
	Wiegand output Pull-up resistance	Internally pulled up with 1 kΩ
	Relay	Voltage: Max. 30 VDC Current: Max. 1 A

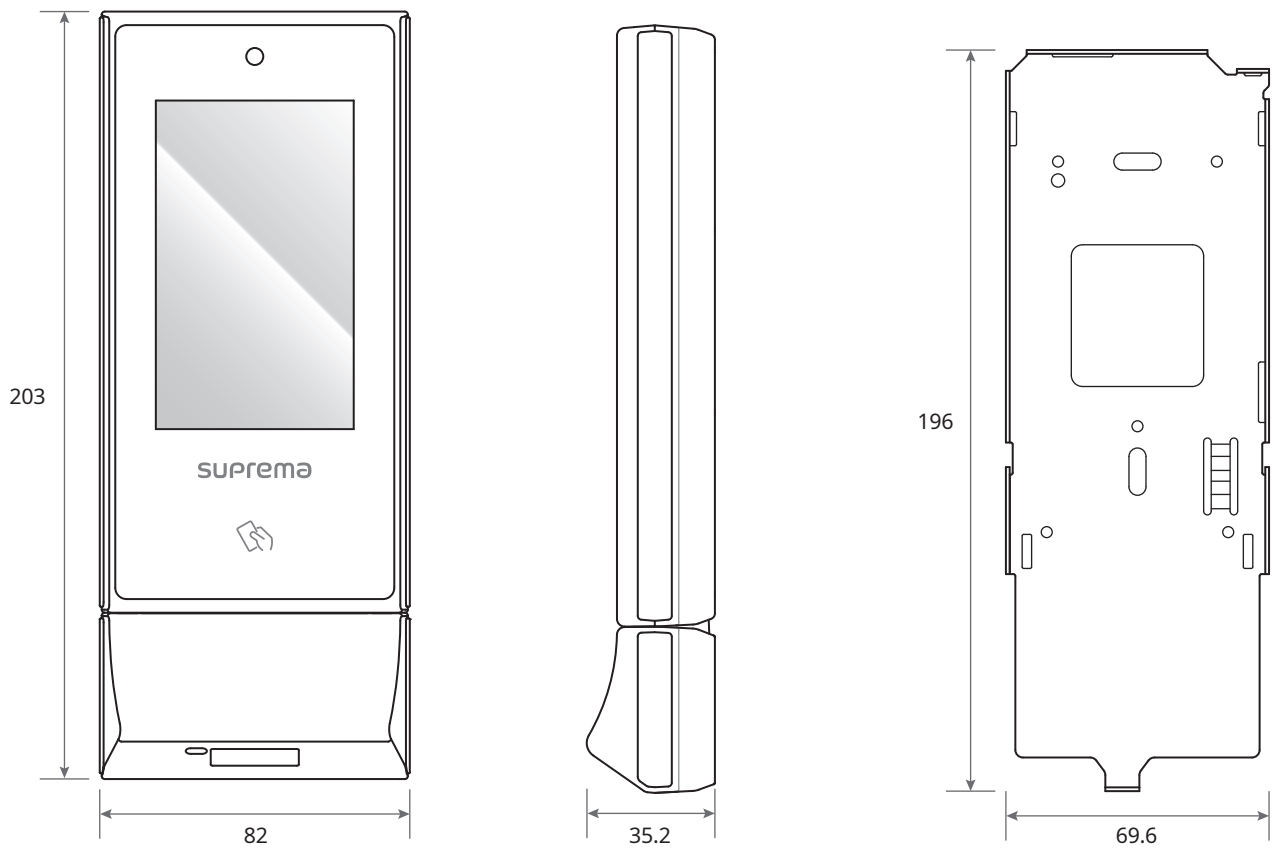
\* DESFire EV2 cards are supported by having backward compatibility of DESFire EV1 cards. CSN and smart card functions are compatible with X-Station 2.

