

FaceLite

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버전 1.02

한국어

KO 101.00.FL V1.02A

목차

안전을 위한 주의사항	2	제품 사양	20
기호	2	제품 치수	21
시작하기	4	FCC 준수 정보	22
구성품	4		
각 부분의 명칭 및 기능	5	유럽 연합 적합성 선언 (CE)	22
케이블 및 커넥터	6		
올바른 얼굴 등록 및 인증 방법	8		
설치	9	부록	23
브래킷 및 제품 고정	9	면책 조항	23
전원 연결	11	저작권 공지	23
네트워크 연결	12	오픈 소스 라이선스	23
TCP/IP	12	GNU General Public License	24
TTL 입력 연결	13	GNU Lesser General Public License	31
릴레이 연결	14	OpenSSL License	33
Fail Safe Lock	14	Original SSLeay License	34
Fail Secure Lock	15		
자동문 연결	16		
독립형 연결	17		
Secure I/O 2 연결	18		
Wiegand 연결	19		

안전을 위한 주의사항

사용자의 위험이나 재산상의 손해를 막기 위해 제품을 사용하기 전에 이 설명서를 반드시 읽고 제품을 안전하고 올바르게 사용하십시오. 이 설명서에서 말하는 제품이란 본체와 함께 제공되는 모든 구성품을 포함합니다.

기호



경고: 제품을 사용할 때 위반할 경우 심각한 상해나 사망에 이를 수 있는 경고 사항을 표기할 때 사용합니다.



주의: 제품을 사용할 때 위반할 경우 경미한 상해나 제품 손상이 발생할 수 있는 주의 사항을 표기할 때 사용합니다.



알아두기: 제품을 사용할 때 참고 사항이나 추가 정보를 제공할 때 사용합니다.



경고

설치

사용자가 임의로 제품을 설치하거나 수리하지 마십시오.

- 화재, 감전, 부상의 원인이 됩니다.
- 사용자의 임의 설치나 수리로 인해 제품이 손상된 경우 무상 수리 서비스가 제공되지 않습니다.

제품을 전열기 등으로 인해 열이 발생하는 장소에 설치하지 마십시오.

- 과열로 인한 화재 또는 감전의 원인이 됩니다.

물기가 있는 곳에 설치하지 마십시오.

- 습기로 인한 감전 또는 제품 손상의 원인이 됩니다.

전자파 장애가 있는 곳에 설치하지 마십시오.

- 감전 또는 제품 손상의 원인이 됩니다.

사용

제품 내부에 물, 음료수, 약품 등의 액체가 들어가지 않도록 주의하십시오.

- 화재, 감전, 제품 손상의 원인이 됩니다.

손상된 전원 어댑터나 플러그, 헐거운 콘센트는 사용하지 마십시오.

- 접촉이 불안정할 경우 화재 또는 감전의 원인이 됩니다.

전원 코드를無理하게 구부리거나 망가뜨리지 마십시오.

- 화재 또는 감전의 원인이 됩니다.



주의

설치

제품을 직사광선이나 자외선에 직접 노출된 장소에 설치하지 마십시오.

- 제품 손상, 오작동 및 변색, 변형의 원인이 됩니다.

전원 케이블 등을 통행 장소에 방치하지 마십시오.

- 신체 상해 또는 제품 손상의 원인이 됩니다.

자석, TV, (CRT) 모니터, 스피커 등 자성이 강한 물체 주변에 설치하지 마십시오.

- 고장의 원인이 됩니다.

여러 대의 장치를 설치할 경우 최소 이격 거리를 확인하십시오.

- 다른 장치의 RF 및 BLE 성능에 영향을 주어 장치가 오작동할 수 있습니다.

직류 24V, 2.5 A 이상의 전원 어댑터만 사용하십시오.

- 적합한 전원을 사용하지 않을 경우 장치가 오작동할 수 있습니다.

제품과 Secure I/O 2, 전기정(전기식 잠금 장치)은 반드시 개별 전원을 사용하십시오.

- 장치가 오작동할 수 있습니다.

사용

제품을 떨어뜨리거나 충격을 주지 마십시오.

- 고장의 원인이 됩니다.

제품의 펌웨어 업그레이드 진행 중 전원 공급이 중단되지 않도록 주의하십시오.

- 고장의 원인이 됩니다.

암호를 타인이 알지 못하도록 관리하고, 주기적으로 변경하십시오.

- 불법 침입의 원인이 됩니다.

제품의 버튼(터치패드)을 무리하게 누르거나 날카로운 도구를 사용해 누르지 마십시오.

- 고장의 원인이 됩니다.

제품을 -20°C ~50°C 이내에서 사용하고 너무 낮거나 높은 온도에서 보관하지 마십시오.

- 고장의 원인이 됩니다.

제품을 청소할 때 주의하십시오.

- 제품을 표면을 깨끗한 마른 천으로 부드럽게 닦으십시오.
- 제품을 소독해야 할 경우 마른 천에 소독용 알코올을 적당량 묻힌 뒤 제품 표면을 부드럽게 닦으십시오. 이소프로필 알코올이 70~75% 함유된 소독용 알코올과 깨끗하고 보풀이 없는 부드러운 천을 사용하십시오.
- 소독제를 제품에 직접 분사하지 마십시오.

제품을 원래 용도 이외 다른 용도로 사용하지 마십시오.

- 고장의 원인이 됩니다.

RTC 배터리

승인되지 않거나 잘못된 종류의 배터리로 교체하면 폭발의 위험이 있습니다. 배터리는 거주 지역 또는 국제 폐기물 규정에 따라 폐기하십시오.

