

# X-Station 2

Guía de instalación de

Versión 1.00

Español

ES 101.00.XS2-ODPB, XS2-OAPB V1.00A

# CONTENTS

## Instrucciones de seguridad 2

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Íconos de instrucciones	2
-------------------------	---

## Introducción 5

---

Componentes	5
Nombre y función de cada pieza	6
Cables y conectores	7
Cómo enrollar una huella	8

## Instalación 9

---

Fijación del soporte y del producto	9
Conexión a la fuente de alimentación	11
Conexión de red	12
TCP/IP	12
Conexión de entrada TTL	13
Conexión del Relé	14
Bloqueo a prueba de fallas	14
Bloqueo seguro contra fallas	15
Conexión de puerta automática	16
Conexión autónoma (Standalone)	17
Conexión a Secure I/O 2	18
Conexión Wiegand	19

## Especificaciones del producto 20

---

Dimensiones	22
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## Información de cumplimiento de la FCC 23

---

## Declaración de conformidad de la UE (CE) 23

---

## Anexos 24

---

Descargo de responsabilidad general de Suprema	24
Aviso de derechos de autor	24
Licencia de código abierto	24
GNU General Public License	26
TERMS AND CONDITIONS	26
BoringSSL License	33
OpenSSL License	33
Original SSLeay License	34
Licenses for support code	35
Apache License	36

# 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.

**No conecte ni utilice la fuente de alimentación y la alimentación a través de Ethernet (PoE) simultáneamente.**

- 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.


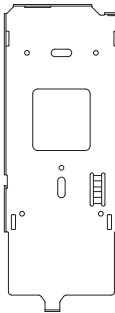
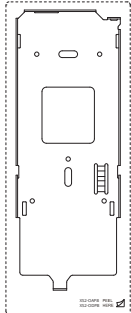



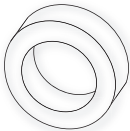



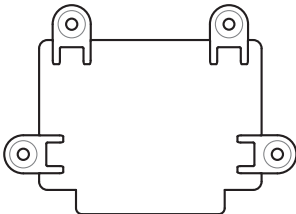



**Batería RTC**

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

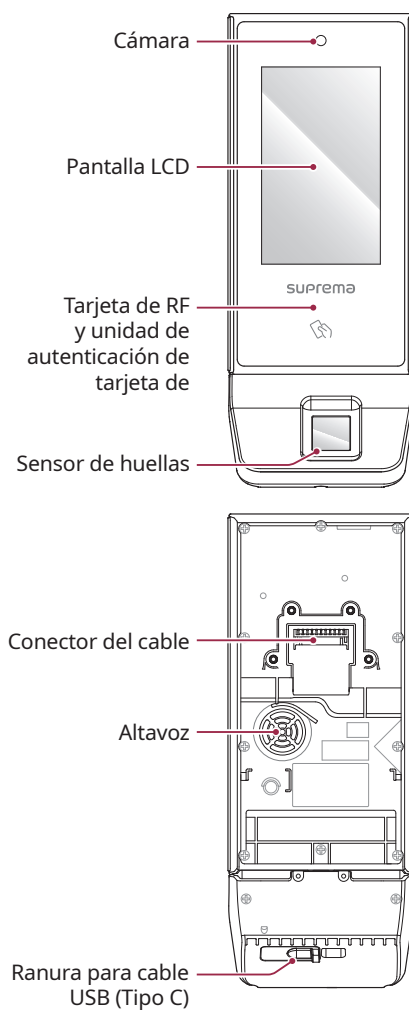
## Componentes

			
X-Station 2	Soporte de pared	Plantilla de perforación	
			
Cables	Diode	Resistencia de 120 Ω	
			
Núcleo de ferrita	Anclaje PVC x2	Tornillo de fijación x2	Tornillo de fijación del soporte (Tipo estrella)
			
