

BioEntry R2

Compact Fingerprint Reader



Suprema BioEntry R2 is a compact fingerprint reader exclusively designed for centralized access control systems. Packed in a slim, mullion-type design, BioEntry R2 provides high-definition fingerprint image capture, minutiae extraction as well as dual-frequency multi RF card reading capability. Combined with Suprema's intelligent biometric controller, the CoreStation, BioEntry R2 completes biometrics-driven access control system with enhanced simplicity and level of security of centralized system topology.

Features



Multi RFID card reading

- · LF(125kHz), HF(13.56MHz) dual-band
- Reads all primary card types
 (EM, MIFARE, MIFARE Plus, DESFire EVI/EV2, FeliCa, NFC)



Field-proven fingerprint technology

- · Latest Suprema fingerprint algorithm
- · High-precision OP5 optical sensor



Standardized communication

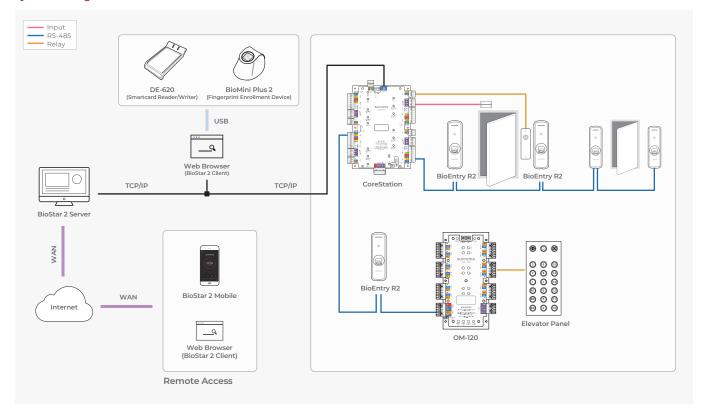
· Open Supervised Device Protocol (OSDP)

Specifications

Model Name	BER2-OD
Biometric	Fingerprint
Sensor Type	Optical Sensor (OP6)
Template	SUPREMA / ISO 19794-2 / ANSI 378
Extractor / Matcher	MINEX certified and compliant
RF Option	125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire EVI/EV2*, FeliCa, NFC
CPU	1.0 GHz
Memory	32MB Flash + 32MB RAM
LED	Multi-Color
Sound	Multi-tone Buzzer
RS-485	1ch Slave, OSDP V2.1.6
Tamper	Supported
Power	DC 12V
Operating Temperature	-20°C ~ 50°C
Operating Humidity	0% ~ 80%, non-condensing
Dimensions (WxHxD, mm)	50 x 164 x 37.5
Weight	158g
Certificates	CE, FCC, KC, RoHS, REACH, WEEE

^{*} DESFire EV2 cards are supported by having backward compatibility of DESFire EV1 cards. CSN and smart card functions are compatible with BioEntry R2.

System Configurations





Suprema Inc.

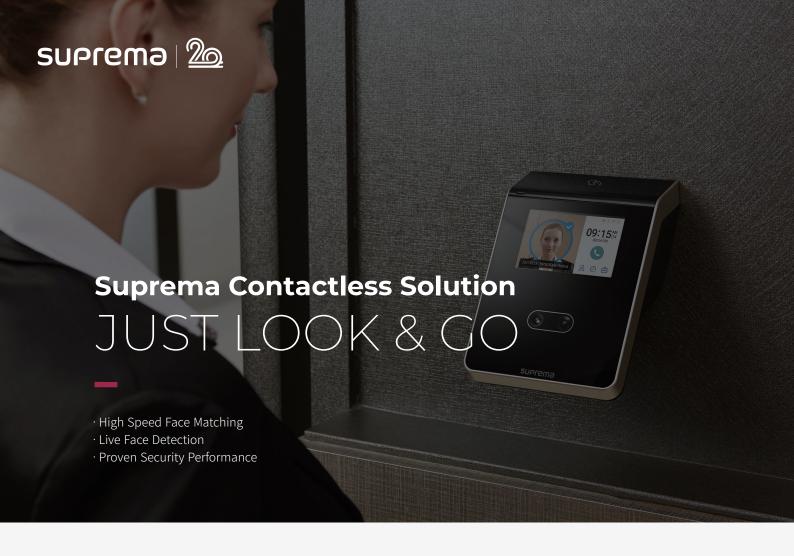


For more information about Suprema's global branch offices, visit the webpage below by scanning the QR code. https://www.supremainc.com/en/about/contact-us.asp