시작하기

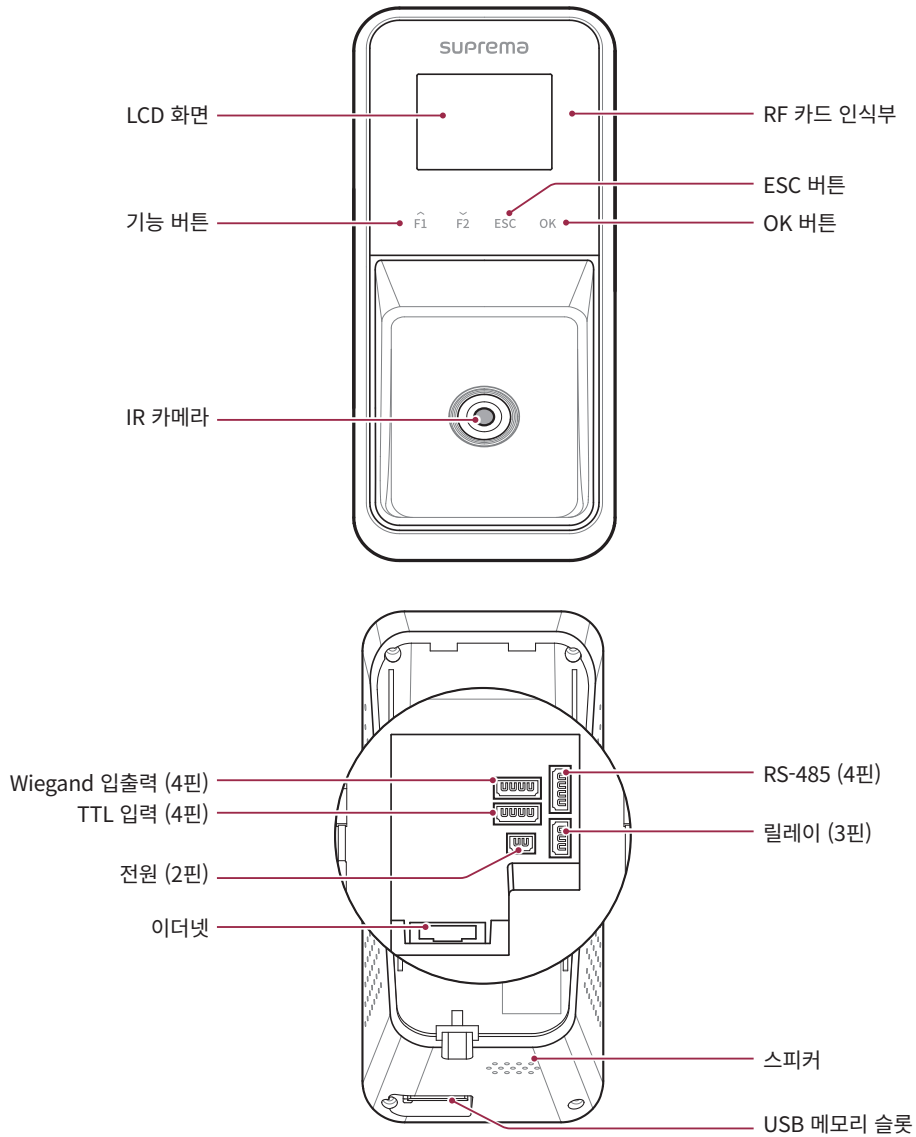
구성품

		
<p>FaceLite</p>	<p>벽걸이용 브래킷</p>	<p>드릴링 템플릿</p>
		
<p>연결 케이블</p>	<p>다이오드</p>	<p>120 Ω 저항</p>
		
<p>PVC 앵커 x2</p>	<p>고정용 나사 x2</p>	<p>브래킷 고정용 나사 (별 모양)</p>
		
<p>페라이트 코어</p>	<p>퀵 가이드</p>	<p>오픈소스라이선스 가이드</p>



- 구성품은 설치 환경에 따라 달라질 수 있습니다.
- 브래킷과 제품을 조립할 때 향상된 보안을 위해 제품 고정용 나사 대신 동봉된 브래킷 고정용 나사(별 모양)를 이용할 수 있습니다.
- 제품 설치에 대한 내용은 슈프리마 웹 사이트(<https://www.supremainc.com>)에 접속하여 설치 가이드를 확인하십시오.

각 부분의 명칭 및 기능



명칭	기능 설명
LCD 화면	동작을 위한 UI를 제공합니다.
기능 버튼	근태 키, 문자 입력 등에 사용합니다. 문자를 입력할 때 기능 버튼을 짧게 누르면 좌우로 이동하며, 길게 누르면 상하로 이동합니다.
IR 카메라	적외선 이미지를 촬영합니다.
OK 버튼	근태 모드를 선택하거나 설정을 저장할 때 사용합니다. 작업 코드가 설정되어 있다면 길게 눌러서 사용자의 작업 코드를 변경할 수 있습니다.
ESC 버튼	메뉴 열기, 이전 화면으로 이동, 입력을 취소할 때 사용합니다.
RF 카드 인식부	출입을 위해 카드를 인식시키는 부분입니다.
Wiegand 입출력 (4핀)	Wiegand 입출력 케이블을 연결합니다.
TTL 입력 (4핀)	TTL 입력 케이블을 연결합니다.
전원 (2핀)	전원 케이블을 연결합니다.
이더넷	이더넷 케이블을 연결합니다.
USB 메모리 슬롯	USB 메모리를 연결합니다.
스피커	소리를 들을 수 있습니다.
릴레이 (3핀)	릴레이 케이블을 연결합니다.
RS-485 (4핀)	RS-485 케이블을 연결합니다.

케이블 및 커넥터

전원



핀	명칭	색상
1	PWR +VDC	빨간색(흰띠)
2	PWR GND	검은색(흰띠)

릴레이



핀	명칭	색상
1	RLY NO	흰색
2	RLY COM	파란색
3	RLY NC	주황색

RS-485



핀	명칭	색상
1	485 TRXP	파란색
2	485 TRXN	노란색
3	485 GND	검은색
4	SH GND	회색

TTL 입력



핀	명칭	색상
1	TTL IN0	빨간색
2	TTL IN1	노란색
3	TTL GND	검은색
4	SH GND	회색

Wiegand 입출력



핀	명칭	색상
1	WG D0	초록색
2	WG D1	흰색
3	WG GND	검은색
4	SH GND	회색

올바른 얼굴 등록 및 인증 방법

얼굴 등록 시 주의 사항

- 얼굴을 등록할 때 장치와 얼굴의 거리를 40 ~ 80 cm로 유지하십시오.
- 표정이 변하지 않도록 주의하십시오. (웃는 얼굴, 찡그린 얼굴, 윙크 등)
- 화면의 지시에 따르지 않을 경우 얼굴 등록이 오래 걸리거나 실패할 수 있습니다.
- 눈이나 눈썹이 가려지지 않도록 주의하십시오.
- 모자, 마스크, 선글라스, 안대를 착용하지 마십시오.
- 두 명의 얼굴이 화면에 동시에 나타나지 않도록 주의하십시오. 한 번에 한 사람씩 등록하십시오.
- 안경을 착용한 사용자는 안경 착용 전/후 얼굴을 모두 등록할 것을 권장합니다.

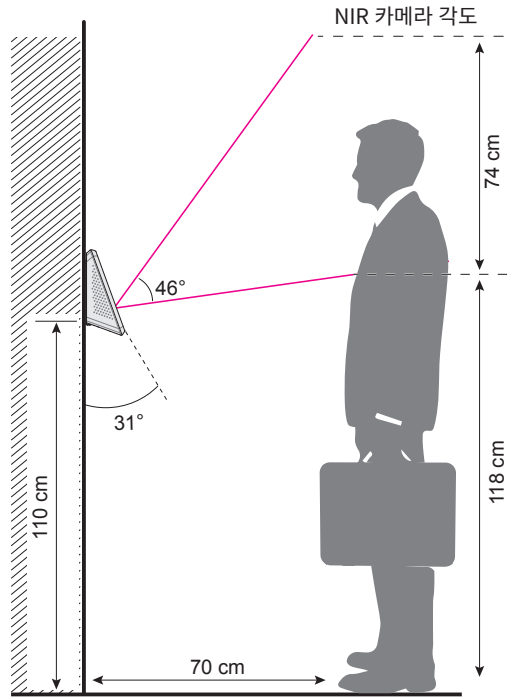
얼굴 인증 시 주의 사항

- 장치의 화면에 표시된 안내선 안에 얼굴이 나타나도록 하십시오.
- 착용하던 안경을 바꾼 경우 인증에 실패할 수 있습니다. 안경을 착용하지 않은 얼굴을 등록한 경우 안경을 벗고 얼굴을 인증하십시오. 안경을 착용한 얼굴만 등록한 경우 기존에 착용하던 안경으로 바꿔서 인증을 다시 시도하십시오.
- 모자, 마스크, 선글라스, 안대 등으로 얼굴의 일부를 가릴 경우 인증에 실패할 수 있습니다. 눈썹과 얼굴을 모두 장치가 인식할 수 있도록 얼굴을 가리지 마십시오.

