

Guía de instalación de FaceStation F2

Versión 1.00
Español

ES 101.00.FSF2-ODB V1.00A

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Instrucciones de seguridad

Respete las siguientes instrucciones para utilizar el producto de forma segura y evitar cualquier riesgo de lesiones o daños a la propiedad.

Advertencia

El incumplimiento de las instrucciones podría causar lesiones graves o la muerte.

Instalación

No instale el dispositivo bajo la luz solar ni luz UV directa.

- Se podrían producir daños, mal funcionamiento, decoloración o deformación del producto.

No instale el producto en un lugar con luz solar directa, humedad, polvo ni hollín.

- Se podría producir un incendio o una descarga eléctrica.

No instale el producto en un lugar con calor de un calefactor eléctrico.

- Se podría producir un incendio o una descarga eléctrica debido al sobrecalentamiento.

Instale el producto en un lugar seco.

- De lo contrario, se podría producir un daño en el producto o una descarga eléctrica debido a la humedad.

Instale el producto en un lugar sin interferencias electromagnéticas.

- De lo contrario, se podría producir un daño en el producto o una descarga eléctrica.

El usuario no debe instalar ni reparar el producto de forma independiente.

- Se podría producir un incendio, una descarga eléctrica o lesiones personales.
- Si el producto se dañó debido a la instalación o a la reparación independiente del producto por parte del usuario, no se proporcionará el servicio A/S gratuito.

Funcionamiento

No permita que entren líquidos, como agua, bebidas ni sustancias químicas al producto.

- Se podría producir un incendio, una descarga eléctrica o daños al producto.

Precaución

El incumplimiento de las instrucciones podría causar lesiones menores o daños al producto.

Instalación

No instale el cable de la fuente de alimentación en un lugar por el que pasen personas.

- Se podrían producir daños en el producto o lesiones físicas.

No instale el producto cerca de objetos altamente magnéticos, como imanes, televisores, monitores (con tubos de rayos catódicos) o altavoces.

- Se podría producir una falla del producto.

Utilice solo un adaptador de alimentación de corriente de 24 V CC y 12 V, 2.5 A o superior.

- Si no se utiliza la alimentación adecuada, el producto podría funcionar incorrectamente.

Utilice una fuente de alimentación independiente para Secure I/O 2, las cerraduras eléctricas y FaceStation F2, respectivamente.

- Si conecta y utiliza la misma fuente de alimentación para estos dispositivos, podrían funcionar incorrectamente.

Mantenga las distancias mínimas de separación entre dispositivos cuando instale varios de ellos.

- De lo contrario, el rendimiento de RF afectará al otro dispositivo y estos podrían funcionar incorrectamente.

Funcionamiento

No deje caer el producto ni lo someta a impactos.

- Se podría producir una falla del producto.

Administre la contraseña con cuidado, no la divulgue y cámbiela periódicamente.

- De lo contrario, podría producirse una intrusión ilegal.

No presione los botones del producto por la fuerza ni con una herramienta afilada.

- Se podría producir una falla del producto.

Limpie el producto con un paño suave y seco, sin agua, benceno ni alcohol.

- De lo contrario, se podría producir una falla del producto.

FaceStation F2 utiliza botones capacitivos. Si hay humedad en el ambiente o si la superficie del producto se encuentra manchada con agua, limpie el producto con una toalla seca antes de usarlo.

Batería RTC

Reemplazar la batería por una de un tipo incorrecto podría provocar una explosión.

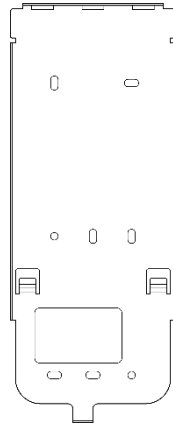
Deseche las baterías de acuerdo con las normas regionales o internacionales correspondientes en materia de residuos.

Introducción

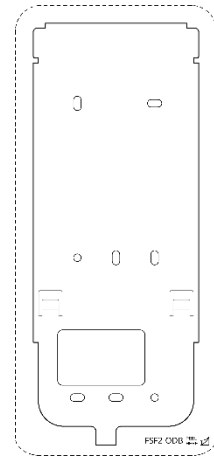
Componentes



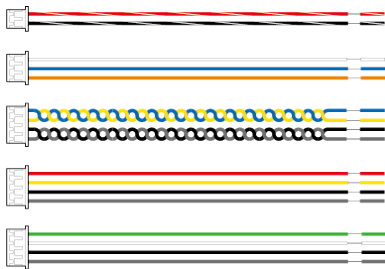
FaceStation F2



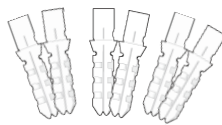
Soporte de pared



Plantilla de perforación



Cable de conexión
(1 x 2 pines, 1 x 3 pines, 3 x 4 pines)



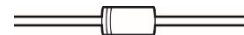
Anclaje de PVC: 6 unidades



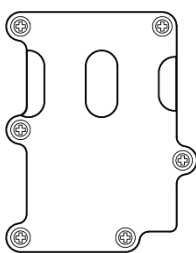
Resistencia de 120 Ω



Tornillo de fijación: 6 unidades



Diodo



Cubierta del cable



Tornillo de fijación del soporte
(Tipo estrella)