Suprema Contactless Solution

- · Face Recognition Terminal
 - · Mobile Access Solution
- · Thermal Camera Integration





FaceStation 2

Smart Face Recognition Terminal



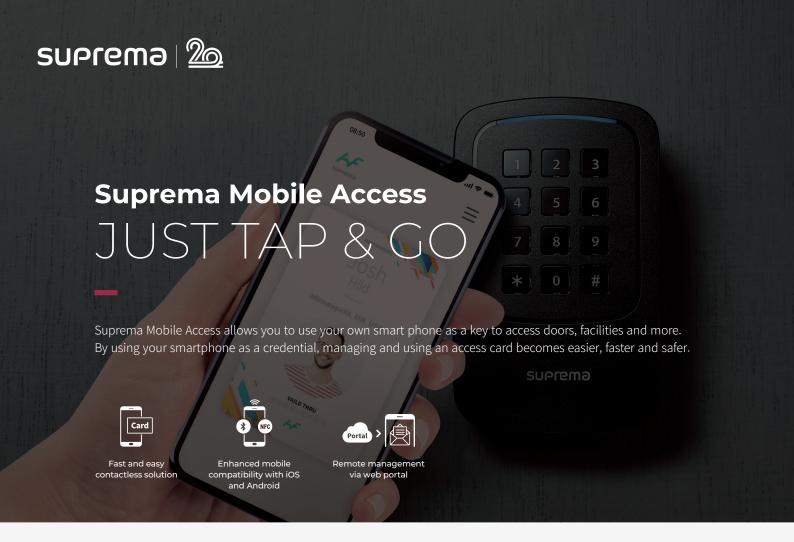
- · Matching Speed: 1:3,000 match/sec
- Group Matching: 1:5,000 match/sec
- · User Capacity: Max 30,000 users (1:1), 3,000 users (1:N)
- · Operating illuminance from 0 lx to 25,000 lx
- · Live face detection: IR-based image analysis to prevent
- · Extended height range: 145cm ~ 210cm
- · 4"color TFT LCD(800x480 pixels)
- · 1.4 GHz Quad Core, 8GB Flash + 1GB RAM
- · Suprema Mobile Access: NFC & BLE (will be supported)

FaceLite

Compact Face Recognition Terminal



- · Matching Speed: 1:3,000 match/sec
- Group Matching: 1:5,000 match/sec
- · User Capacity: Max 30,000 users (1:1), 3,000 users (1:N)
- \cdot Covers complete darkness to all indoor lighting conditions (0lx \sim 25,000lx)
- · IR-based Live Face Detection(LFD); prevent spoofing by printed images and LCDs
- · Secured communication with TLS 1.2
- · 2"color TFT LCD
- · 1.2 GHz Quad Core, 8GB Flash + 1GB RAM
- · Suprema Mobile Access: NFC & BLE (will be supported)



Contactless mobile solution compatible with iOS and Android

Suprema Mobile Access supports both NFC and BLE(Bluetooth Low Energy) for full compatibility with various types of smartphones.



Fast and Accurate

Prevents unintentional openings by controlling BLE communication distance, allowing authentication times of less than a second

BLE Background mode

Works seamlessly without waking up your smartphone

Remote and Contactless

Suprema makes it easier to issue and revoke a mobile access card by sending an email to users.