설치

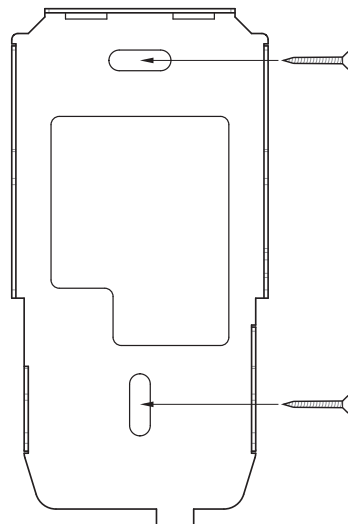
브래킷 및 제품 고정

1 제공된 드릴링 템플릿을 이용하여 제품을 장착할 위치를 정하십시오.



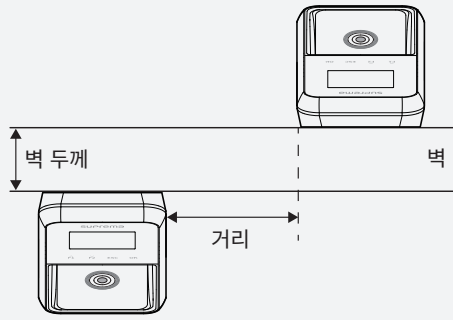
- 장치를 설치할 최적의 높이는 110 cm입니다.
- 장치에 직사광선이 닿지 않는 곳에 설치하십시오.
- 사용자가 얼굴을 인증할 때 얼굴에 직사광선이 닿지 않도록 설치 위치를 조정하십시오.

2 FaceLite를 장착할 위치에 브래킷 고정용 나사를 이용하여 브래킷을 단단히 고정하십시오.

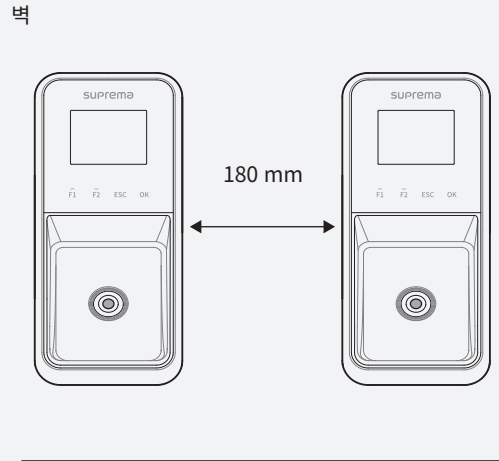




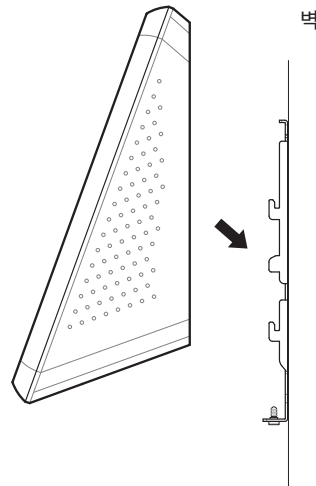
- FaceLite를 콘크리트 벽에 설치할 경우 드릴로 구멍을 뚫어 PVC 앵커를 끼운 뒤 고정용 나사로 고정하십시오.
- RF 신호 간섭을 피하기 위해 최소 이격 거리를 확인하여 설치하십시오.



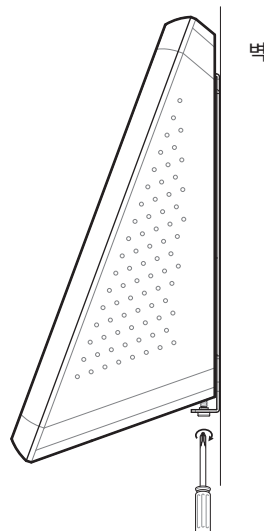
벽 두께	거리
100 mm	80 mm
120 mm	60 mm
150 mm	30 mm



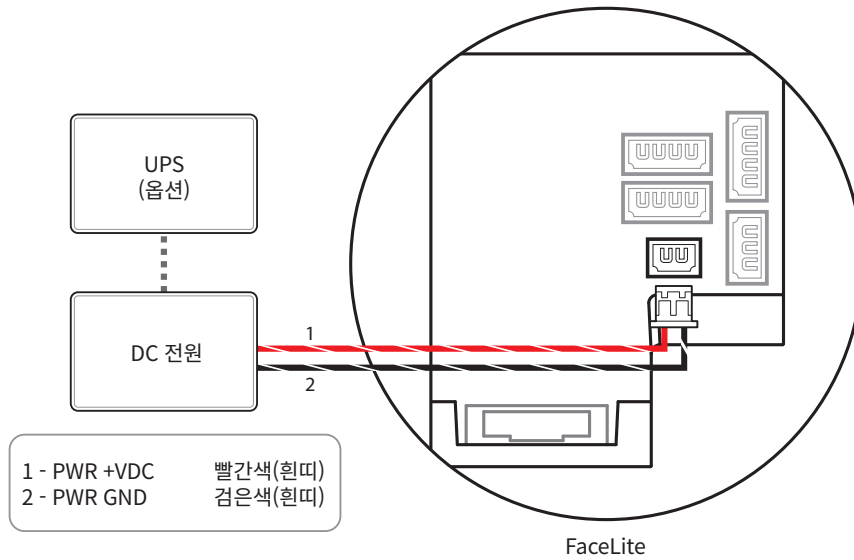
3 고정된 브래킷 위에 FaceLite를 장착하십시오.



4 FaceLite의 제품 고정용 나사를 돌려 FaceLite와 브래킷을 조립하십시오.



전원 연결



- 전원 어댑터는 DC 24 V (± 10 %), 최소 2,500 mA 이상의 제품으로 IEC/EN 60950-1 승인을 받은 제품을 사용하십시오. 전원 어댑터에 다른 기기를 연결하여 사용하려면 단말기의 소모 전력과 다른 기기에 필요한 소모 전력을 합한 전류 용량 이상의 어댑터를 사용해야 합니다.
- Secure I/O 2, 전기정(전기식 잠금장치), 제품은 반드시 개별 전원을 사용하십시오. 전원을 함께 연결하여 사용하면 장치가 오작동할 수 있습니다.
- 별도의 전원 장치를 사용할 경우 FaceLite와 전원 장치 간의 거리에 주의하십시오. 장치와 전원 장치는 최대한 가깝게 설치해야 합니다. 올바르게 연결하지 않을 경우 장치가 오작동할 수 있으므로 주의하십시오. 장치와 전원 장치의 거리가 먼 경우 16 AWG 또는 18 AWG 케이블을 사용할 것을 권장합니다. 사용하는 케이블 규격과 설치 환경에 따라 연결할 수 있는 거리가 다를 수 있습니다.