Guía rápida

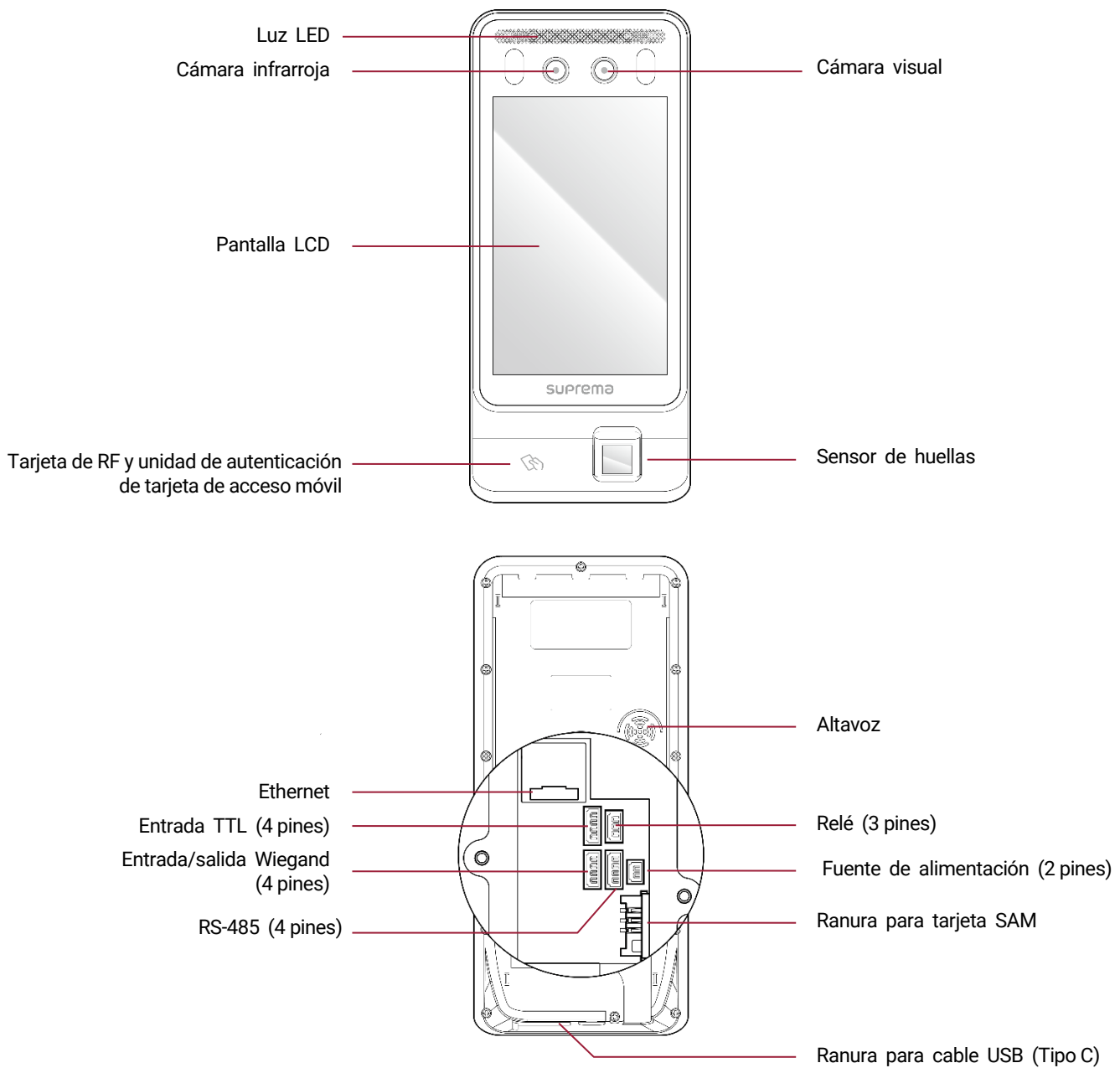


Guía de software de código abierto

NOTA

- Los componentes podrían variar según el entorno de instalación.
- Al montar el producto con el soporte, puede utilizar el tornillo de fijación (tipo estrella) incluido con el soporte en lugar del tornillo de fijación del producto para mejorar la seguridad.

Nombre y función de cada pieza



Nombre	Descripción
Luz LED	Se enciende cuando se detecta al usuario en la oscuridad.
Cámara infrarroja	Captura la imagen infrarroja del rostro.
Cámara visual	Captura una imagen real del rostro.
Pantalla LCD	Provee la Interfaz de Usuario (IU) para operación.
Tarjeta de RF y unidad de autenticación de tarjeta de acceso móvil	Parte para escanear tarjetas para entrada.
Sensor de huellas	Lee huellas.

Altavoz	Transmite sonido.
Ethernet	Permite conectar el cable Ethernet.
Entrada TTL (4 pines)	Permite conectar el cable de entrada TTL.
Relé (3 pines)	Permite conectar el cable del relé.
Entrada/salida Wiegand (4 pines)	Permite conectar el cable de entrada/salida Wiegand.
Fuente de alimentación (2 pines)	Permite conectar el cable de la fuente de alimentación.
RS-485 (4 pines)	Permite conectar el cable RS-485.
Ranura para tarjeta SAM	Permite insertar la tarjeta SAM.
Ranura para cable USB (Tipo C)	Permite conectar el cable USB.

Cables y conectores

Fuente de alimentación



Clavija	Nombre	Color
1	ENERGÍA +VCC	Rojo (banda blanca)
2	TIERRA GENERAL	Negro (banda blanca)

Relé



Clavija	Nombre	Color
1	CONTACTO NORMALMENTE ABIERTO	Blanco
2	COMÚN DE RELÉ	Azul
3	CONTACTO NORMALMENTE CERRADO	Naranja

RS-485



Clavija	Nombre	Color
1	485 TRXP	Azul
2	485 TRXN	Amarillo
3	TIERRA DE 485	Negro
4	TIERRA	Gris

Entrada TTL



Clavija	Nombre	Color
1	TTL ENTRADA 0	Rojo
2	TTL ENTRADA 1	Amarillo
3	TIERRA DE TTL	Negro
4	TIERRA	Gris

Entrada y salida Wiegand



Clavija	Nombre	Color
1	WG D0	Verde
2	WG D1	Blanco
3	TIERRA DE WG	Negro
4	TIERRA	Gris

Método correcto de registro del rostro y de autenticación

Precauciones para registrar un rostro

- Al registrar un rostro, mantenga una distancia de 60 a 100 cm entre el dispositivo y el rostro.
- Tenga cuidado de no cambiar la expresión facial.
- Tenga cuidado de no cubrir los ojos ni las cejas.
- No use máscaras ni anteojos.
- Tenga cuidado de no mostrar dos rostros en la pantalla. Registre una persona a la vez.
- Si no sigue las instrucciones que aparecen en pantalla, el registro del rostro podría tardar o fallar.

Precauciones para autenticar un rostro

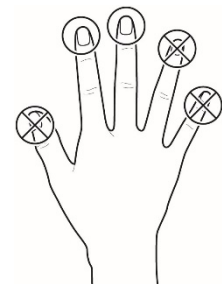
- Asegúrese de que el rostro aparezca en el centro de la pantalla del dispositivo. Cuando aparezca la guía, siga las instrucciones que se muestran en la pantalla para autenticar el rostro.
- Si se cubre parte del rostro con una máscara o gafas de sol, la autenticación podría fallar. No se cubra el rostro; deje que el dispositivo reconozca ambas cejas y el rostro.

Cómo enrollar una huella

Para mejorar la velocidad de autenticación de huellas, regístrelas correctamente. FaceStation F2 puede reconocer una huella dactilar incluso si cambia el ángulo y la posición de la entrada de la huella de un usuario. Si en el momento de enrollar una huella presta atención a los siguientes detalles, podrá mejorar la velocidad de autenticación.

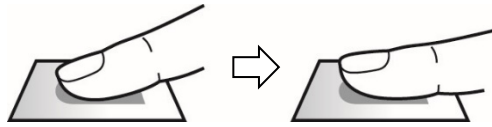
Selección de un dedo para el ingreso de la huella

- En preparación para una situación en la que no se pueda utilizar la huella de un dedo específico; por ejemplo, si el usuario tiene una mano ocupada o si se hiere un dedo, se pueden enrollar hasta 10 huellas por cada usuario.
- En el caso de un usuario cuya huella no se pueda reconocer bien, la tasa de autenticación se puede mejorar si se enrolla el mismo dedo dos veces.
- Si un dedo tiene un corte o la huella está borrosa, seleccione otro dedo.
- Se recomienda utilizar el dedo índice o el dedo medio al escanear la huella. La tasa de autenticación se puede reducir si es difícil colocar con precisión otro dedo en el centro del sensor de huellas.



Método de enrolamiento de la huella

- 1 Cuando un mensaje que dice "Place your finger on the sensor" (Coloque su dedo sobre el sensor) aparezca en la pantalla LCD para enrolar la huella, coloque el dedo con la huella que desea enrolar en la unidad de autenticación de huellas y presione el dedo gentilmente para lograr una mejor autenticación.



- 2 Cuando aparezca la pantalla de reingreso después de un pitido, vuelva a escanear la huella del dedo enrolado (la huella que se desea grabar se debe escanear dos veces).

NOTA

Precauciones cuando se enrola una huella

Cuando se reconoce la huella, se compara con la huella registrada inicialmente, por lo que el enrolamiento inicial de la huella es el más importante. Preste atención a las siguientes recomendaciones cuando enrole una huella.

- Coloque el dedo presionándolo lo suficiente como para que entre en contacto por completo con el sensor.
- Coloque el centro de la huella en el centro del sensor.
- Si un dedo tiene un corte o la huella está borrosa, seleccione otro dedo.
- Escanee la huella correctamente sin moverla, según las instrucciones de la pantalla.
- Si coloca el dedo en posición vertical y el área de contacto con el sensor disminuye o el ángulo del dedo se deforma, la autenticación de huella podría no realizarse.



Cuando falla el reconocimiento de la huella

FaceStation F2 puede reconocer una huella dactilar independientemente del cambio de estación o del estado del dedo. Sin embargo, la velocidad de autenticación podría variar según el ambiente externo o el método de entrada de la huella.