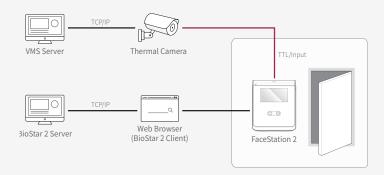
- · Saves cost of issuing cards and maintenance in comparison to physical cards
- · Protects your data with ISO 27001 certified system architecture



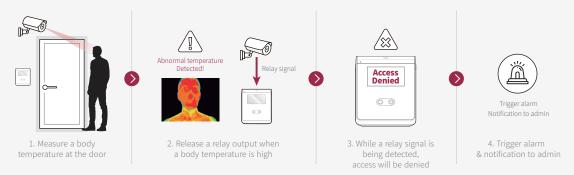
Thermal camera integration With Suprema access control system

- · Detect suspected infections through thermal imaging camera
- · Support fast, easy and safe verification with Suprema Contactless Solution
- · Operate directly by adding a thermal imaging camera without major changes in existing system

System Configuration



Operation example



Recommended camera

To use this solution, a thermal camera with below specifications are required.



- · Capable of Measuring body temperature precisely
- · Capable of configuring to release a relay signal when it detects certain level of body temperature



- · IO interface for relay signal
- · Capable of configuring to relay output duration



Suprema Inc.

17F Parkview Tower, 248, Jeongjail-ro, Bundang- gu, Seongnam-si, Gyeonggi-do, 13554, Rep. of KOREA **T** +82 31 783 4502 **F** +82 31 783 4503 **E** sales_sys@supremainc.com www.supremainc.com



For more information about Suprema's global branch offices, visit the webpage below by scanning the QR code. https://www.supremainc.com/en/about/contact-us.asp

FaceLite

Compact Face Recognition Terminal



Suprema FaceLite is the most compact face recognition terminal providing loads of the world's best features. Powered by Suprema's latest innovation in facial biometrics, FaceLite offers unrivaled matching speed, accuracy, and level of security. With Suprema's patented optic engineering, FaceLite achieves up to 25,000 lx of operating illuminance which in turn, brings all-around confidence regardless of lighting conditions. Packed in a compact and an ergonomically-designed structure, FaceLite provides exceptional performance and usability for diverse access control and time attendance sites, large or small.



Features



Ultra Performance

- · Matching Speed: 1:4,000 match/sec
- Group Matching: 1:5,000 match/sec
- \cdot User Capacity: Max 30,000 users (1:1), 4,000 users (1:N)



Highest Operating Illuminance

- · Operating illuminance from 0lx to 25,000lx
- \cdot Covers complete darkness to all indoor lighting conditions



Enhanced Security

- \cdot IR-based Live Face Detection(LFD); Prevent spoofing by printed images and LCDs
- · Face template encryption
- \cdot Secured communication with TLS 1.2



Multi RFID Card Reading

- · LF(125kHz), HF(13.56MHz) dual-band
- \cdot Reads all card types including Mobile Card (NFC and BLE)



Ergonomics & User Convenience

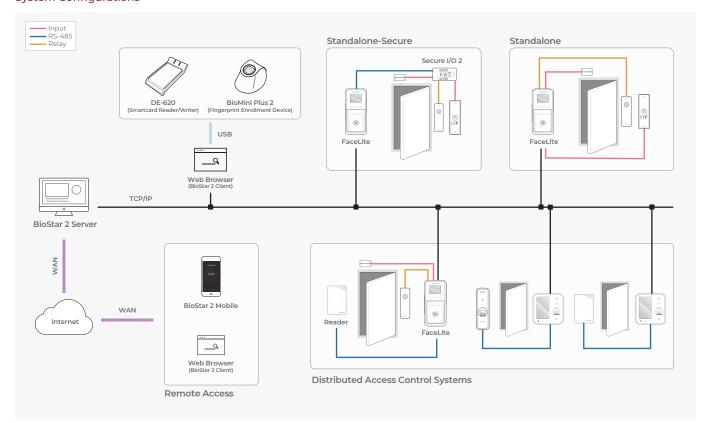
- · Extended height range: 145cm 210cm
- \cdot Improved face enrollment procedure