케이블 규격	최대 연장 길이
16 AWG	150 m
18 AWG	136 m
20 AWG	90 m

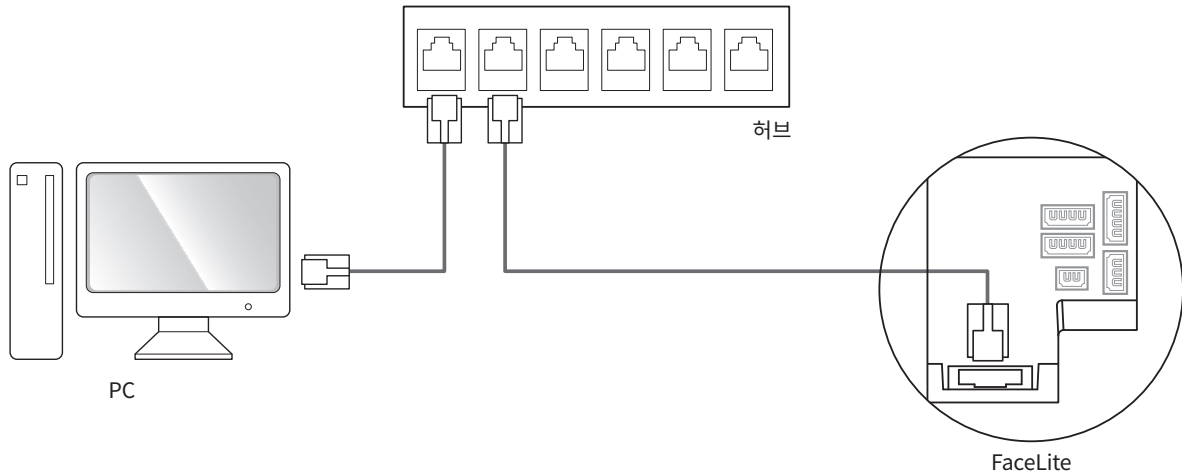
- 전원 어댑터(DC 24 V(± 10 %), 2.5 A)를 사용할 경우 전원 케이블의 길이를 임의로 연장하지 마십시오.
- CAT5 UTP 2-Wire 케이블을 전원 공급 용도로 사용하지 마십시오.

네트워크 연결

TCP/IP

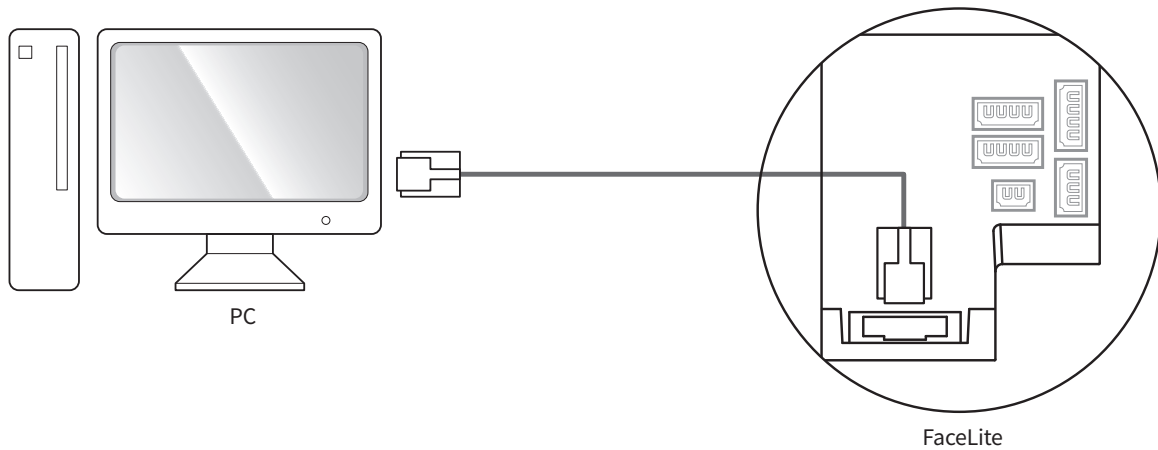
LAN 연결 (허브와 연결)

일반 타입의 CAT-5e 케이블을 사용하여 허브와 연결할 수 있습니다.



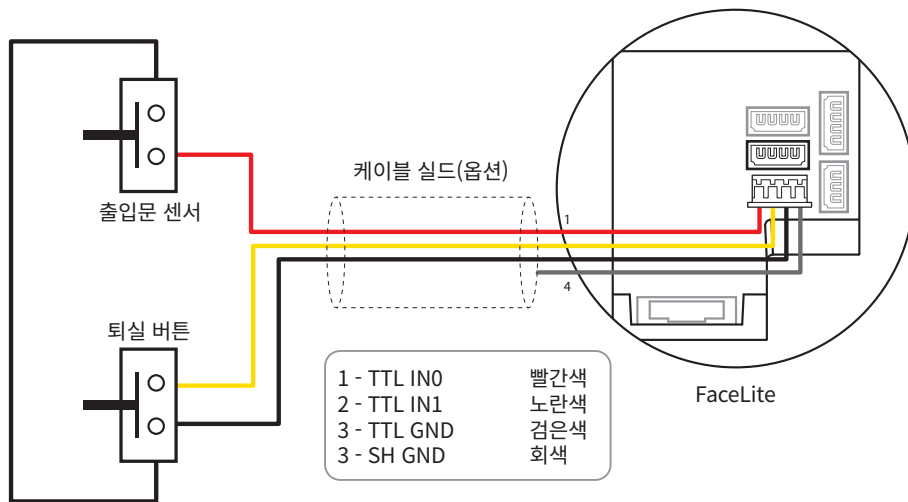
LAN 연결 (PC와 직접 연결)

FaceLite는 자동 MDI/MDIX 기능을 가지고 있으므로 크로스 케이블이나 일반 스트레이트 타입의 CAT-5e 케이블로 PC와 직접 연결할 수 있습니다.



- 기가 비트 이더넷 스위치를 사용할 때 아래 정보를 확인하십시오.
 - CAT-5e 비차폐 꼬임선(UTP)을 사용하십시오.
 - 4 쌍(8 선)을 모두 네트워크 연결로 사용하십시오.
 - 네트워크 케이블의 일부 쌍이나 선을 다른 용도로 사용하지 마십시오.

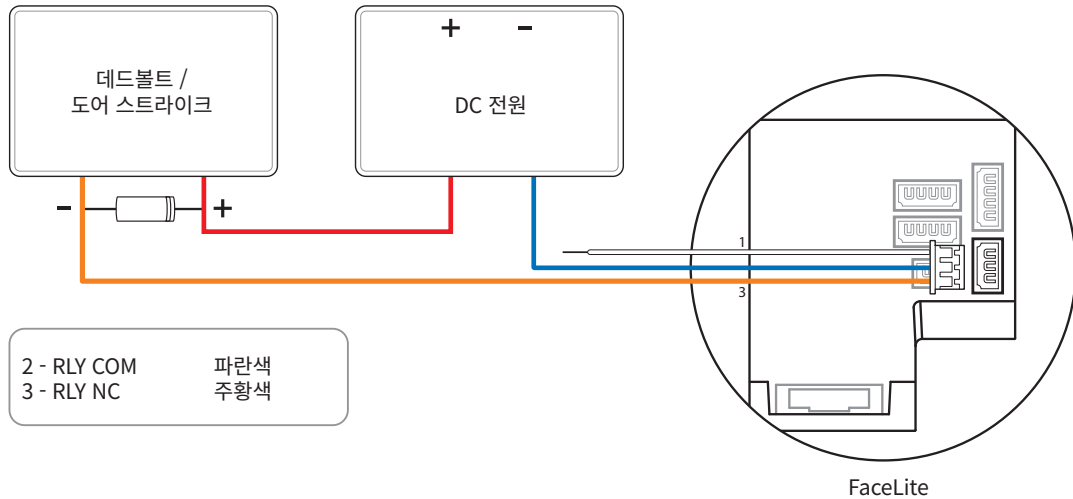
TTL 입력 연결



릴레이 연결

Fail Safe Lock

Fail Safe Lock을 사용하려면 아래 그림과 같이 N/C 릴레이를 연결하십시오. Fail Safe Lock은 정상 시 릴레이 회로에 전류가 흐르며, 릴레이가 동작하여 전류를 일시적으로 차단하면 출입문이 열립니다. 정전이 되거나 외부 요인으로 장치의 전원이 끊길 경우 출입문이 열립니다.