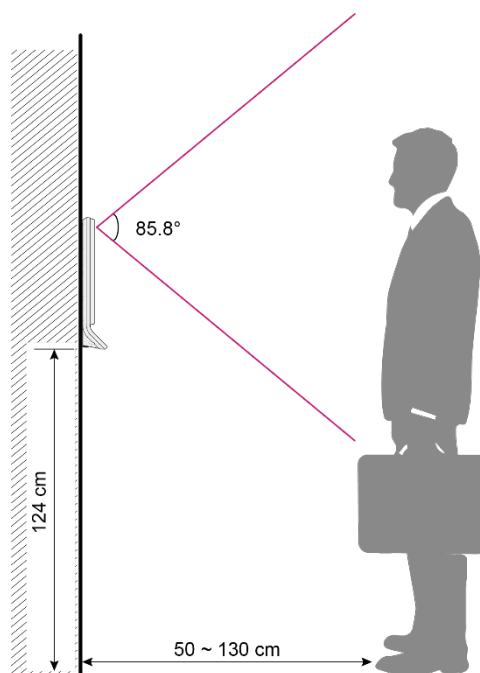
Si la autenticación de la huella presenta problemas, se recomienda tomar las siguientes medidas.

- Si el dedo tiene residuos de agua o sudor, séquelo y luego escanéelo.
- Si el dedo está demasiado seco, sople con su aliento (para humedecer) sobre las yemas de los dedos y luego escanéelo.
- Si el dedo presenta un corte, registre la huella de otro dedo.
- Con frecuencia, la huella inscrita inicialmente podría no escanearse correctamente, en cuyo caso deberá volver a enrolarse de acuerdo con lo indicado en "**Precauciones cuando se enrola una huella**".

Instalación

Fijación del soporte y del producto

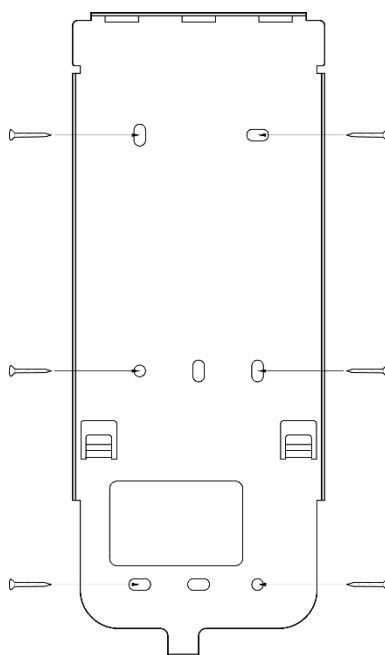
- 1 Determine la posición correcta para instalar el producto mediante la plantilla de taladrado que se proporciona.



NOTA

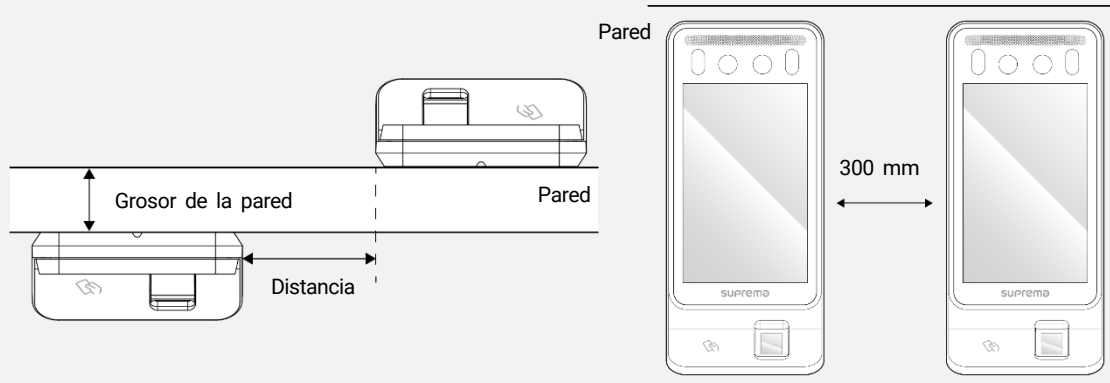
- La altura óptima para instalar el dispositivo es de 124 cm.
- Instale el dispositivo donde no llegue la luz directa del sol ni luz UV.
- Ajuste la posición de instalación, de modo que el rostro no esté expuesto a la luz directa del sol cuando un usuario intente autenticarse.

- 2 Fije firmemente el soporte con tornillos de fijación a través del mismo, hasta la posición donde FaceStation F2 será instalado.



NOTA

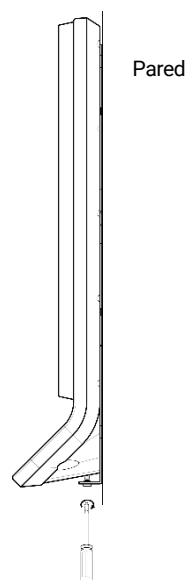
- Si se instala FaceStation F2 en una pared de concreto, perfora orificios, inserte los anclajes de PVC y fíjelos con los tornillos de fijación.
- Para evitar interferencias de RF, se debe mantener una distancia mínima de separación.



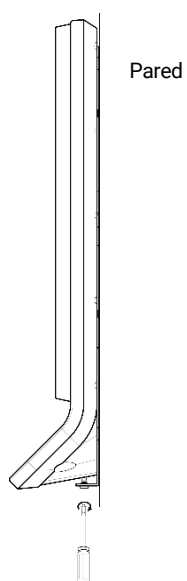
Grosor de la pared	Distancia
100 mm	200 mm
120 mm	180 mm
150 mm	150 mm

- Cuando utilice Suprema Mobile Access, deje una distancia mínima de 1 m entre los dispositivos para evitar interferencias BLE.

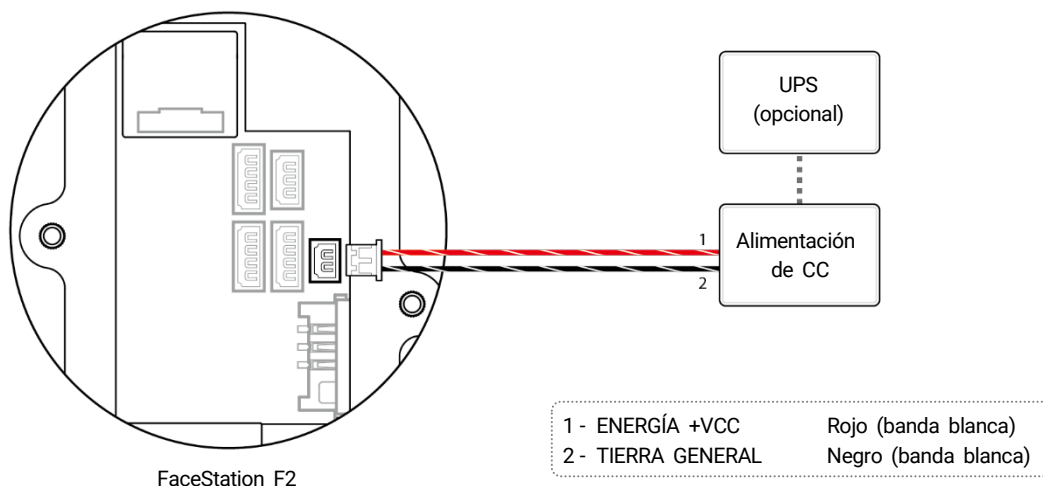
- 3** Instale FaceStation F2 en el soporte que fijó.



- 4** Para conectar FaceStation F2 al soporte, gire el tornillo de fijación del producto.



Conexión a la fuente de alimentación



NOTA

- Utilice un adaptador de alimentación de 24 V CC o 12 V CC ($\pm 10\%$) con un mínimo de 2500 mA con la aprobación de IEC/EN 60950-1. Si desea conectar y utilizar otro dispositivo con la misma fuente de alimentación, debe utilizar un adaptador con una capacidad de corriente igual o superior al consumo total de energía necesario para el terminal y el otro dispositivo.
- Utilice una fuente de alimentación independiente para Secure I/O 2, la cerradura eléctrica y el producto, respectivamente. Si conecta y utiliza la misma fuente de alimentación para estos dispositivos, podrían funcionar incorrectamente.
- Cuando conecte la fuente de alimentación, tenga en cuenta la distancia entre esta y FaceStation F2. FaceStation F2 se debe conectar lo más cerca posible de la fuente de alimentación para que la longitud del cable de conexión se mantenga al mínimo. Si las conexiones de los cables se realizan de forma incorrecta, es posible que funcione mal el dispositivo. Se recomienda utilizar un cable de 16 o 18 AWG si FaceStation F2 está lejos de la fuente de alimentación. La distancia de conexión puede variar según el estándar del cable utilizado y el entorno de instalación. FaceStation F2 es compatible con la alimentación de 24 V CC y 12 V CC, por lo que debe verificar la longitud máxima según la especificación del cable para asegurarse de que la unidad esté alimentada correctamente.

