

# FaceStation F2

Guía de instalación de

Versión 1.03

Español

ES 101.00.FSF2-ODB V1.03A

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# Instrucciones de seguridad

Lea estas instrucciones de seguridad antes de utilizar el producto para evitar lesiones personales y a otras personas, además de daños a la propiedad. El término "producto" en este manual se refiere al producto y a cualquier artículo que se entregue con el producto.

## Íconos de instrucciones



**Advertencia:** Este símbolo indica situaciones que pueden causar la muerte o lesiones graves.



**Precaución:** Este símbolo indica situaciones que pueden causar lesiones moderadas o daños a la propiedad.



**Nota:** Este símbolo indica notas o información adicional.



## Advertencia

### Instalación

**No instale ni repare el producto arbitrariamente.**

- Esto puede provocar descargas eléctricas, incendios o daños en el producto.
- Los daños causados por cualquier modificación o incumplimiento de las instrucciones de instalación pueden anular la garantía del fabricante.

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

- Esto puede provocar una descarga eléctrica o un incendio.

**Instale el producto en un lugar bien ventilado y fresco, lejos de la luz directa del sol, a fin de evitar el sobrecalentamiento cuando se instala en áreas exteriores.**

**No ponga el producto dentro de un gabinete sellado cuando lo instale en el exterior.**

- Aumenta la temperatura interna del gabinete y puede provocar descargas eléctricas, incendios o fallas.

**No instale el producto en una ubicación con calor proveniente de un calefactor eléctrico.**

- Esto puede provocar un incendio debido a sobrecalentamiento.

**Instale el producto en una ubicación seca.**

- La humedad y los líquidos pueden provocar descargas eléctricas o daños en el producto.

**No instale el producto en un lugar donde se vea afectado por las frecuencias de radio.**

- Esto puede provocar un incendio o daños en el producto.

### Funcionamiento

**Mantenga el producto seco.**

- La humedad y los líquidos pueden provocar descargas eléctricas, incendios o daños en el producto.

**No utilice adaptadores de poder dañados, enchufes ni tomas eléctricas sueltas.**

- Las conexiones inseguras pueden provocar descargas eléctricas o incendios.

**No doble ni dañe el cable de alimentación.**

- Esto puede provocar una descarga eléctrica o un incendio.



## Precaución

### Instalación

**No instale el producto bajo la luz solar o la luz UV directas.**

- Esto puede causar daños, mal funcionamiento, decoloración o deformación del producto.

**No instale el cable de la fuente de alimentación en una ubicación por el que pasen personas.**

- Esto puede causar lesiones o daños al producto.

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

- Es posible que el producto no funcione correctamente.

**Mantenga las distancias mínimas entre los productos cuando instale varios de ellos.**

- Es posible que el producto esté afectado por frecuencias de radio emitidas por otros productos y que no funcione correctamente.

**Utilice solo una fuente de alimentación de CC de 24 V y 800 mA o superior, o bien CC de 12 V y 1500 mA o superior.**

- Si no se utiliza la fuente de alimentación adecuada, el producto podría presentar fallas.

**Utilice una fuente de alimentación independiente para el Secure I/O 2, la cerradura eléctrica y el producto.**

- Si se conecta y utiliza la misma fuente de alimentación, es posible que el producto no funcione correctamente.

**Asegúrese de que la cubierta del cable esté completamente cerrada después de conectarla al producto para mantener las características de resistencia al agua y al polvo (clasificación IP65). Se recomienda utilizar una carcasa si el producto se instala en exteriores.**

- El producto puede presentar un mal funcionamiento si se dañan las características de resistencia al agua y al polvo.

### Funcionamiento

**No deje caer el producto ni lo someta a impactos.**

- Es posible que el producto no funcione correctamente.

**No desconecte la fuente de alimentación mientras actualiza el firmware del producto.**

- Es posible que el producto no funcione correctamente.

**No divulgue la contraseña a otras personas y cámbiela regularmente.**

- Esto puede provocar una intromisión ilegal.

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

- Es posible que el producto no funcione correctamente.

**No almacene el producto en lugares muy calientes ni muy fríos. Se recomienda utilizar el producto a temperaturas entre -20°C y 50°C.**

- Es posible que el producto no funcione correctamente.

**Cuando limpie el producto, tenga en cuenta los siguientes procedimientos.**

- Limpie el producto con una toalla limpia y seca.
- Si necesita desinfectar el producto, humedezca el paño o la toallita con una cantidad adecuada de alcohol isopropílico y limpie con suavidad todas las superficies expuestas, incluido el sensor de huellas dactilares. Utilice alcohol isopropílico (que contenga un 70 % de alcohol isopropílico) y un paño limpio y no abrasivo, como un paño para limpiar la lente.
- No aplique líquido directamente sobre la superficie del producto.

**No utilice el producto para ningún otro uso que no sea el previsto.**

- Es posible que el producto no funcione correctamente.


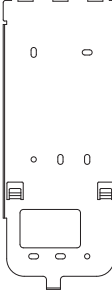
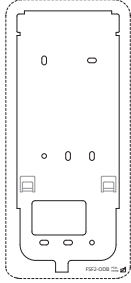
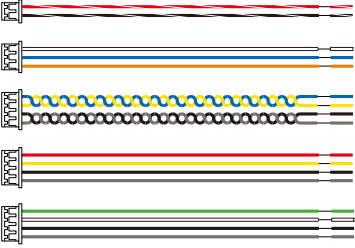


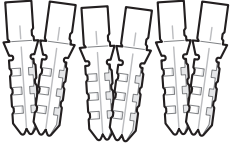
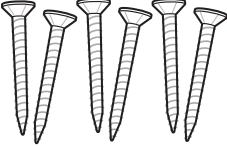

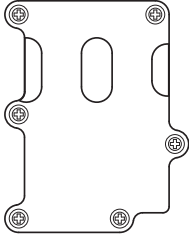
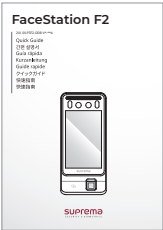