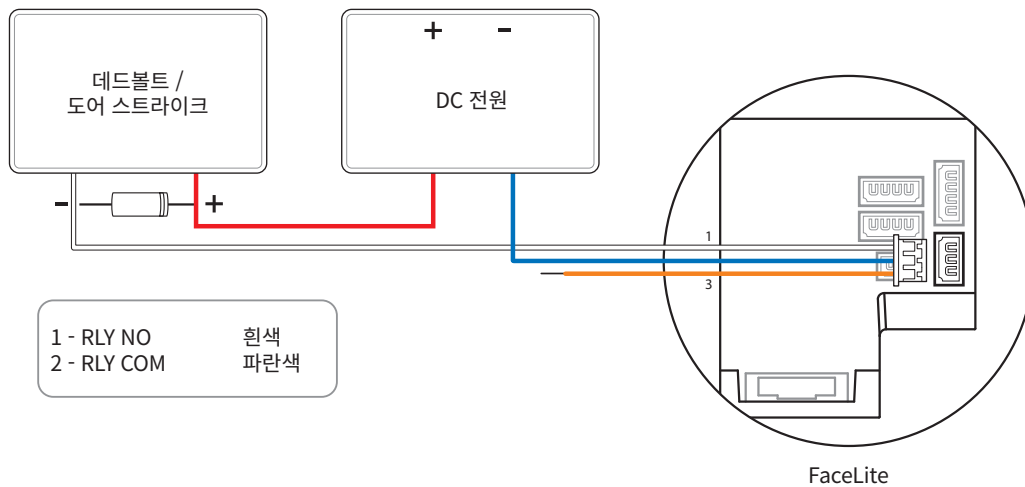
- 출입문 잠금 장치가 작동할 때 발생하는 역전류로부터 릴레이를 보호하기 위해 그림과 같이 출입문 잠금 장치 배선 양쪽에 다이오드를 설치하십시오.
- FaceLite와 출입문 잠금 장치는 별도의 전원을 사용하십시오.
- 슈프리마의 지능형 장치에는 편의를 제공하기 위해 별도의 컨트롤러 없이 독립형으로 연결하여 출입문을 직접 열거나 잠글 수 있도록 하는 릴레이가 내장되어 있습니다. 그러나 향상된 보안이 요구되는 출입통제 애플리케이션의 경우 잠재적으로 출입문 잠금 해제를 유발할 수 있는 변조 공격을 방지하기 위해 장치에 내장된 릴레이를 사용하지 않는 것이 좋습니다. 이러한 애플리케이션의 경우 잠금 제어를 위해 출입문 내부의 안전한 위치에 설치된 슈프리마의 Secure I/O 2, DM-20, CoreStation 과 같은 별도의 릴레이 장치를 사용할 것을 권장합니다.



다이오드의 설치 방향에 주의하십시오. 다이오드는 출입문 잠금 장치와 가깝게 설치하십시오.

Fail Secure Lock

Fail Secure Lock을 사용하려면 아래 그림과 같이 N/O 릴레이를 연결하십시오. Fail Secure Lock은 정상 시 릴레이 회로에 전류가 흐르지 않으며, 릴레이가 동작하여 전류가 흐르면 출입문이 열립니다. 정전이 되거나 외부 요인으로 장치의 전원이 끊길 경우 출입문이 잠깁니다.

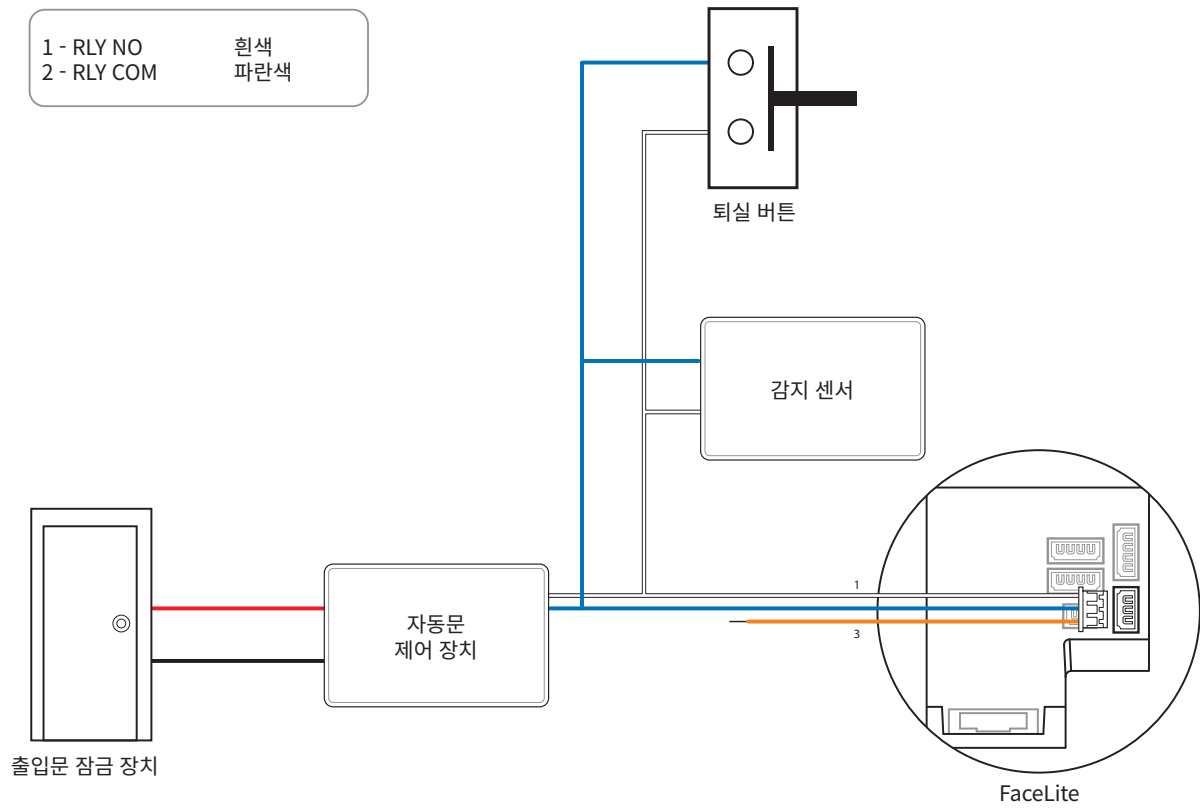


- 출입문 잠금 장치가 작동할 때 발생하는 역전류로부터 릴레이를 보호하기 위해 그림과 같이 출입문 잠금 장치 배선 양쪽에 다이오드를 설치하십시오.
- FaceLite와 출입문 잠금 장치는 별도의 전원을 사용하십시오.
- 슈프리마의 지능형 장치에는 편의를 제공하기 위해 별도의 컨트롤러 없이 독립형으로 연결하여 출입문을 직접 열거나 잠글 수 있도록 하는 릴레이가 내장되어 있습니다. 그러나 향상된 보안이 요구되는 출입통제 애플리케이션의 경우 잠재적으로 출입문 잠금 해제를 유발할 수 있는 변조 공격을 방지하기 위해 장치에 내장된 릴레이를 사용하지 않는 것이 좋습니다. 이러한 애플리케이션의 경우 잠금 제어를 위해 출입문 내부의 안전한 위치에 설치된 슈프리마의 Secure I/O 2, DM-20, CoreStation 과 같은 별도의 릴레이 장치를 사용할 것을 권장합니다.