Cubierta de cables	Termoretráctil	Guía rápida	Guía de software de código abierto



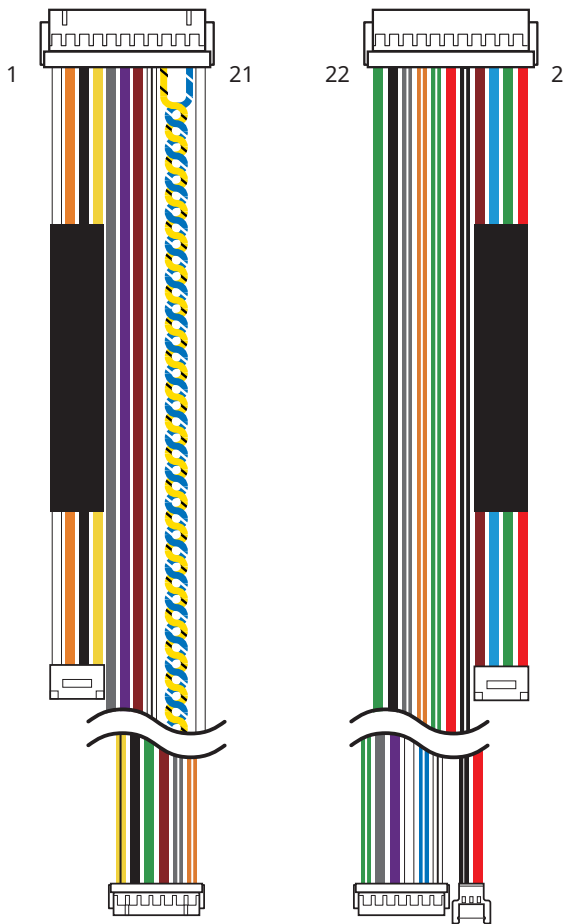
- Los componentes podrían variar según el entorno de instalación.
- Al montar el producto con el soporte, puede utilizar el tornillo de fijación (tipo estrella) incluido con el soporte en lugar del tornillo de fijación del producto para mejorar la seguridad.
- Para obtener más información sobre el producto, visite el sitio web de Suprema (<https://www.supremainc.com>) y consulte la guía del usuario.

## Nombre y función de cada pieza



Nombre	Descripción
<b>Cámara</b>	Captura imágenes reales.
<b>Pantalla LCD</b>	Provee la Interfaz de Usuario (IU) para operación.
<b>Tarjeta de RF y unidad de autenticación de tarjeta de acceso móvil</b>	Parte para escanear una tarjeta RFID o una tarjeta de acceso móvil de entrada.
<b>Sensor de huellas</b>	Lee huellas.
<b>Conector del cable</b>	Conecta los cables. <ul style="list-style-type: none"> <li>• Fuente de alimentación</li> <li>• Ethernet + PoE</li> <li>• RS-485</li> <li>• Entrada y salida Wiegand</li> <li>• Entrada TTL</li> <li>• Contacto</li> </ul>
<b>Altavoz</b>	Transmite el sonido.
<b>Ranura para cable USB (Tipo C)</b>	Conecta el cable USB.

Cables y conectores



Cable	PIN	Nombre	Color
RJ-45 (Ethernet + PoE)	1	ENET TXP	Blanco
	3	ENET TXN	Naranja
	5	ENET RXP	Negro
	7	ENET RXN	Amarillo
Entrada TTL	9	TTL GND	Gris
	11	TTL IN0	Púrpura
	13	TTL IN1	Marrón
RS-485	15	485 GND	Blanco (banda negra)
	17	485 TRXN	Amarillo (banda negra)
	19	485 TRXP	Azul (banda blanca)
Wiegand	21	WG D1	Blanco
	22	WG D0	Verde
	20	WG GND	Negro
Relé	18	RLY NO	Gris (banda blanca)
	16	RLY NC	Naranja (banda blanca)
	14	RLY COM	Verde (banda blanca)
Alimentación	12	PWR +VDC	Rojo
	10	PWR GND	Negro (banda blanca)
RJ-45 (Ethernet + PoE)	8	VB2	Marrón
	6	VB2	Azul
	4	VB1	Verde
	2	VB1	Rojo