### **Batería RTC**

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

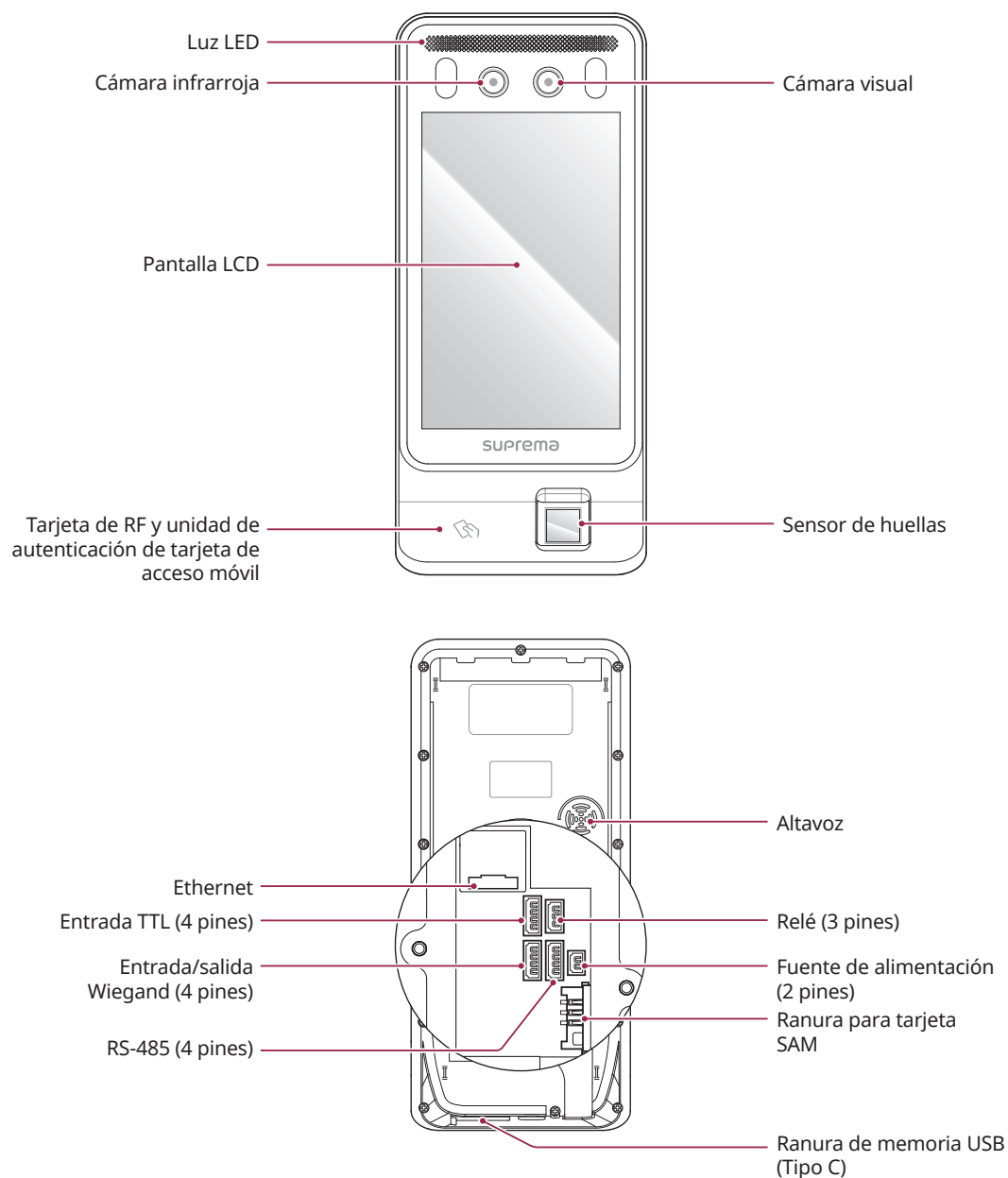
## Componentes

		
<p>FaceStation F2</p>	<p>Soporte de pared</p>	<p>Plantilla de perforación</p>
		
<p>Cable de conexión</p>	<p>Diodo</p>	<p>Resistencia de 120 Ω</p>
		
<p>Anclaje de PVC: 6 unidades</p>	<p>Tornillo de fijación: 6 unidades</p>	<p>Tornillo de fijación del soporte (Tipo estrella)</p>
		
<p>Cubierta del cable</p>	<p>Guía rápida</p>	<p>Guía de software de código abierto</p>



- 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.
- Para obtener contenido adicional sobre la instalación del producto, visite el sitio web de Suprema (<https://www.supremainc.com>) y consulte la guía de instalación.

## 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 el 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 de memoria USB (Tipo C)	Conexión del memoria USB.

## Cables y conectores

### Fuente de alimentación



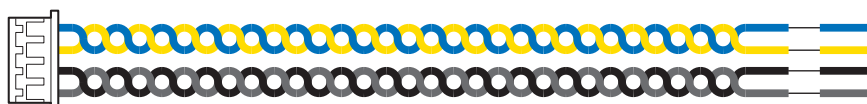
Clavija	Nombre	Color
1	ENERGÍA +VCC	Rojo (banda blanca)
2	TIERRA GENERAL	Negro (banda blanca)

### 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

## TTL input



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

## Wiegand input and output



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.
- No use mascarillas (cubrebocas), sombreros ni parches en los ojos.
- No enrole un rostro con mascarilla (cubrebocas). Puede aumentar la tasa de aceptación falsa (FAR) si se enrollan ambas caras - con y sin mascarilla (cubrebocas).
- No levante ni baje la cabeza.
- No use maquillaje muy cargado.
- No cierre sus ojos.
- Asegúrese de que ambos hombros aparezcan correctamente en la pantalla.
- Quédese quieto y registre su rostro mirando la pantalla.
- 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

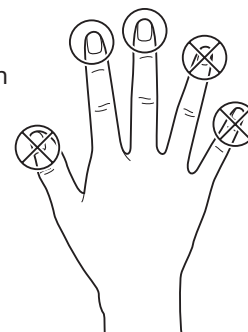
- Asegúrese de que el rostro aparezca en el centro de la pantalla del dispositivo. Cuando aparezca la guía, siga las instrucciones que se muestran en la pantalla para autenticar el rostro.
- Si se cubre parte del rostro con un sombrero, una máscara, un parche ocular o gafas de sol, la autenticación podría fallar. No se cubra el rostro; deje que el dispositivo reconozca ambas cejas y el rostro.
- Autentique su rostro a una distancia de 90 a 100 cm del dispositivo.
- Asegúrese de que ambos hombros aparezcan correctamente en la pantalla. La autenticación puede fallar si sus hombros no están a la misma altura. Quédese quieto y luego autentique su 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).