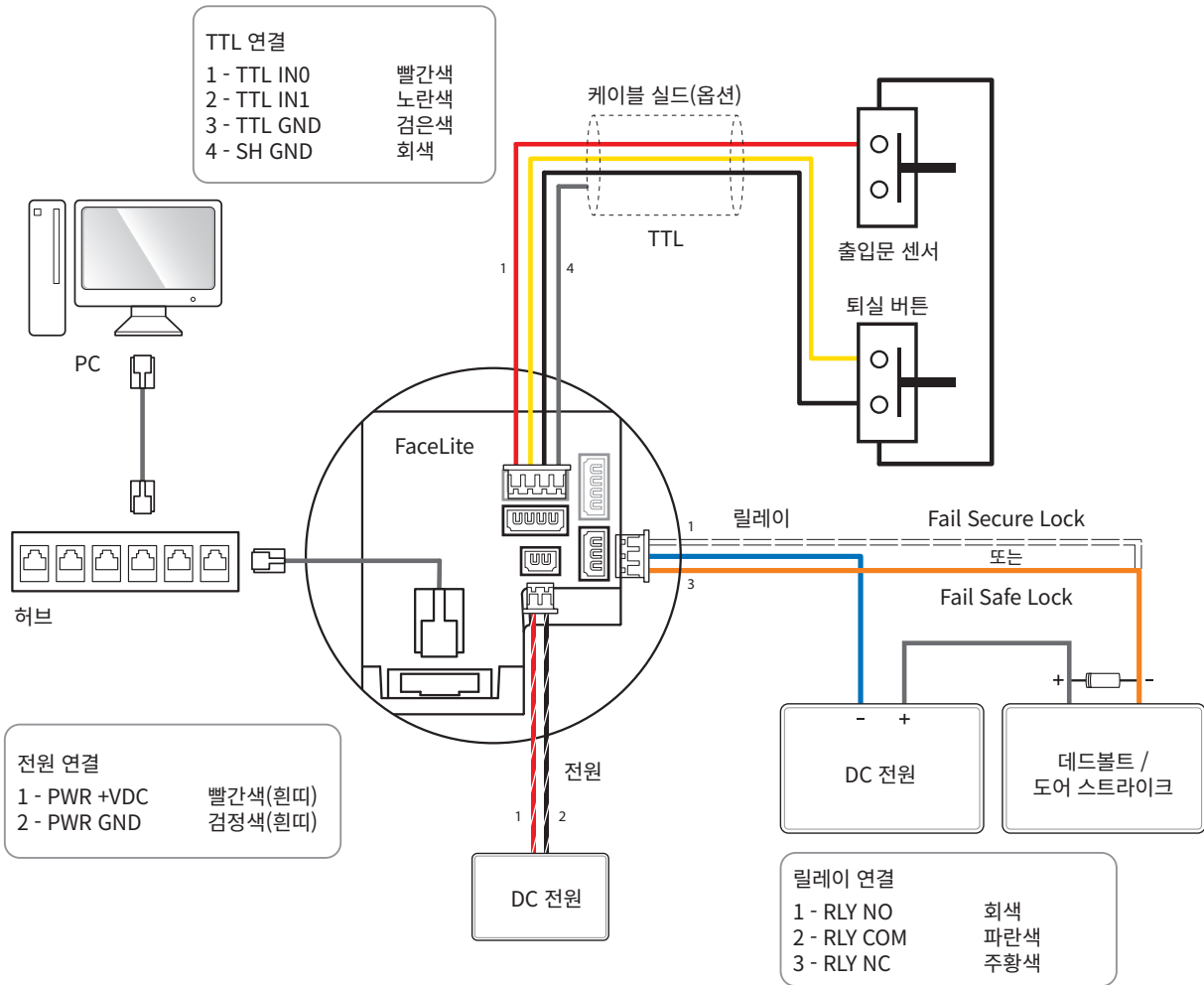
다이오드의 설치 방향에 주의하십시오. 다이오드는 출입문 잠금 장치와 가깝게 설치하십시오.

자동문 연결



독립형 연결

별도의 I/O 장치를 연결하지 않고 FaceLite를 직접 출입문 잠금 장치, 퇴실 버튼, 출입문 센서 등에 연결할 수 있습니다.



슈프리마의 지능형 장치에는 편의를 제공하기 위해 별도의 컨트롤러 없이 독립형으로 연결하여 출입문을 직접 열거나 잠글 수 있도록 하는 릴레이가 내장되어 있습니다. 그러나 향상된 보안이 요구되는 출입통제 애플리케이션의 경우 잠재적으로 출입문 잠금 해제를 유발할 수 있는 변조 공격을 방지하기 위해 장치에 내장된 릴레이를 사용하지 않는 것이 좋습니다. 이러한 애플리케이션의 경우 잠금 제어를 위해 출입문 내부의 안전한 위치에 설치된 슈프리마의 Secure I/O 2, DM-20, CoreStation과 같은 별도의 릴레이 장치를 사용할 것을 권장합니다.