Cable estándar	Longitud máxima extendida	
	24 V CC	12 V CC
16 AWG	150 m	50 m
18 AWG	136 m	30 m
20 AWG	90 m	20 m

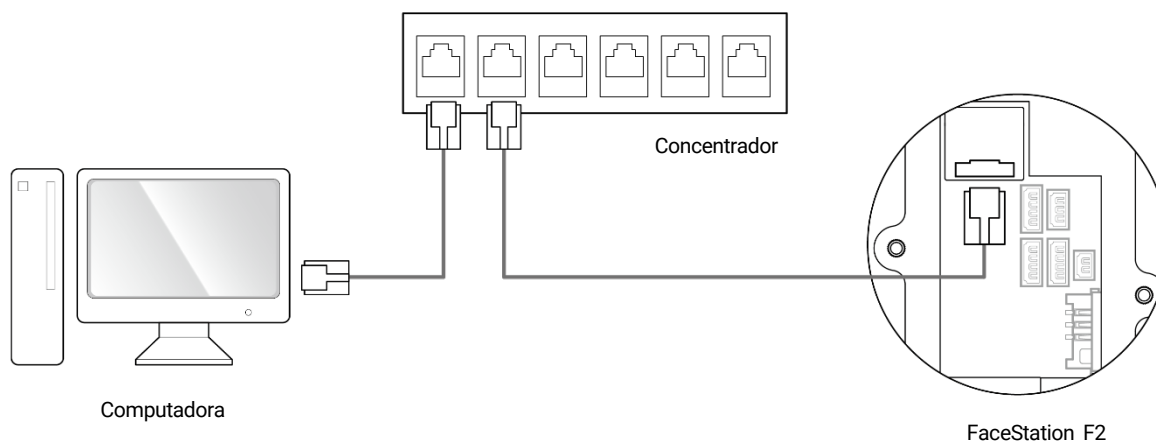
- NO extienda la longitud del cable de alimentación cuando utilice el adaptador de alimentación (24 V CC $\pm 10\%$, 2.5 A).
- NO utilice cable UTP CAT5 de dos hilos con propósito de alimentación de energía.

Conexión de red

TCP/IP

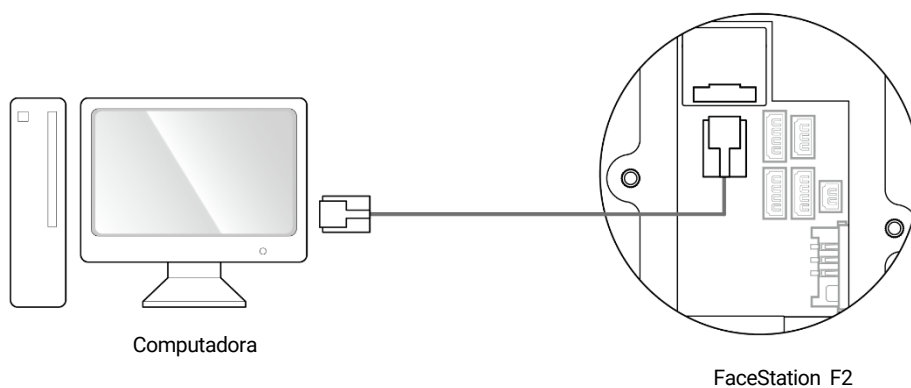
Conexión LAN (conexión a un concentrador)

Puede conectar el producto a un concentrador mediante un cable CAT-5e de tipo general.



Conexión LAN (conexión directa a una computadora)

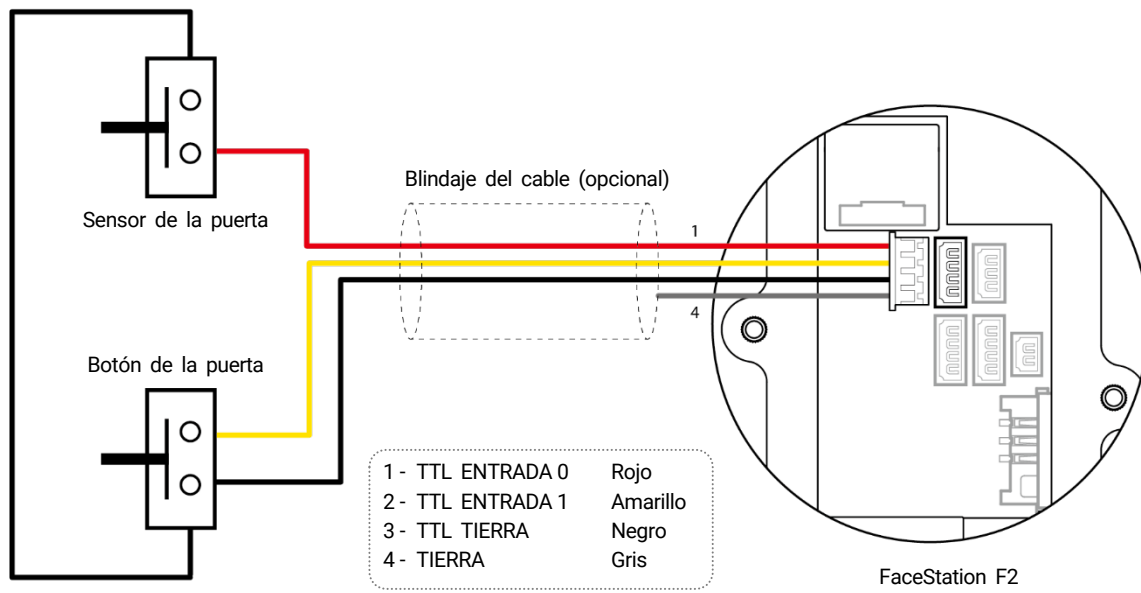
La FaceStation F2 tiene una función MDI/MDIX automática para que se pueda conectar directamente a una computadora mediante un cable recto normal tipo CAT-5e o un cable cruzado.



NOTA

- Cuando utilice un switch gigabit, consulte la siguiente información.
 - Utilice un cable UTP (par trenzado no blindado) Cat5e.
 - Utilice los 4 pares (8 líneas) de cable para la conexión de red.
 - NO utilice el par de cables para otros fines.

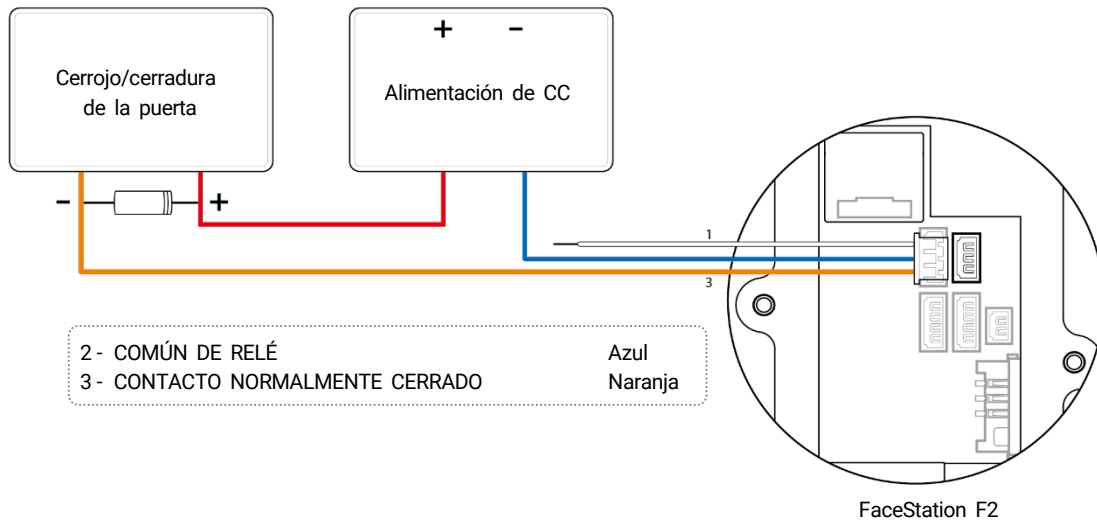
Conexión de entrada TTL



Conexión del relé

Bloqueo a prueba de fallas

Para utilizar el bloqueo a prueba de fallas, conecte el contacto normalmente cerrado como se muestra en la figura siguiente. Normalmente, hay una corriente que fluye a través del relé para el bloqueo a prueba de fallas. Cuando el relé se activa, bloqueando el flujo de corriente, la puerta se abre. Si la fuente de alimentación del producto se corta debido a una falla de la alimentación o a un factor externo, la puerta se abrirá.