### 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

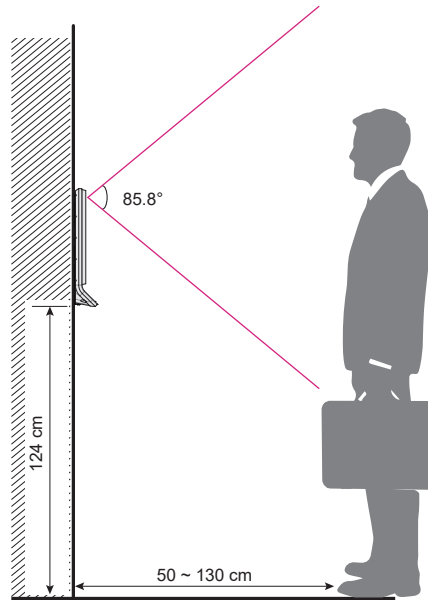
FaceStation F2 puede reconocer una huella dactilar independientemente del cambio de estación o del estado del dedo. Sin embargo, la velocidad de autenticación podría variar según el ambiente externo o el método de entrada de la huella. Si la autenticación de la huella presenta problemas, se recomienda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

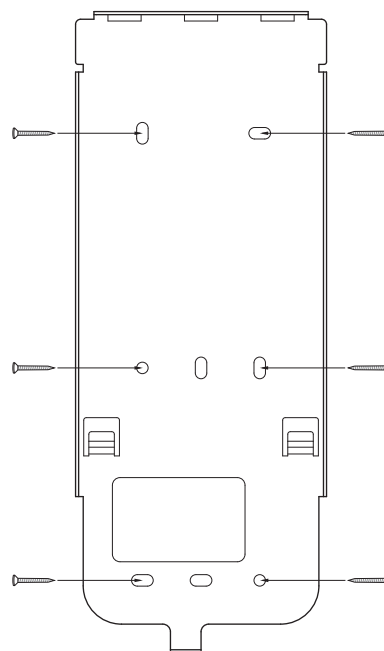
## Fijación del soporte y del producto

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



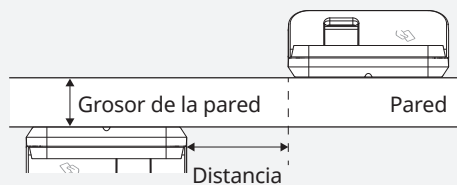
- La altura óptima para instalar el dispositivo es de 124 cm.
- Instale el dispositivo donde no llegue la luz directa del sol ni luz UV.
- Ajuste la posición de instalación, de modo que el rostro no esté expuesto a la luz directa del sol cuando un usuario intente autenticarse.

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

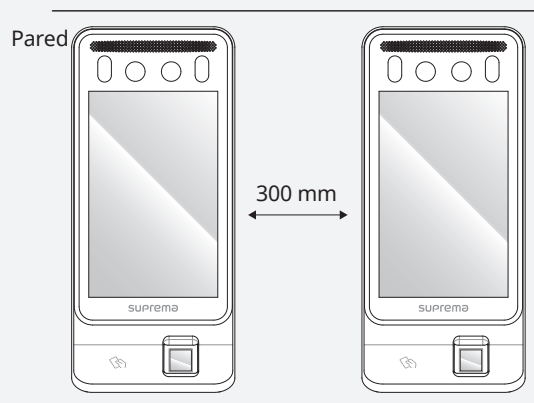




- Si se instala FaceStation F2 en una pared de concreto, perfora orificios, inserte los anclajes de PVC y fíjelos con los tornillos de fijación.
- Para evitar interferencias de RF, se debe mantener una distancia mínima de separación.

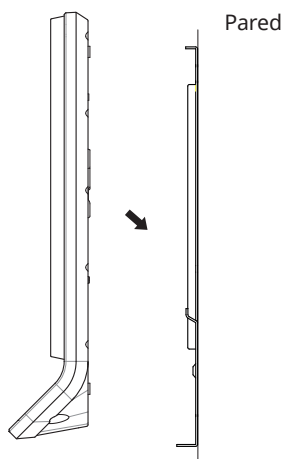


Grosor de la pared	Distancia
100 mm	200 mm
120 mm	180 mm
150 mm	150 mm

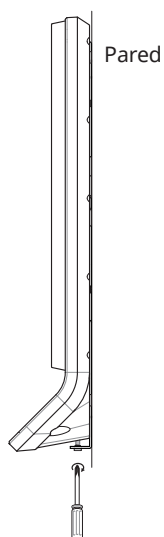


- Cuando utilice Suprema Mobile Access, deje una distancia mínima de 1 m entre los dispositivos para evitar interferencias BLE.

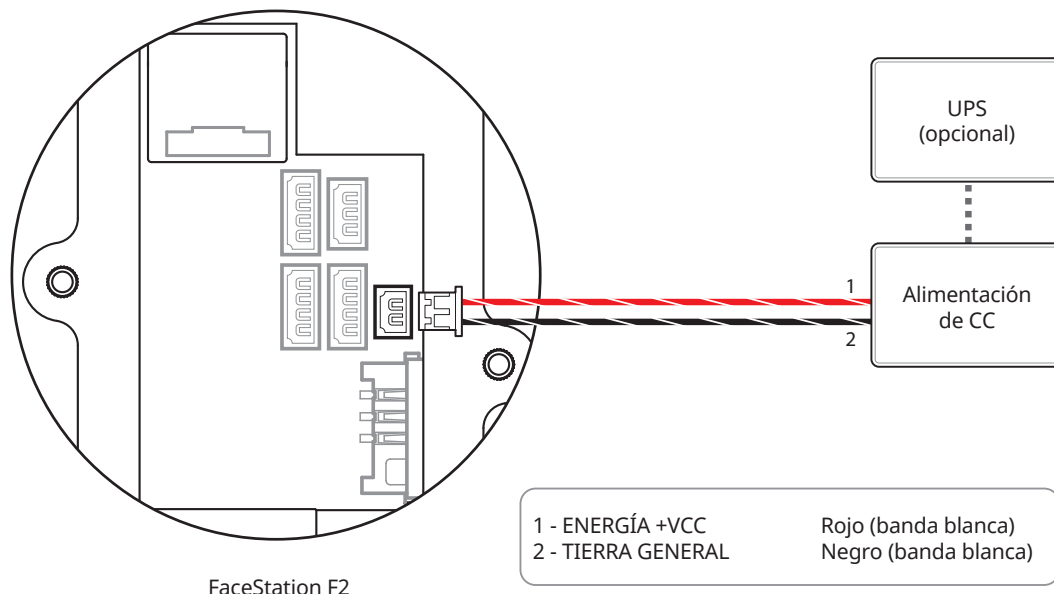
**3** Instale FaceStation F2 en el soporte que fijó.