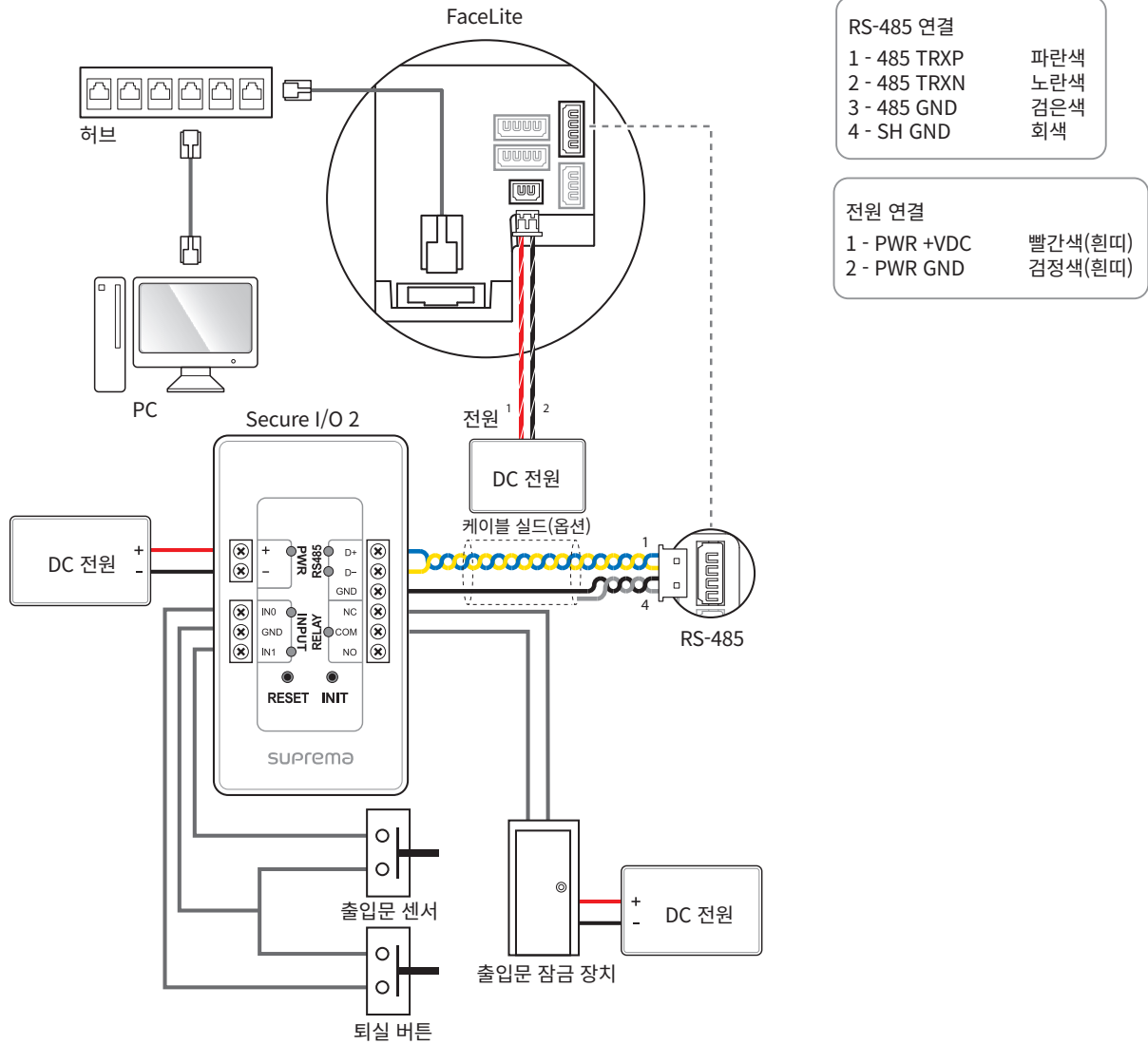


- RS-485 케이블로 슬레이브 장치를 연결하여 FaceLite를 다중 출입문 제어 장치로 사용할 수 있습니다. 슬레이브 장치는 더미 리더로 사용되며 인증은 마스터 장치에서 수행합니다.
- 지문 인식 장치가 FaceLite의 슬레이브 장치로 구성된 경우 다른 FaceLite를 슬레이브 장치로 추가할 수 없습니다.
- 지문 인식 장치가 마스터 장치일 때 FaceLite를 슬레이브 장치로 추가할 수 없습니다.
- FaceLite가 마스터 장치이고 FaceLite를 슬레이브 장치로 연결할 때 1대의 FaceLite만 슬레이브 장치로 추가할 수 있습니다.
- FaceLite가 마스터 장치이고 FaceLite를 슬레이브 장치로 연결할 때 Secure I/O 2와 DM-20을 각각 1대씩 추가로 연결할 수 있습니다.
- FaceLite가 마스터 장치이고 FaceLite를 슬레이브 장치로 연결할 때 OM-120을 추가로 연결할 수 없습니다.
- 연결할 수 있는 최대 슬레이브 장치 수는 인증 방법, 사용자 수, 장치 수에 따라 달라지며 슬레이브 장치 수는 인증 속도에 영향을 줍니다.
- 마스터 장치는 31개의 슬레이브 장치를 제어할 수 있습니다. RS-485 대역폭으로 인해 최대 7대의 지문 인식 장치를 연결할 수 있습니다.
- 더 자세한 내용은 슈프리마 기술 지원팀(CS@suprema.co.kr)에 문의하십시오.

Secure I/O 2 연결

FaceLite에 I/O 장치인 Secure I/O 2를 RS-485로 연결할 수 있습니다. FaceLite와 Secure I/O 2의 연결이 끊기거나 외부 요인에 의해 FaceLite의 전원이 차단되더라도 보안을 유지할 수 있습니다.

- RS-485 케이블은 AWG24, 꼬임선(Twisted Pair), 최대 길이 1.2 km를 사용하십시오.
- RS-485 데이터 체인으로 연결할 경우 종단 저항(120 Ω)을 데이터 체인 연결의 양 끝에 연결하십시오. 중간 선로에 연결할 경우 신호 레벨이 작아져 통신 성능이 떨어지므로 반드시 데이터 체인 연결의 양 끝에 연결하십시오.

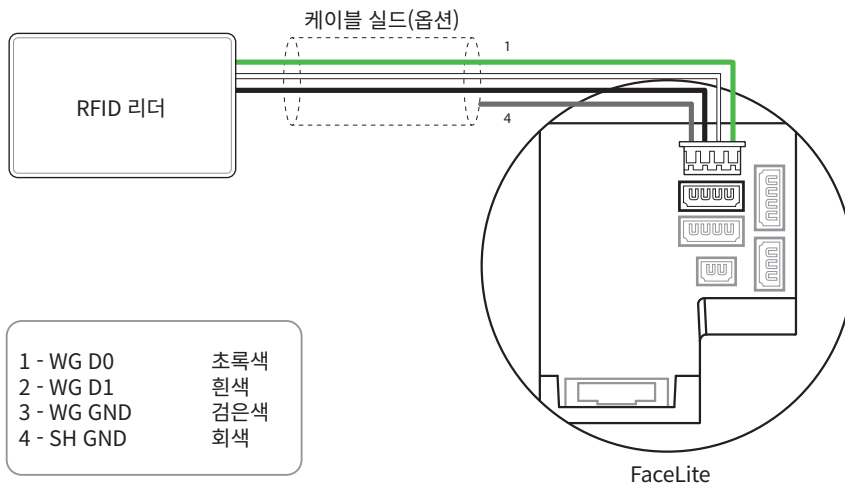




- RS-485 케이블로 슬레이브 장치를 연결하여 FaceLite를 다중 출입문 제어 장치로 사용할 수 있습니다. 슬레이브 장치는 더미 리더로 사용되며 인증은 마스터 장치에서 수행합니다.
- 지문 인식 장치가 FaceLite의 슬레이브 장치로 구성된 경우 다른 FaceLite를 슬레이브 장치로 추가할 수 없습니다.
- 지문 인식 장치가 마스터 장치일 때 FaceLite를 슬레이브 장치로 추가할 수 없습니다.
- FaceLite가 마스터 장치이고 FaceLite를 슬레이브 장치로 연결할 때 1대의 FaceLite만 슬레이브 장치로 추가할 수 있습니다.
- FaceLite가 마스터 장치이고 FaceLite를 슬레이브 장치로 연결할 때 Secure I/O 2와 DM-20을 각각 1대씩 추가로 연결할 수 있습니다.
- FaceLite가 마스터 장치이고 FaceLite를 슬레이브 장치로 연결할 때 OM-120을 추가로 연결할 수 없습니다.
- 연결할 수 있는 최대 슬레이브 장치 수는 인증 방법, 사용자 수, 장치 수에 따라 달라지며 슬레이브 장치 수는 인증 속도에 영향을 줍니다.
- 마스터 장치는 31개의 슬레이브 장치를 제어할 수 있습니다. RS-485 대역폭으로 인해 최대 7대의 지문 인식 장치를 연결할 수 있습니다.
- 더 자세한 내용은 슈프리마 기술 지원팀(CS@suprema.co.kr)에 문의하십시오.