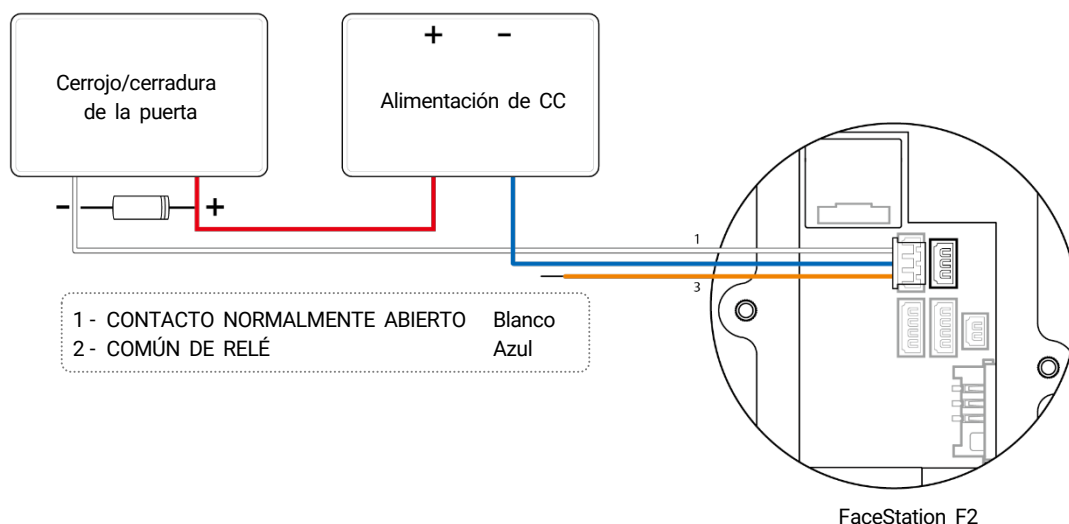


NOTA

- Instale un diodo a ambos lados de la cerradura de la puerta como se muestra en la figura para proteger el relé de la corriente inversa, que se produce cuando la cerradura opera.
- Tenga cuidado con la dirección de instalación del diodo. Instale el diodo cerca de la cerradura de la puerta.
- Utilice una fuente de alimentación independiente para FaceStation F2 y la cerradura de la puerta.
- Los lectores inteligentes independientes de Suprema contienen relés internos que pueden bloquear o desbloquear directamente las puertas sin controladores externos para mayor comodidad. Para las aplicaciones de control de acceso que necesitan seguridad; sin embargo, NO se recomienda utilizar el relé interno de un lector para evitar cualquier ataque de manipulación que pueda activar el desbloqueo de la puerta. Para dichas aplicaciones, se recomienda encarecidamente utilizar una unidad de relé independiente para un control de bloqueo, como las Secure I/O 2, DM-20 o CoreStation de Suprema instaladas en un lado seguro de la puerta.

Bloqueo seguro contra fallas

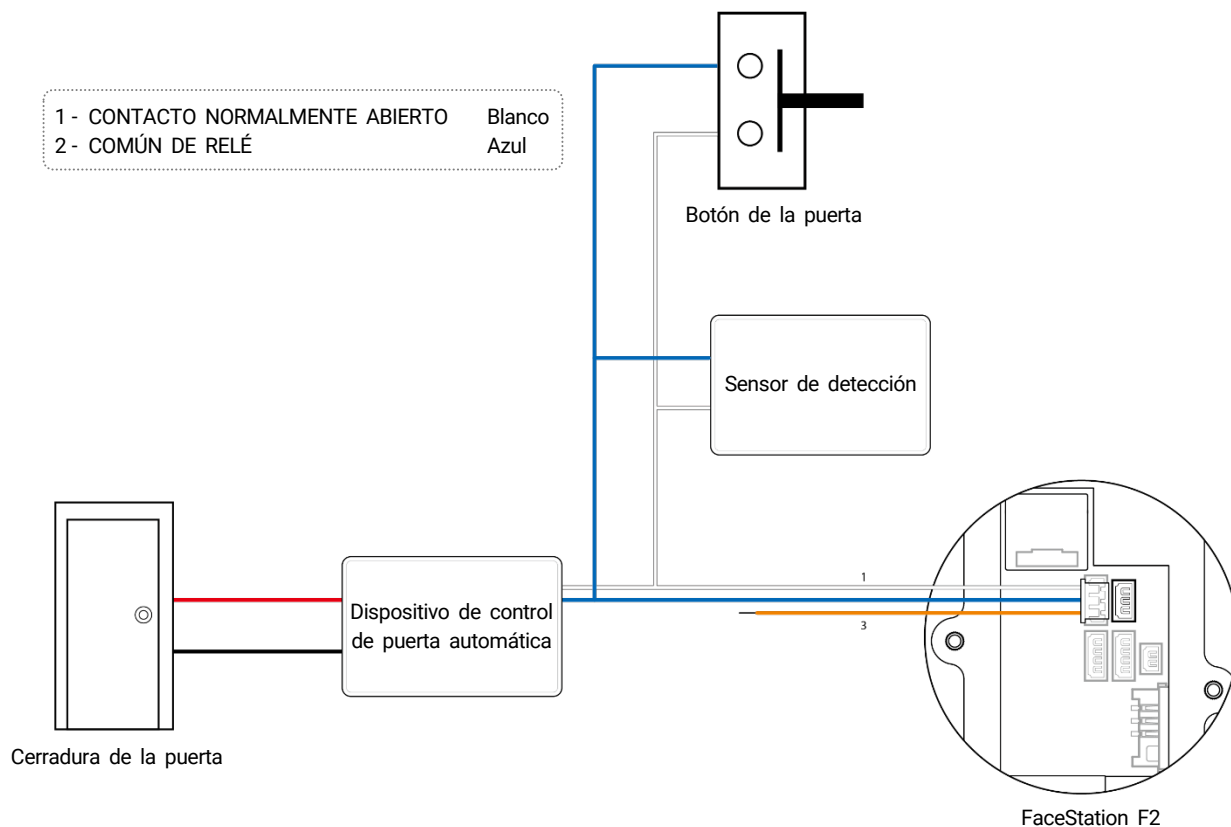
Para utilizar el bloqueo seguro contra fallas, conecte el relé normalmente abierto como se muestra en la figura siguiente. Normalmente no hay flujo de corriente a través del relé para el bloqueo seguro contra fallas. Cuando el relé activa el flujo de corriente, la puerta se abre. Si la fuente de alimentación del producto se corta debido a una falla de la alimentación o a un factor externo, la puerta se bloqueará.