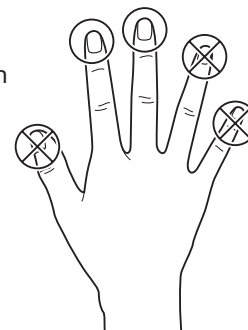


## Cómo enrolar una huella

Para mejorar la velocidad de autenticación de huellas, regístrelas correctamente. X-Station 2 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 enrolar 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 enrolar 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 enrola 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

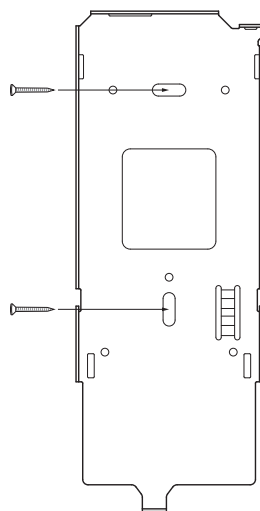
X-Station 2 puede reconocer una huella dactilar independientemente del cambio de estación o del estado del dedo. Sin embargo, la velocidad de autenticación podría variar según el ambiente externo o el método de entrada de la huella. Si la autenticación de la huella presenta problemas, se recomienda tomar 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".

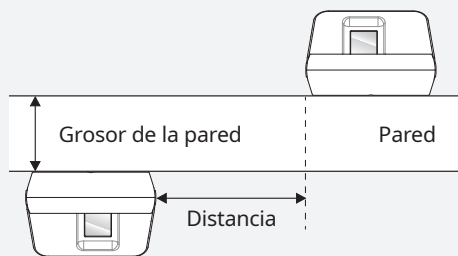
# Instalación

## Fijación del soporte y del producto

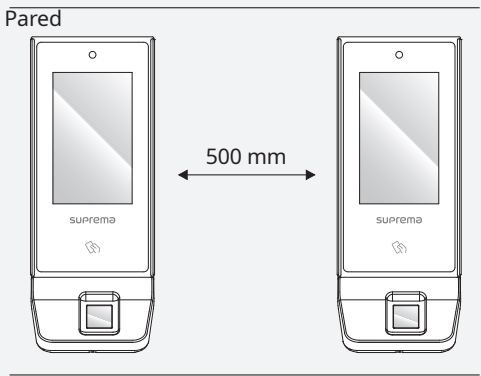
- 1 Determine la posición correcta para instalar el soporte mediante la plantilla de taladrado que se proporciona. Fije firmemente el soporte con tornillos de fijación a través de él, hasta la posición en la que va a instalar la X-Station 2.



- Si se instala la X-Station 2 en una pared de concreto, perfore orificios, inserte los anclajes PVC y fíjelos con los tornillos de fijación.
- Para evitar interferencias de RF, se debe mantener una distancia mínima de separación.

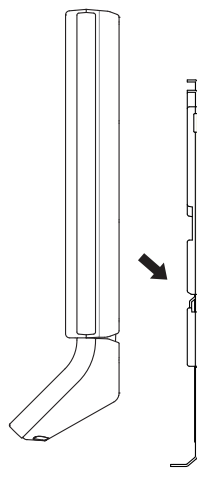


Grosor de la pared	Distancia
100 mm	500 mm
120 mm	400 mm
150 mm	300 mm

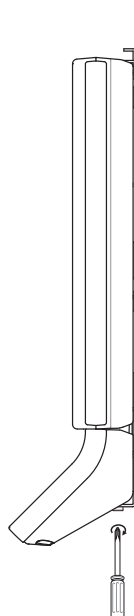


- Cuando utilice una tarjeta de acceso móvil, realice la instalación de los dispositivos con una distancia mínima de 1 m entre ellos para evitar interferencia de RF.