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



## Conexión a la fuente de alimentación



- 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

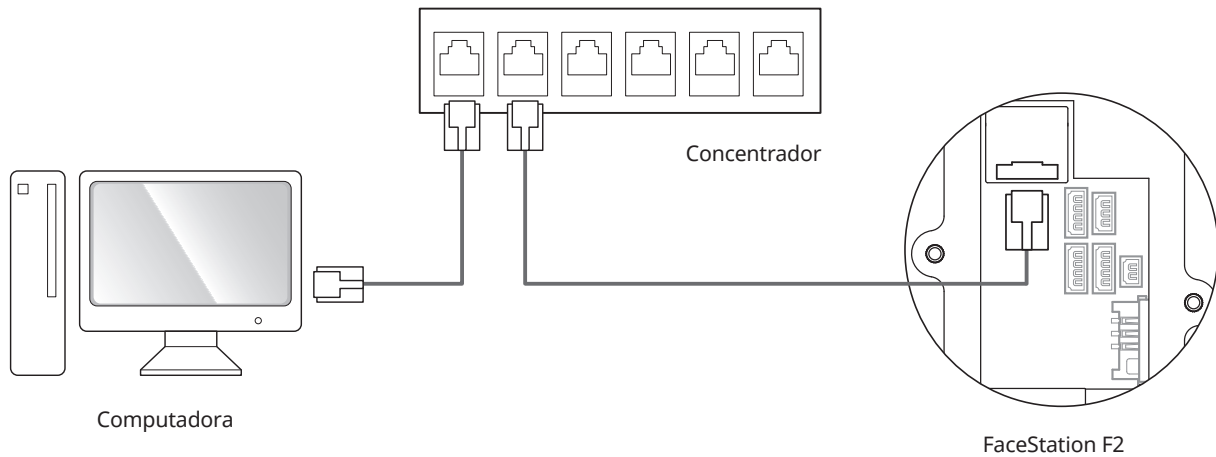
- NO extienda la longitud del cable de alimentación cuando utilice el adaptador de alimentación (24 V CC [ $\pm 10\%$ ], 2.5 A).
- NO utilice cable UTP CAT5 de dos hilos con propósito de alimentación de energía.

## Conexión de red

### TCP/IP

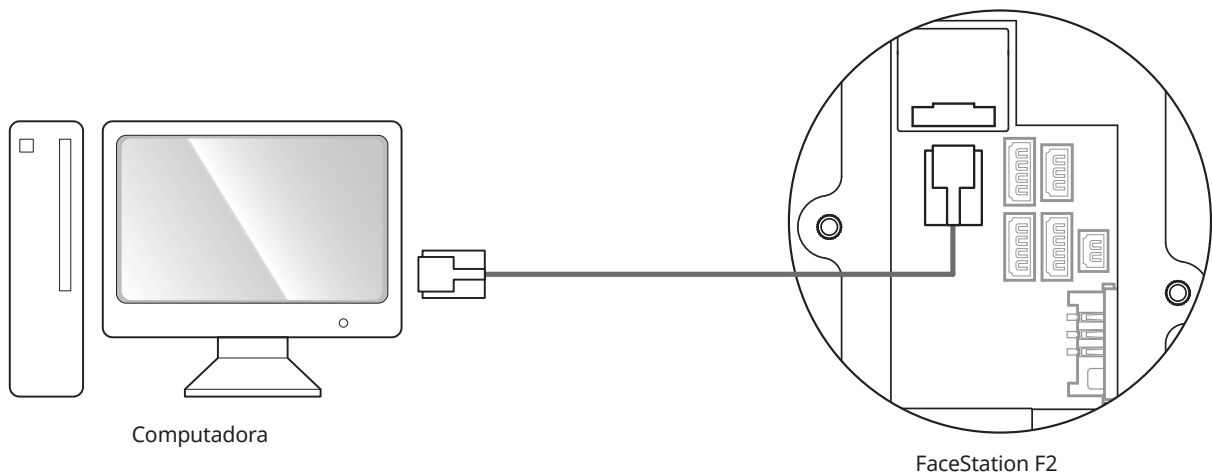
#### Conexión LAN (conexión a un concentrador)