NOTA

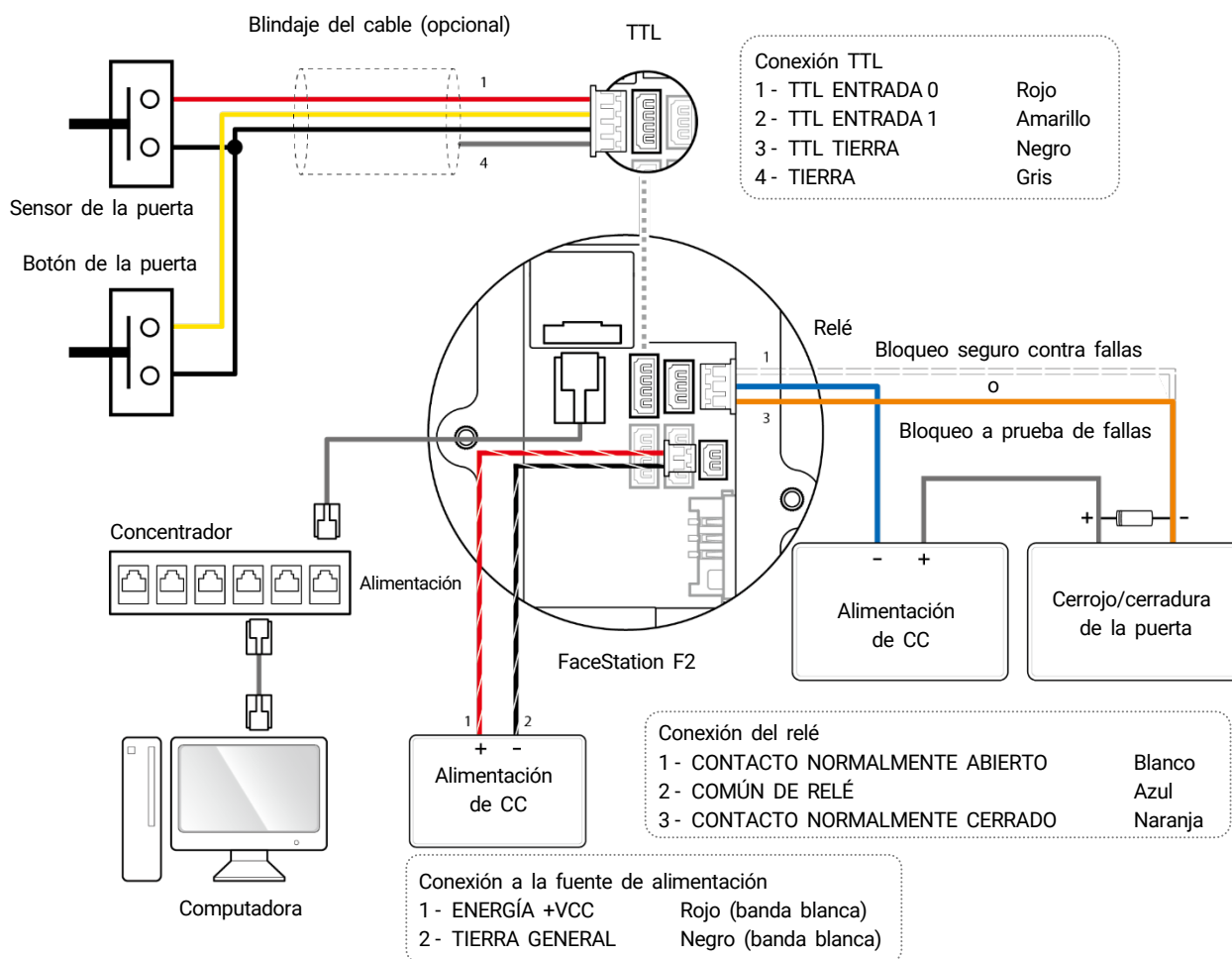
- Instale un diodo a ambos lados del cable de la cerradura de la puerta como se muestra en la figura para proteger el relé de la corriente inversa, que se produce cuando la cerradura opera.
- Tenga cuidado con la dirección de instalación del diodo. Instale el diodo cerca de la cerradura de la puerta.
- Utilice una fuente de alimentación independiente para FaceStation F2 y la cerradura de la puerta.
- Los lectores inteligentes independientes de Suprema contienen relés internos que pueden bloquear o desbloquear directamente las puertas sin controladores externos para mayor comodidad. Para las aplicaciones de control de acceso que necesitan seguridad; sin embargo, NO se recomienda utilizar el relé interno de un lector para evitar cualquier ataque de manipulación que pueda activar el desbloqueo de la puerta. Para dichas aplicaciones, se recomienda encarecidamente utilizar una unidad de relé independiente para un control de bloqueo, como Secure I/O 2, DM-20 o CoreStation de Suprema instaladas en un lado seguro de la puerta.

Conexión de puerta automática



Conexión autónoma (Standalone)

FaceStation F2 se puede conectar directamente a la cerradura de la puerta, al botón de la puerta y al sensor de la puerta sin conectar un dispositivo de E/S independiente.