Specifications -

Model Name	FL-DB
Biometric	Face
RF Options	125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire EVI/EV2*, FeliCa
Mobile Card	NFC, BLE
Max. User	30,000(1:1), 4,000(1:N)
Max. Log	5,000,000
Ethernet	10/100Mbps, auto MDI/MDI-X
RS-485	1ch Host or Slave (Selectable)
Wiegand	1ch Input or Output (Selectable)
TTL	2ch Inputs
Relay	1 Relay
Tamper	Supported
CPU	1.2GHz Quad Core
Memory	8GB Flash + 1GB RAM
Operating Temperature	-20°C ~ 50°C
Dimensions (WxHxD, mm)	80 x 170 x 76
Power	DC 24V
Certificates	CE, FCC, KC, RoHS, REACH, WEEE, BT SIG

^{*} DESFire EV2 cards are supported by having backward compatibility of DESFire EV1 cards. CSN and smart card functions are compatible with FaceLite.

System Configurations





Suprema Inc.



For more information about Suprema's global offices, visit the webpage below by scanning the QR code. $\underline{\text{https://www.supremainc.com/en/about/contact-us.asp}}$

FaceStation F2

Fusion Multimodal Terminal





Unrivaled Face Recognition Performance



Best-in-class Multimodal Device



Contactless Solution for the New Normal



Robust Device Security and Data Encryption





Unrivaled face recognition performance by Fusion Matching

FaceStation F2 boasts exceptional authentication accuracy achieved by the fusion matching of visual and infrared(IR) face recognition.

*False Acceptance Rate(FAR) of 1 in 10 billion.





- Suprema's unique algorithm optimizes IR and visual face recognition to produce the industry's best face recognition and anti-spoofing performance
- Proven track record of authentication performance regardless of user ethnicity and face changes powered by deep learning algorithm

Best-in-class multimodal with various credentials

FaceStation F2 offers a wide range of authentication options including face, mobile access, fingerprint and cards.









Mobile Access

- \cdot Register up to 100,000 users for fingerprints authentication and 50,000 users for face authentication
- \cdot Supports dual frequency access cards, NFC and BLE-based Mobile Access Cards
- $\cdot \ \, \text{Template-on-Card allows authentication via biometric data stored in cards}$
- (A) Deep learning-based AI algorithm applied for live face/fingerprint detection



Contactless solution for new standards of safety and hygiene

FaceStation F2 meets the needs of the post-pandemic world with remote and contactless solution.

- · Detects and limits access of users not wearing masks
- · Face recognition of users wearing masks
- · Remote user enrollment through profile photo uploads
- · Combines with Suprema Thermal Camera to identify users with elevated skin temperature

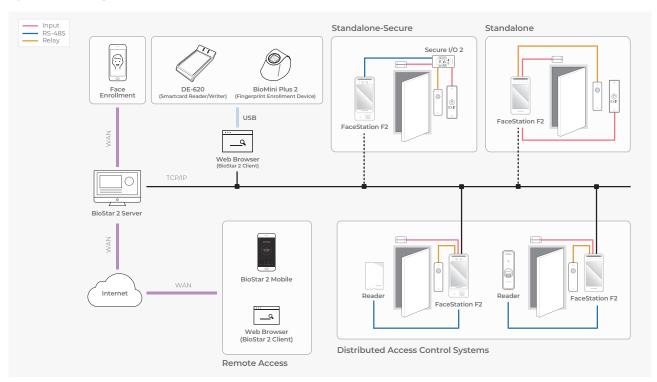
Robust device security and data encryption

FaceStation F2 is equipped with security measures to protect user data.