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



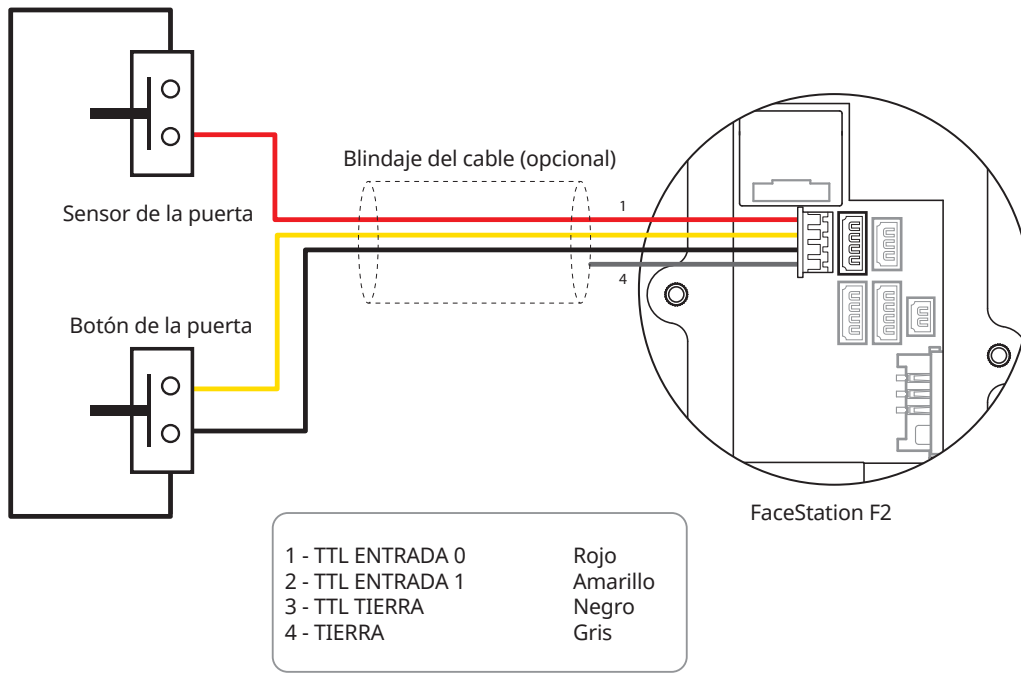
#### Conexión LAN (conexión directa a una computadora)

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.



- 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.

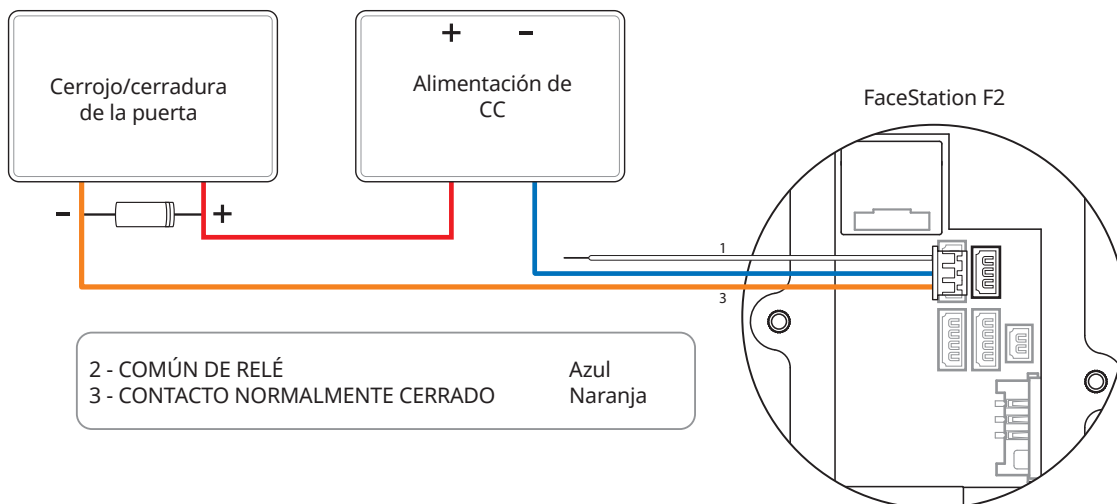
## Conexión de entrada TTL



## 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.



- 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.
- 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.

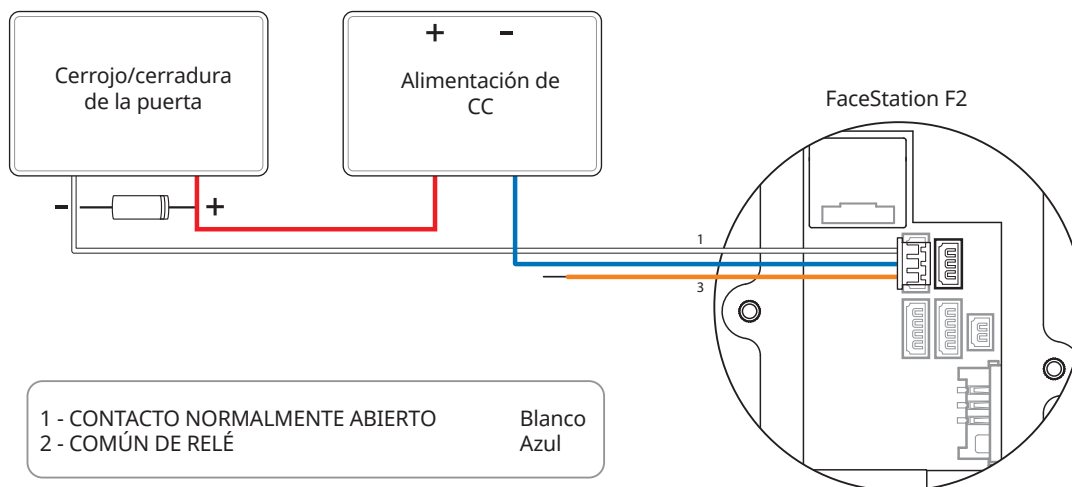


Tenga cuidado con la dirección de instalación del diodo. Instale el diodo cerca de la cerradura de la puerta.



## Bloqueo seguro contra fallas

Para utilizar el bloqueo seguro contra fallas, conecte el contacto 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.