Wiegand 연결

Wiegand 입력 또는 출력 장치로 사용



제품 사양

구분	항목	규격	
크리덴셜	바이오 인식	얼굴	
	RF 카드	<ul style="list-style-type: none"> • FL-DB: 125 kHz EM & 13.56 Mhz MIFARE, MIFARE Plus, DESFire EV1/EV2*, FeliCa, NFC & 2.4 GHz BLE 	
	RF 인식 거리**	MIFARE/DESFire: 50 mm, EM/Felica: 30 mm, BLE: 50 mm	
	LFD	지원	
일반	CPU	1.2 GHz Quad-core	
	메모리	8 GB Flash + 1 GB RAM	
	크립토 칩	지원	
	LCD 종류	2" 컬러 TFT LCD	
	LCD 해상도	320 x 240 픽셀	
	IR LED	8 ea (940 nm)	
	소리	24 bit DSP	
	동작 온도	-20°C ~ 50°C	
	보관 온도	-40°C ~ 70°C	
	동작 습도	0 % ~ 80 %, 비응축	
	보관 습도	0 % ~ 90 %, 비응축	
	카메라 종류	CMOS	
	카메라 해상도	720 x 480 픽셀	
	카메라 각도	IR 렌즈: 대각선 58°	
	치수 (W x H x D)	80 x 170 x 76 (mm)	
	무게	<ul style="list-style-type: none"> • 장치: 296 g • 브래킷: 41 g (와셔 및 볼트 포함) 	
	인증	CE, FCC, KC, RoHS, REACH, WEEE, BT SIG	
	저장 용량	최대 사용자 수	30,000***
		최대 크리덴셜 수 (1:N)	<ul style="list-style-type: none"> • 얼굴: 4,000
최대 크리덴셜 수 (1:1)		<ul style="list-style-type: none"> • 얼굴: 30,000 • 카드: 30,000 • PIN: 30,000 	
최대 텍스트 로그 수		5,000,000	
최대 이미지 로그 수		미지원	
인터페이스	Wi-Fi	미지원	
	이더넷	지원 (10/100 Mbps, 자동 MDI/MDI-X)	
	RS-485	1채널 마스터/슬레이브 (선택 가능)	
	Wiegand	1채널 입력/출력 (선택 가능)	
	TTL 입력	입력 2채널	
	릴레이	1개	
	USB	USB 2.0 (Host)	
	탐퍼	지원	
전기 규격	전원	전압: 24 VDC / 전류: 최대 2.5 A	
	스위치 입력 VIH	최소: 3 V / 최대: 5 V	
	스위치 입력 VIL	최대: 1 V	
	스위치 풀업 저항	4.7 kΩ (입력 단자는 4.7 kΩ으로 풀업 되어 있습니다.)	
	Wiegand 출력 VOH	4.8 V 이상	
	Wiegand 출력 VOL	0.2 V 이하	
	Wiegand 출력 풀업 저항	1 kΩ으로 내부 풀업	
	릴레이	2 A @ 30 VDC Resistive load 1 A @ 30 VDC Inductive load	

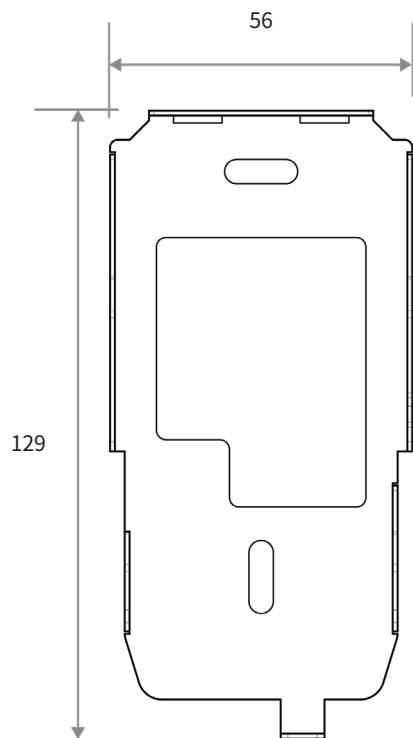
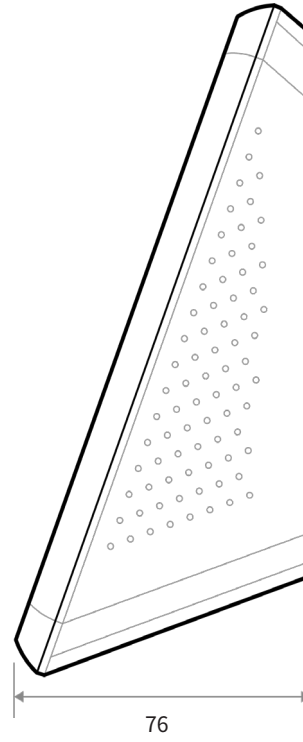
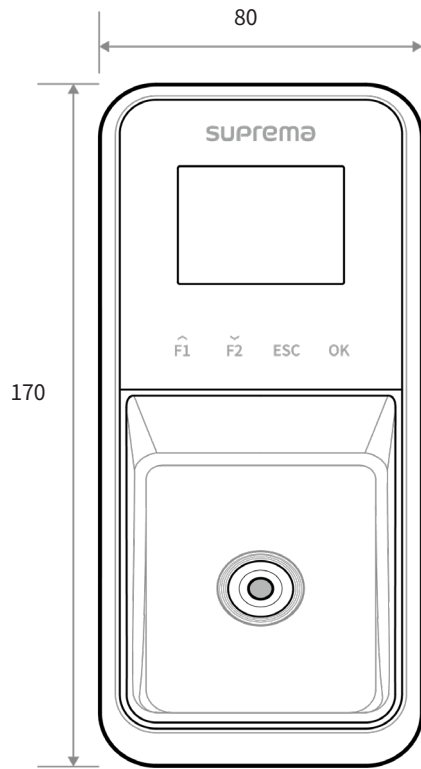
*DESFire EV2 카드는 DESFire EV1 카드와 하위 호환되므로, DESFire EV1 카드의 기능을 포함하여 CSN 및 스마트 카드 기능이 지원됩니다.

**RF 인식 거리는 설치 환경에 따라 다를 수 있습니다.

***크리덴셜 없이 등록된 사용자 기준입니다.

제품 치수

(단위: mm)



FCC 준수 정보

이 기기는 FCC 규제의 Part 15를 준수합니다.
작동은 다음의 두 조건을 따릅니다.

- (1) 이 기기는 해로운 전파 방해를 발생시키지 않습니다.
- (2) 이 기기는 원치 않는 작동을 일으키는 전파 방해를 포함한 어떠한 전파 방해도 수용합니다.



이 기기는 Class B 디지털 기기에 대한 제한 사항을 준수하여 테스트를 거쳤고 FCC규제의 Part 15에 적합하다는 것을 검증받았습니다. 이러한 제한은 주거 설치에서 해로운 전파방해로부터 적절한 수준의 보호를 제공하기 위해 고안되었습니다. 이 장비는 무선 주파수 에너지를 생성, 사용 및 방사하므로 지침에 따라 설치하여 사용하지 않을 경우 무선 통신에서 유해한 간섭을 일으킬 수 있습니다. 그러나 특정한 설치에서는 전파방해가 발생하지 않는다는 어떠한 보장도 하지 않습니다. 본 장비를 켜거나 끌 때 라디오 또는 TV 수신에 해로운 전파방해를 일으키는 경우, 다음 중 하나 이상의 조치를 수행하여 전파방해를 해결하십시오.

- 수신 안테나의 방향을 조정하거나 재설치합니다.
- 장비와 수신기 사이의 간격을 늘립니다.
- 장비를 수신기가 연결된 회로와 다른 회로의 콘센트에 연결합니다.
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