- · Highest level of device security including secure booting process
- · Encrypts all biometric credentials and personal information



System Configurations



Product Specification -





Category	Feature	;	FSF2-DB	FSF2-AB	FSF2-ODB			
	Biometric		Fa	Face				
Credential	RF Optio	n	125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire EV1/EV2 ⁽¹⁾ , FeliCa	125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire EVI/EV2 ⁽¹⁾ , FeliCa, iCLASS SE/SR/Seos	125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire EV1/EV2 ⁽¹⁾ , FeliCa			
	RF Read	Range ⁽²⁾	EM/t	MIFARE/DESFire : 50 mm (2"), FeliCa: 30 mm	(1.2")			
	Mobile		NFC, BLE					
	CPU			1.8 GHz Dual Core + 1.4 GHz Quad Core				
	Memory		16GB Flash + 2GB RAM					
	LCD Type		7" IPS color LCD					
	LCD Resolution		800 x 1280 pixels					
	Sound		16bit					
	Operating Temperature		-20°C ~ 50°C (-68°F ~ 122°F)					
General	Operating Humidity		0% ~ 80%, non-condensing					
	Dimension (W x H x D)		119.8mm x 223 (4.7" x 8	119.8mm x 268.4mm x 49.7mm (4.7" x 10.6" x 1.9")				
		Device		5g	670g			
	Weight	Bracket (Including washer and bolt)	181g		205g			
	IP Rating			IP65				
	Certificat		CE, FCC, KC, ROHS, REACH, WEEE					
	Recognit	ion Distance	0.5m ~ 1.3m (19.7" ~ 51.2")					
		ion Height	140cm ~ 190cm (55.1" ~ 74.8")					
Face	Matching		Less than 0.5 sec					
	Live Face Detection (Anti-Spoofing)		Supported					
	Image Di	imension			300 x 400 pixels			
	Resolution			500 dpi				
Fingerprint	Template	•		/A	SUPREMA / ISO19794-2, ANSI-378			
ringerprint	Extractor	/ Matcher	IN	/A	MINEX certified and compliant			
	Sensor Co	ertificates			FBI PIV and FBI Mobile ID FAP20			
	Live Fing	erprint Detection		Supported (Deep learning-based)				
	Max. Use * Based on on per user	r (1:1) ne face/fingerprint enrollment						
Capacity	Max. User (1:N) * Based on one face/fingerprint enrollment per user		Face: 50,000		Face: 50,000 Fingerprint: 100,000			
	Max. Text	Log						
	Max. Ima	ge Log						
	Ethernet							
	RS-485		1ch Host or Slave (Selectable)					
	Wiegand	I	1ch Input or Output (Selectable)					
Interface	TTL Input	t	2ch Inputs					
	Relay		1 Relay					
	USB		USB 2.0 (Host)					
	Tamper		Supported					
Power			Voltage: DC 12V ~ DC 24V Current: Max. 2.5 A * Use a 24V/2.5A adapter. Must follow the product manual when using a 12V adapter.					

DESFire EV2 cards are supported by having backward compatibility of DESFire EV1 cards. CSN and smart card functions are compatible with FaceStation F2. RF read range will vary depending on the installation environment.



Suprema Inc.

17F Parkview Tower, 248, Jeongjail-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, 13554, Republic of Korea **T** +82 31 783 4502 www.supremainc.com



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

X-Station 2

Versatile Intelligent Terminal



Suprema X-Station 2 is a versatile intelligent terminal that supports various credentials, such as QR codes, Mobile Access, RFID cards and fingerprints, offering the ultimate flexibility in terms of credential options and system design.





Benefits at a glance



Multi-technology Terminal with Various Credential Options

- Multiple credential options of QR codes, Mobile Access, RFID cards and fingerprints can provide maximum system design flexibility
- · Go mobile, card-less and carefree by using smartphones as credentials



Leading-edge Fingerprint Recognition

- · MINEX-Certified Algorithm
- · Fake/Live Finger Detection
- · Max. Credential: 100,000 (1:N)



Comprehensive RFID Card Compatibility

- · LF (125 kHz), HF (13.56 MHz) dual-band
- · Reads various card types (EM/MIFARE/iCLASS/DESFire/FeliCa)



Enhanced Security and Data Protection

- · Protects data with secure boot process
- · Built-in camera captures image logs for added security
- Open Supervised Device Protocol (OSDP) for secure bidirectional communication between the terminal and controller



Designed for easy deployment and management

- Power over Ethernet (PoE) enables convenient installation with less wiring
- · Dust-tight and waterproof IP65 protection