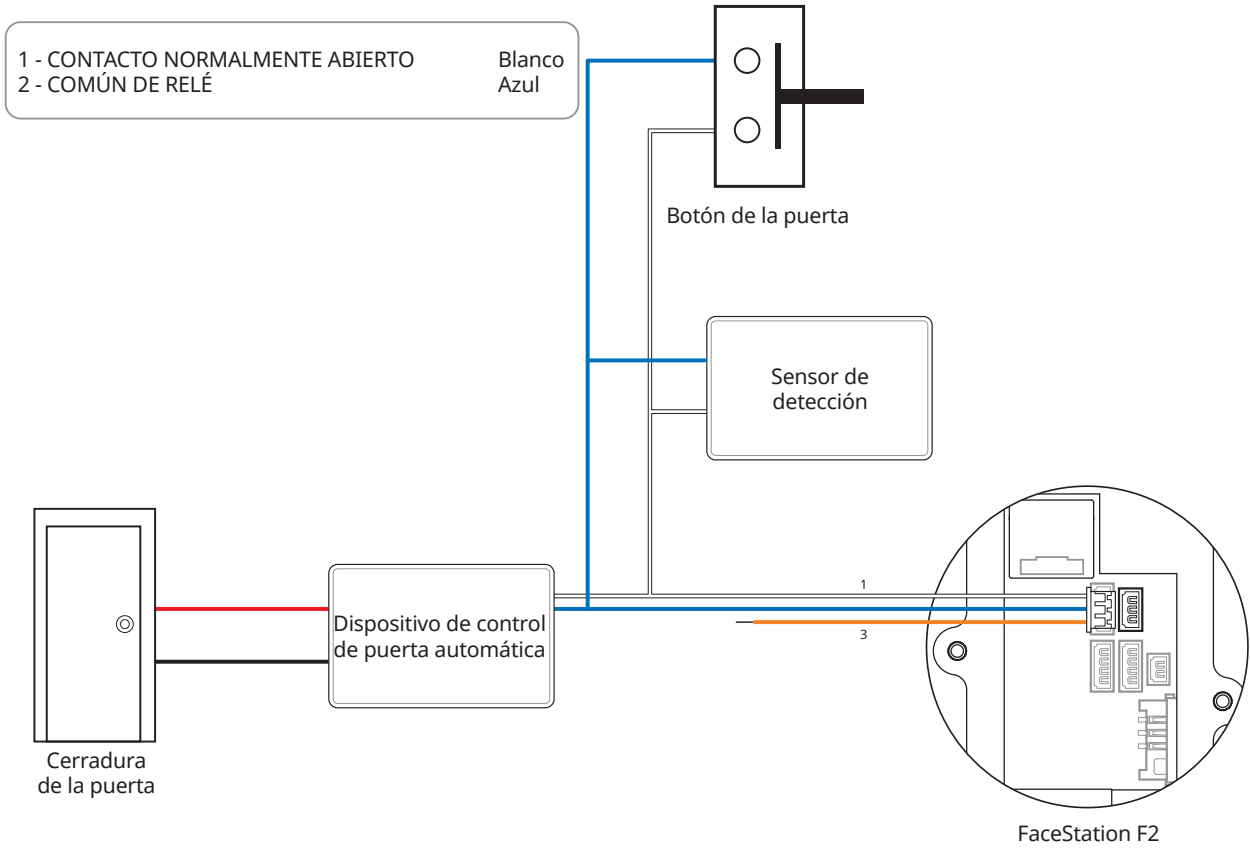


- Instale un diodo a ambos lados de la cerradura de la puerta como se muestra en la figura para proteger el relé de la corriente inversa, que se produce cuando la cerradura opera.
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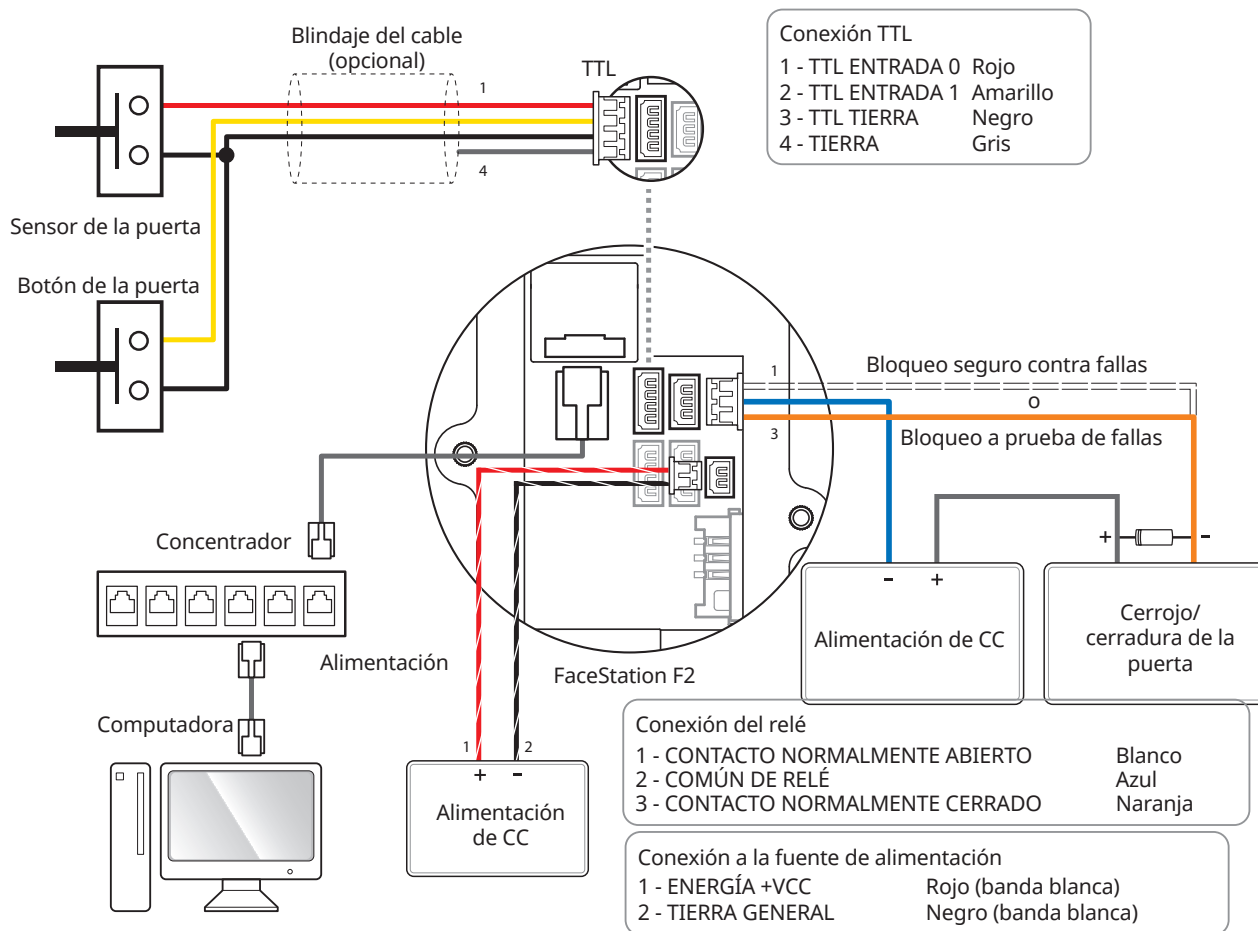
Tenga cuidado con la dirección de instalación del diodo. Instale el diodo cerca de la cerradura de la puerta.