\* RF read range will vary depending on installation environment.

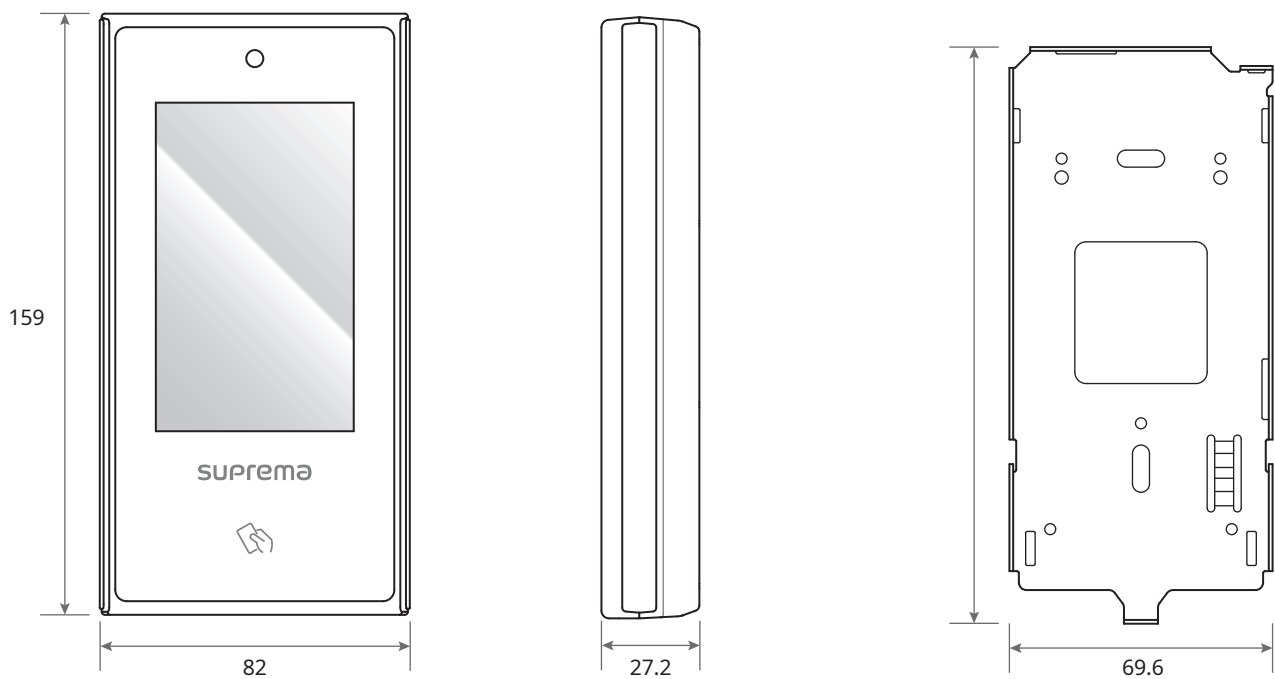
## Dimensions

### XS2-QAPB, XS2-QDPB

(Unit: mm)



### XS2-APB, XS2-QDPB



## FCC compliance information

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.



This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

- This appliance and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.
- A minimum separation distance of 20 cm must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements.

## EU Declaration of Conformity (CE)

This product is CE marked according to the provisions of the Radio Equipment Directive (RED) 2014/53/EU. Hereby, Suprema Inc. declares that this product is in compliance with the essential requirements and other relevant provisions of Radio Equipment Directive (RED) 2014/53/EU.

- Bluetooth Transmit Power: -0.1 dBm
- Bluetooth Frequency: 2402-2480 MHz
- NFC Frequency: 13.56 MHz
- RFID Frequency: 13.56 MHz + 125 kHz

For more information, contact us at the following contact information.

Suprema Inc.

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# Appendices

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Version 3, 29 June 2007

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- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

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