Improved Usability of Intuitive UI on Touchscreen

- Quick and easy access to features on 4" wide capacitive touchscreen
- · Customizable display on intuitive GUI



Expanded Capacity for more users and security logs

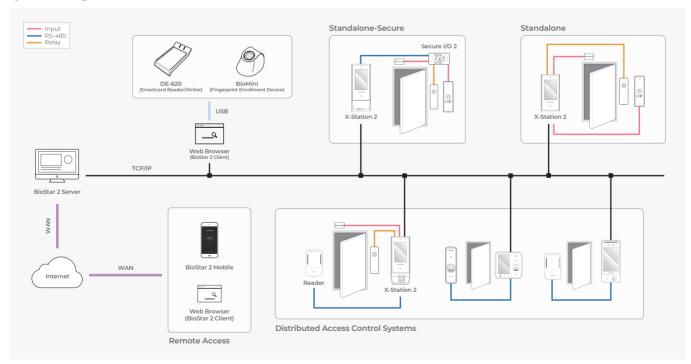
- · Max. 500k users, 5 million text logs, 50k image logs
- · Large memory: 16 GB Flash + 1 GB RAM

Specifications

Model Name	XS2-DPB	XS2-QDPB	XS2-ODPB	XS2-APB	XS2-QAPB	XS2-OAPB		
RF Option	125 kHz EM & 13.56 MHz MIFARE, MIFARE Plus, DESFire EVI/EV2®, FeliCa			125 kHz EM, HID Prox & 13.56 MHz MIFARE, MIFARE Plus,DESFire EVI/EV2 [®] , FeliCa, iCLASS SE/SR/Seos				
Mobile Card	NFC, BLE							
QR/Barcode	N/A	Supported ⁽²⁾	N/A	N/A	Supported ⁽²⁾	N/A		
Biometrics	N/A	N/A	Fingerprint	N/A	N/A	Fingerprint		
Scrambled Keypad (PIN)	Supported							
CPU	1.5 GHz Quad Core							
Memory	16 GB Flash + 1 GB RAM							
Crypto Chip	Supported							
Max. User	500,000(5)							
Max. Credential (1:N)	N/A	N/A	100,000	N/A	N/A	100,000		
Max. Credential (1:1)	Card: 500,000 500,000 Card: 500,000 50 PIN: 500,000 Card: 500,000 PIN: 500,000 Card				Fingerprint: 500,000 Card: 500,000 PIN: 500,000			
Max. Logs	Text 5,000,000 / Image 50,000							
LCD	4" IPS color LCD / 480 x 800 pixels							
Camera	CMOS 2M pixels / 1600 x 1200							
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	2 ch Inputs							
Relay	1 Relay							
USB	USB 2.0 (Host)							
PoE	Supported (IEEE 802.3af compliant)							
IP Rating	IP65							
Tamper	Supported							
Power	DC 12 V (Max. 0.8 A) or DC 24 V (Max. 0.45 A)							
Dimensions (W x H x D, mm)	82 mm x 159 mm x 25.9 mm	82 mm x 203 mm x 33.9 mm	82 mm x 208.5 mm x 25.9(53) mm	82 mm x 159 mm x 25.9 mm	82 mm x 203 mm x 33.9 mm	82 mm x 208.5 mm x 25.9(53) mm		
Operating Temperature	-20°C-50°C (-4°F-122°F)							
Certificates	KC, CE, UKCA, FCC, RCM (Compliance: RoHS, REACH, WEEE)							

- © DESFire EV2 cards are supported by having backward compatibility of DESFire EV1 cards. CSN and smart card functions are compatible with X-Station 2. © Supports QR/Barcodes composed of up to 32 ASCII code strings. QR codes can be issued on Suprema BioStar 2 or 3rd party systems.
- The number of users registered without having any credential data

System Configurations





Suprema Inc.

17F Parkview Tower, 248, Jeongjail-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, 13554, Republic of Korea T +82 31 783 4502 www.supremainc.com



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