## Conexión de puerta automática



## Conexión autónoma (Standalone)

La 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.



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.

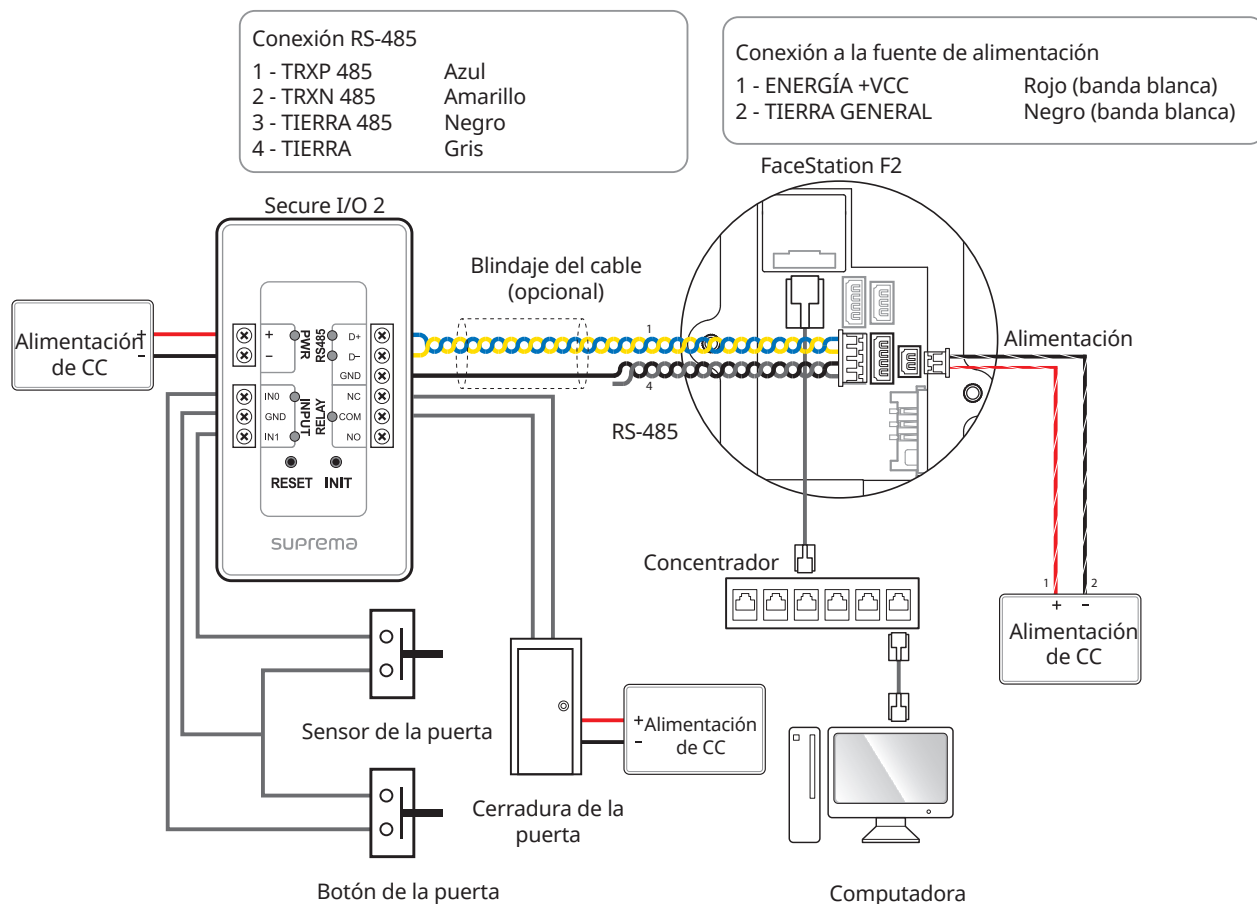


- FaceStation F2 se puede utilizar para controlar varias puertas con dispositivos esclavos con la interfaz RS-485. Los dispositivos esclavos se utilizan solamente como lectores y la autenticación se realiza en el dispositivo maestro.
- Si un dispositivo de autenticación de huella dactilar está configurado 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.
- Para obtener más información, comuníquese con el equipo de asistencia técnica de Suprema ([support.supremainc.com](http://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 FaceStation F2 debido a factores externos.

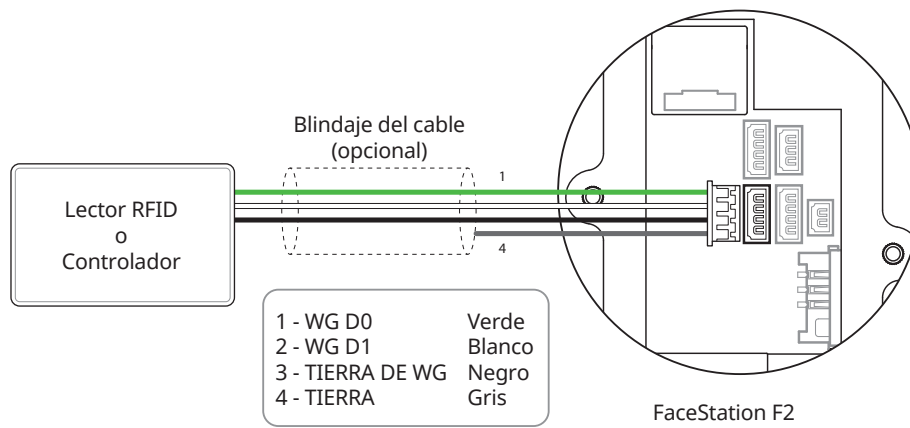
- Utilice un cable de par trenzado AWG24 con una longitud máxima de 1.2 km para el cable RS-485.
- Si se enlaza con una conexión en cadena RS-485, conecte la resistencia de terminación (120 Ω) a ambos extremos de la conexión. Si la conexión se realiza a la línea central, el nivel de la señal se reduce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