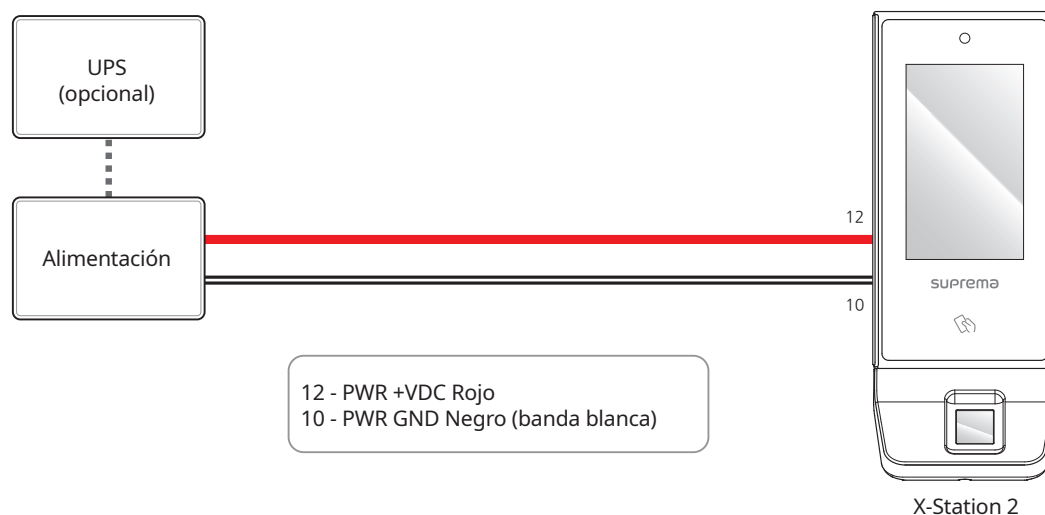
- 2** Monte la cubierta del cable e instale X-Station 2 en el soporte que fijó.



- 3** Conecte X-Station 2 al soporte: gire el tornillo de fijación del producto de X-Station 2.



## Conexión a la fuente de alimentación



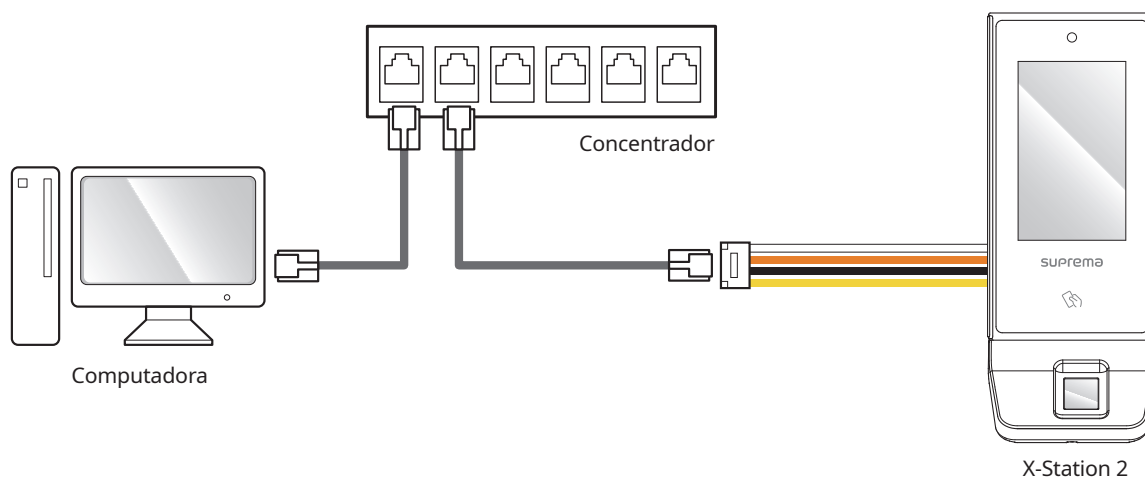
- Utilice una fuente de alimentación de CC de 12 V ( $\pm 10\%$ ) con un mínimo de 1500 mA, o CC de 24 V ( $\pm 10\%$ ) con un mínimo de 800 mA, que cuenta con la aprobación de IEC/EN 60950-1. Si desea conectar y utilizar otro dispositivo con la misma fuente de alimentación, debe utilizar un adaptador con una capacidad de corriente igual o superior al consumo total de energía necesario para ambos dispositivos.
- Utilice una fuente de alimentación independiente para el 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.
- NO conecte el dispositivo a la fuente de alimentación de CC (o al adaptador) y a la fuente de alimentación PoE al mismo tiempo.