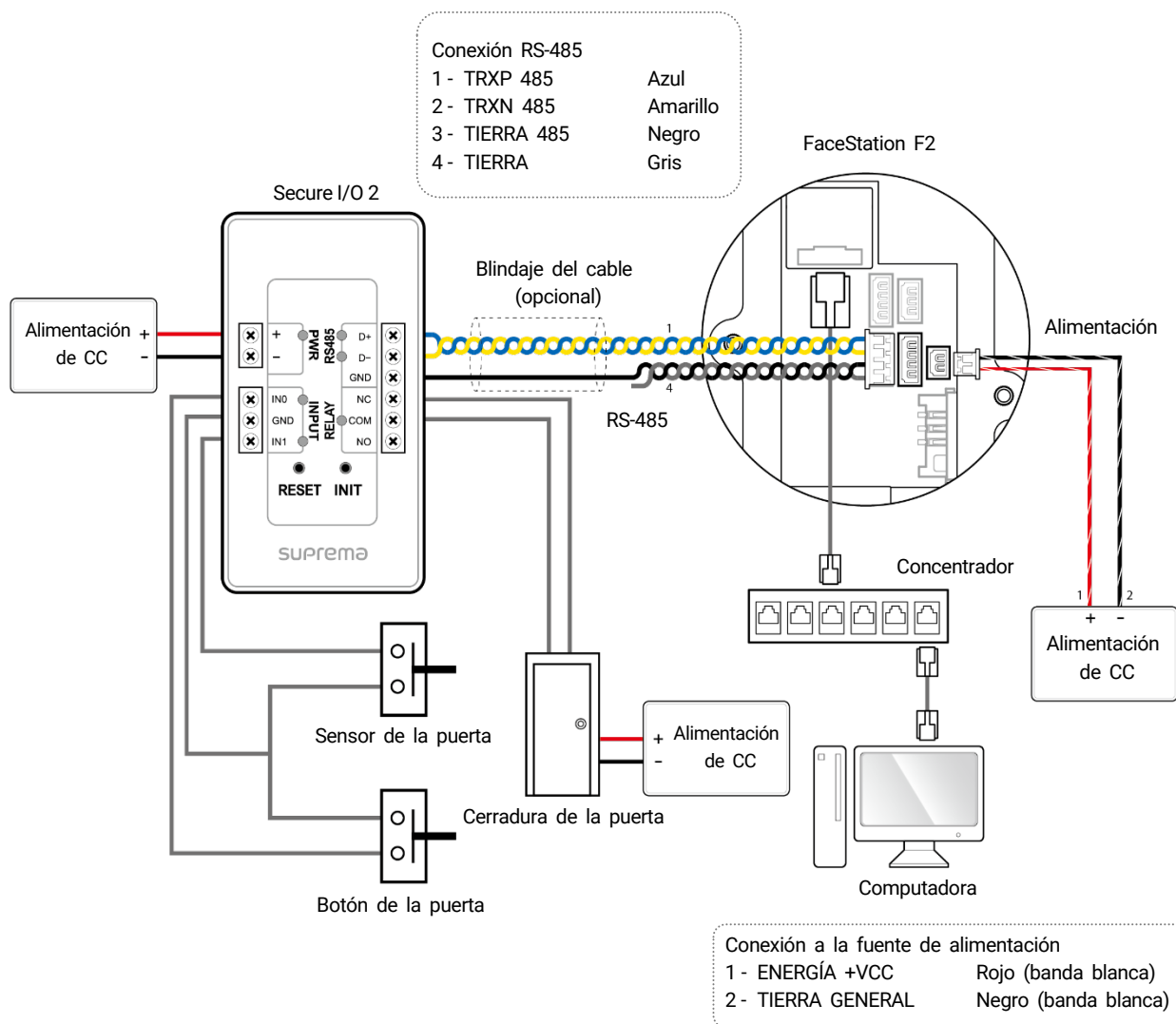
NOTA

- FaceStation F2 se puede utilizar para controlar varias puertas con dispositivos esclavos con la interfaz RS-485. Los dispositivos esclavos se utilizan solamente como lectores y la autenticación se realiza en el dispositivo maestro.
- Si un dispositivo de autenticación de huella dactilar está configurado como un dispositivo esclavo en FaceStation F2, no puede agregar otro FaceStation F2 como dispositivo esclavo.
- Si el dispositivo de autenticación de la huella dactilar es el dispositivo maestro, FaceStation F2 no se puede agregar como dispositivo esclavo.
- Cuando se conecta FaceStation F2 como dispositivo esclavo mientras FaceStation F2 es el dispositivo maestro, solo se puede agregar un FaceStation F2 como dispositivo esclavo.
- Si FaceStation F2 está configurado como un dispositivo esclavo para el terminal de reconocimiento facial, puede conectar un Secure I/O 1 y DM-20 adicional cada uno.
- Si FaceStation F2 está configurado como un dispositivo esclavo para el terminal de reconocimiento facial, no puede conectar un OM-120 adicional.
- La cantidad máxima de dispositivos esclavos disponibles para conectar varía según el método de autenticación, la cantidad de usuarios y la cantidad de dispositivos. Además, se debe tener en cuenta que la cantidad de dispositivos esclavos afecta la velocidad de autenticación.
- Un dispositivo maestro puede controlar 31 dispositivos esclavos. El ancho de banda de RS-485 permite conectar hasta 7 dispositivos de autenticación de huellas.
- Los lectores inteligentes independientes de Suprema contienen relés internos que pueden bloquear o desbloquear directamente las puertas sin controladores externos para mayor comodidad. Para las aplicaciones de control de acceso que necesitan seguridad; sin embargo, NO se recomienda utilizar el relé interno de un lector para evitar cualquier ataque de manipulación que pueda activar el desbloqueo de la puerta. Para dichas aplicaciones, se recomienda encarecidamente utilizar una unidad de relé independiente para un control de bloqueo, como Secure I/O 2, DM-20 o CoreStation de Suprema instaladas en un lado seguro de la puerta.
- Para obtener más información, comuníquese con el equipo de asistencia técnica de Suprema (support.supremainc.com).

Conexión a Secure I/O 2

Secure I/O 2 es un dispositivo de E/S que se puede conectar a FaceStation F2 con el cable RS-485. La seguridad se puede mantener incluso si se pierde la conexión entre FaceStation F2 y Secure I/O 2 o si se apagó la fuente de alimentación de la FaceStation F2 debido a factores externos.

- Utilice un cable de par trenzado AWG24 con una longitud máxima de 1.2 km para el cable RS-485.
- Si se enlaza con una conexión en cadena RS-485, conecte la resistencia de terminación (120 Ω) a ambos extremos de la conexión. Si la conexión se realiza a la línea central, el nivel de la señal se reducirá y el rendimiento de las comunicaciones se deteriorará. Asegúrese de realizar la conexión en ambos extremos del enlace en cadena.

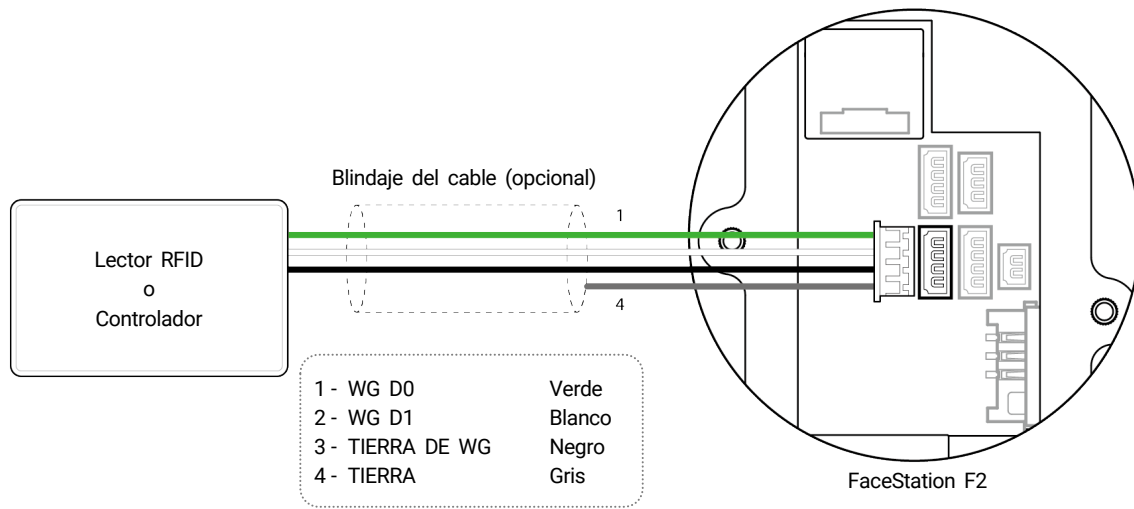


NOTA

- FaceStation F2 se puede utilizar para controlar varias puertas con dispositivos esclavos con la interfaz RS-485. Los dispositivos esclavos se utilizan solamente como lectores y la autenticación se realiza en el dispositivo maestro.
- Si un dispositivo de autenticación de huella dactilar está configurado como un dispositivo esclavo en FaceStation F2, no puede agregar otra FaceStation F2 como dispositivo esclavo.
- Si el dispositivo de autenticación de la huella dactilar es el dispositivo maestro, FaceStation F2 no se puede agregar como dispositivo esclavo.
- Cuando se conecta FaceStation F2 como dispositivo esclavo mientras FaceStation F2 es el dispositivo maestro, solo se puede agregar un FaceStation F2 como dispositivo esclavo.
- Si FaceStation F2 está configurado como dispositivo esclavo para el terminal de reconocimiento facial, puede conectar un Secure I/O 1 y DM-20 adicional cada uno.
- Si FaceStation F2 está configurada como un dispositivo esclavo para el terminal de reconocimiento facial, no puede conectar un OM-120 adicional.
- La cantidad máxima de dispositivos esclavos disponibles para conectar varía según el método de autenticación, la cantidad de usuarios y la cantidad de dispositivos. Además, se debe tener en cuenta que la cantidad de dispositivos esclavos afecta la velocidad de autenticación.
- Un dispositivo maestro puede controlar 31 dispositivos esclavos. El ancho de banda de RS-485 permite conectar hasta 7 dispositivos de autenticación de huellas.
- Para obtener más información, comuníquese con el equipo de asistencia técnica de Suprema (support.supremainc.com).