- 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.
- Para obtener más información, comuníquese con el equipo de asistencia técnica de Suprema ([support.supremainc.com](http://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, DESFire EV1/EV2/EV3*, 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	16 GB Flash + 2 GB RAM
	Chip criptográfico	Compatible
	Tipo de LCD	Pantalla LCD en color IPS de 7"
	Resolución de LCD	800 x 1280 pixeles
	Sonido	16 bit
	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 268.3 x 49.6 (mm)
	Peso	<ul style="list-style-type: none"> <li>Dispositivo: 670 g</li> <li>Soporte (incluye arandela y tornillo): 205 g</li> </ul>
	Clasificación IP	IP65
	Certificaciones	CE, FCC, KC, RoHS, REACH, WEEE
	Rostro	Distancia de reconocimiento
Altura de reconocimiento		1.4–1.9 m
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
Capacity	Identificación facial en vivo	Compatible (basado en software)
	Máximo de usuarios	100,000***
	Máximo de credencial (1:N)	<ul style="list-style-type: none"> <li>Huella digital: 100,000</li> <li>Rostro: 50,000</li> </ul>
	Máximo de credencial (1:1)	<ul style="list-style-type: none"> <li>Huella digital: 100,000</li> <li>Rostro: 100,000</li> <li>Tarjeta: 100,000</li> <li>PIN: 100,000</li> </ul>
	Máximo de registro de eventos	5,000,000
	Registro de imágenes máximo	50,000

Interface	Ethernet	Compatible (10/100 Mbps, MDI/MDI-X automática)
	RS-485	Host o esclavo de 1 canal (seleccionable))
	Wiegand	1 canal de entrada y 1 canal de salida
	Entrada TTL	Entradas de 2 canales
	Relé	1 relé
	USB	USB 2.0 (Maestro)
	Seguro contra alteraciones (Tamper)	Compatible
Eléctrica	Alimentación	<ul style="list-style-type: none"> <li>• Corriente: DC 12 V-DC 24 V (Máx. 2.5 A)</li> <li>• Especificaciones recomendadas para el adaptador: DC 12 V-DC 24 V (<math>\pm</math> 10%) con un mínimo de 2,500 mA****</li> </ul>
	Interruptor entrada VIH	Mínimo: 3 V / Máximo: 5 V
	Interruptor entrada VIL	Máximo: 1 V
	Interruptor de resistencia de polarización	4.7 k $\Omega$ (Los puertos de entrada están polarizados con 4.7 k $\Omega$ .)
	Salida Wiegand VOH	Más de 4.8 V
	Salida Wiegand VOL	Menos de 0.2 V
	Resistencia de polarización de la salida Wiegand	Polarización interna de 1 k $\Omega$
	Relé	2 A @ 30 VDC Resistive load 1 A @ 30 VDC Inductive load

\* Las tarjetas DESFire EV2/EV3 se pueden usar con tarjetas de compatibilidad retroactiva de DESFire EV1. Las funciones de tarjeta inteligente y CSN son compatibles con dispositivos Suprema.

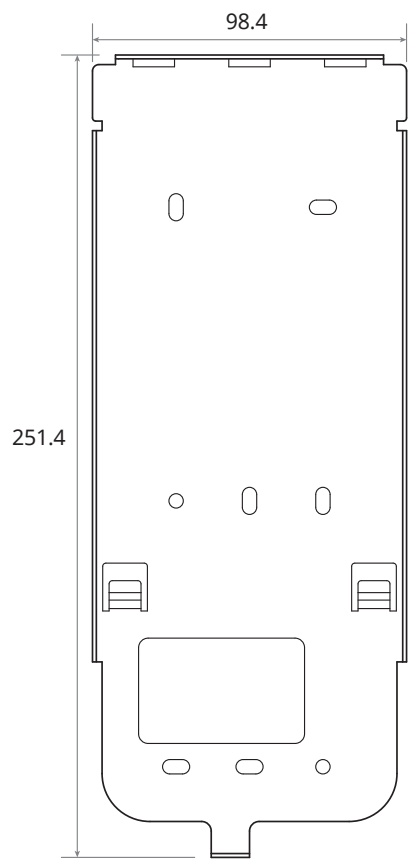
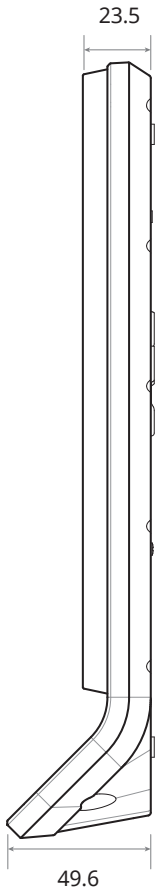
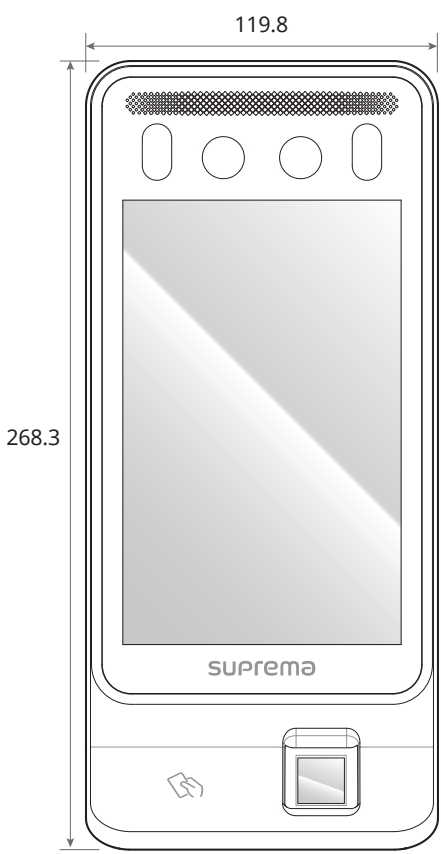
\*\* El rango de lectura de RF varía según el entorno de instalación.

\*\*\* El número de usuarios registrados sin tener datos de credenciales.

\*\*\*\* El adaptador se vende por separado. Consulte las especificaciones recomendadas.

# 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.



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-si, Gyeonggi-do, 13554, Rep. of KOREA

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

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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](mailto:support.supremainc.com).

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Version 3, 29 June 2007

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