Conexión Wiegand

Utilizar como dispositivo de entrada o salida Wiegand



Especificaciones del producto

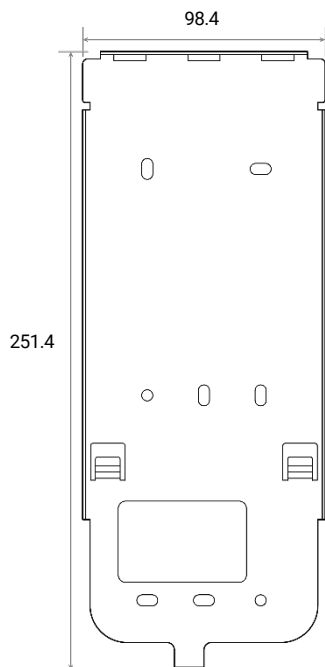
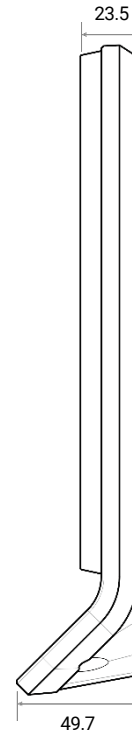
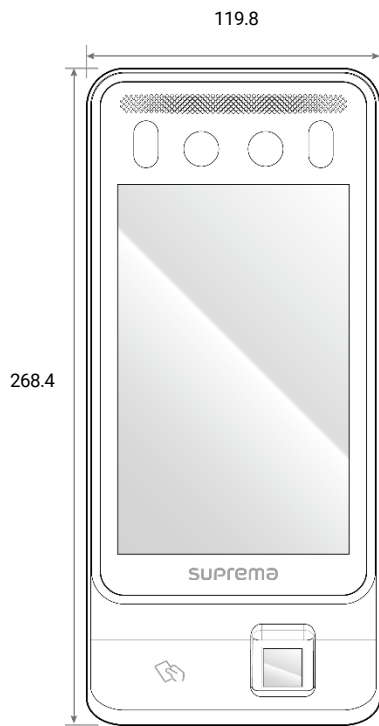
Categoría	Característica	Especificación
Credencial	Biometría	Rostro, huella digital
	Opción de RF	EM de 125 kHz y MIFARE de 13.56 MHz, MIFARE Plus, DESFire EV1/EV2*, FeliCa
	Rango de lectura de RF*	EM/MIFARE/DESFire: 50 mm, FeliCa: 30 mm
	Móvil	NFC, BLE
General	CPU	1.8 GHz Dual Core + 1.4 GHz Quad Core
	Memoria	Memoria flash de 16GB + 2GB de RAM
	Tipo de LCD	Pantalla LCD en color IPS de 7"
	Resolución de LCD	800 x 1280 pixeles
	Sonido	16bit
	Temperatura de funcionamiento	-20°C ~ 50°C
	Temperatura de almacenamiento	-40°C ~ 70°C
	Operación en humedad	0 % ~ 80 %, sin condensación
	Humedad en almacenamiento	0 % ~ 90%, sin condensación
	Cámara	2MP, 2EA
	Dimensión (ancho x alto x largo)	119.8 x 268.4 x 49.7 (mm)
	Peso	Dispositivo: 670g Soporte (incluye arandela y tornillo): 205g
	Clasificación IP	IP65
	Certificaciones	CE, FCC, KC, RoHS, REACH, WEEE
Rostro	Distancia de reconocimiento	0.5 ~ 1.3 m
	Altura de reconocimiento	1.4 ~ 1.9m
	Velocidad de identificación	Menos de 0.5 s
	Identificación facial en vivo	Compatible
Huella	Dimensión de la imagen	300 x 400 pixeles
	Resolución	500 dpi
	Plantilla	SUPREMA/ISO19794-2, ANSI-378
	Extractor/buscador de coincidencias	Con certificación y compatible con MINEX
	Certificados de sensores	PIV del FBI e ID móvil FAP20 del FBI
Capacidad	Identificación facial en vivo	Compatible (basado en software)
	Máximo de usuarios (1:1) * Basado en el registro del rostro o de un dedo por usuario	100,000
	Máximo de usuarios (1:N) * Basado en el registro del rostro o de un dedo por usuario	<ul style="list-style-type: none"> Rostro: 50,000 Huella digital, tarjeta: 100,000
	Máximo de registro de eventos	5,000,000
Interfaz	Registro de imágenes máximo	50,000
	Ethernet	10/100 Mbps, MDI/MDI-X automática
	RS-485	Host o esclavo de 1 canal (seleccionable)
	Wiegand	Entrada o salida de 1 canal (seleccionable)
	Entrada TTL	Entradas de 2 canales
	Relé	1 relé
Eléctrica	USB	USB 2.0 (Maestro)
	Seguro contra alteraciones (Tamper)	Compatible
	Alimentación	Voltaje: 12 V CC ~ 24 V CC Corriente: Máximo 2.5 A
	Interruptor entrada VIH	Mínimo: 3 V Máximo: 5 V
	Interruptor entrada VIL	Máximo: 1 V
	Interruptor de resistencia de polarización	4.7 kΩ (Los puertos de entrada están polarizados con 4.7 kΩ).
	Salida Wiegand VOH	Más de 4.8 V
	Salida Wiegand VOL	Menos de 0.2 V
Eléctrica	Resistencia de polarización de la salida Wiegand	Polarización interna de 1 kΩ
	Relé	Voltaje: Máximo 30 VCC Corriente: 1 A, máximo 2 A

* El rango de lectura de RF varía según el entorno de instalación.

* Las tarjetas DESFire EV2 se pueden usar con tarjetas de compatibilidad retroactiva de DESFire EV1. Las funciones de tarjeta inteligente y CSN son compatibles con FaceStation F2.

Dimensiones

(Unidad: mm)



Información de cumplimiento de la FCC

ESTE DISPOSITIVO CUMPLE CON LA PARTE 15 DEL REGLAMENTO DE LA FCC.

El funcionamiento está sujeto a las siguientes dos condiciones:

- (1) Este dispositivo no puede causar interferencia perjudicial, y
- (2) Este dispositivo debe aceptar cualquier interferencia recibida, incluidas las interferencias que puedan causar un funcionamiento no deseado.

Nota: Este equipo ha sido probado y cumple con los límites para un dispositivo digital Clase A, en conformidad con la parte 15 del reglamento de la FCC. Estos límites están diseñados para proporcionar una protección razonable contra la interferencia perjudicial en una instalación residencial. Este equipo genera, utiliza y puede irradiar energía de radiofrecuencia y, si no se instala y utiliza de acuerdo con las instrucciones, podría causar interferencias perjudiciales en las comunicaciones de radio. Sin embargo, no hay garantía de que no se produzcan interferencias en una instalación determinada. Si este equipo causa interferencia perjudicial en la recepción de radio o televisión, lo que se puede determinar apagando y encendiendo el equipo, se recomienda al usuario que intente corregir la interferencia mediante una o varias de las siguientes medidas:

- Reoriente o reubique la antena receptora.
- Aumente la separación entre el equipo y el receptor.
- Conecte el equipo a una toma de corriente de un circuito distinto al que está conectado el receptor.
- Consulte al distribuidor o a un técnico experimentado en radio/televisión para obtener ayuda.

Las modificaciones no aprobadas expresamente por el fabricante podrían anular la autoridad del usuario para hacer funcionar el equipo de acuerdo con el reglamento de la FCC.

Este aparato y su antena no se deben ubicar juntos ni se deben operar junto con otras antenas o transmisores. Se debe mantener una distancia mínima de separación de 20 cm entre la antena y las personas para que el aparato cumpla con los requisitos de exposición a RF.

Declaración de conformidad de la UE (CE)

Este producto tiene la marca CE de acuerdo con las disposiciones de Radio Equipment Directive (RED) 2014/53/UE. Por la presente, Suprema Inc. declara que este producto cumple los requisitos esenciales y otras disposiciones pertinentes de Radio Equipment Directive (RED) 2014/53/UE.

- Energía de transmisión Bluetooth: -0.1 dBm
- Frecuencia de Bluetooth: 2402~2480 MHz
- Frecuencia de NFC: 13.56 MHz
- Frecuencia de RFID: 13.56 MHz ~ 125 kHz

Para obtener más información, comuníquese con nosotros mediante la siguiente información de contacto.

Suprema Inc.

Sitio web: <https://www.supremainc.com>

Dirección: 17F Parkview Tower 248 Jeongjail-ro, Bundang-gu, Seongnam-is, Gyeonggi-do, 13554, Rep. de Corea

Teléfonos: +82-31-783-4502/Fax: +82-31-783-4503

Anexos

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- Para solicitar el código fuente modificado basado en el kernel 4.x de Linux y el código fuente de BoringSSL, Original SSLeay y AOSP, que se incluye en este producto, escribanos a support.supremainc.com.

GNU General Public License

Version 3, 29 June 2007

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1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The “Corresponding Source” for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work’s System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

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- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- 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.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A “User Product” is either (1) a “consumer product”, which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, “normally used” refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

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