## Conexión de red

### TCP/IP

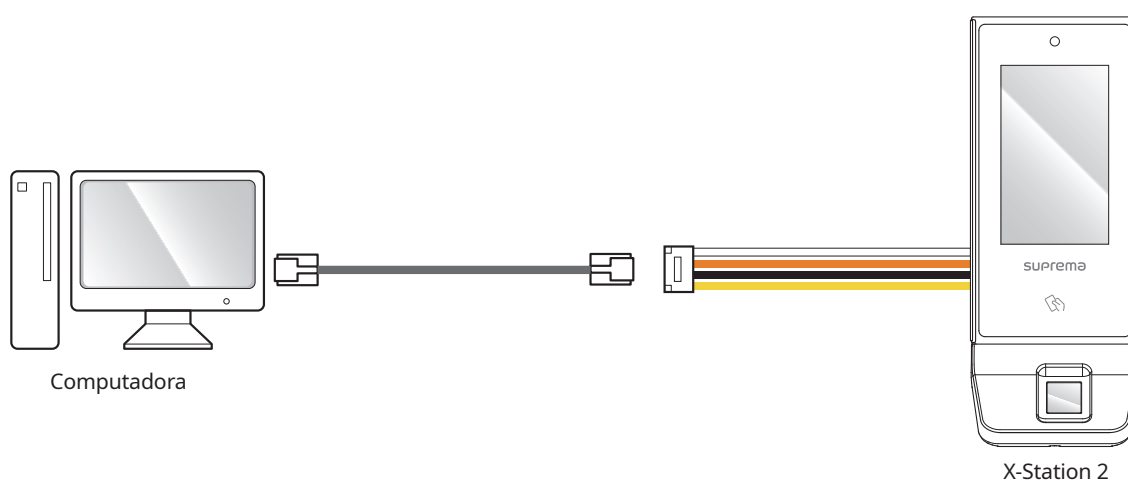
#### Conexión LAN (conexión a un concentrador)

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

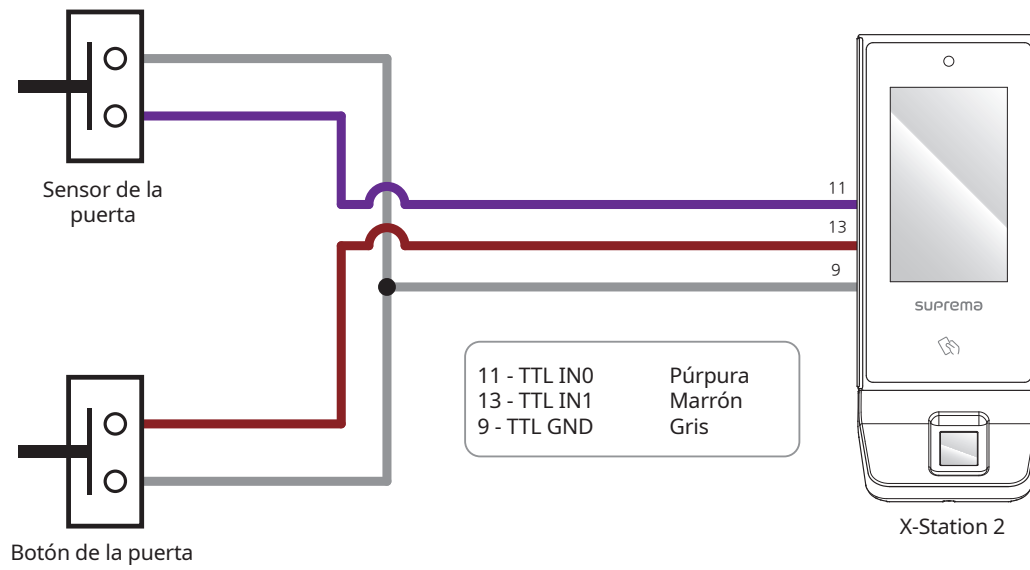


#### Conexión LAN (conexión directa a una computadora)

X-Station 2 tiene una función MDI/MDIX automática para que se pueda conectar directamente a una computadora mediante un cable recto normal tipo CAT-5 o un cable cruzado.



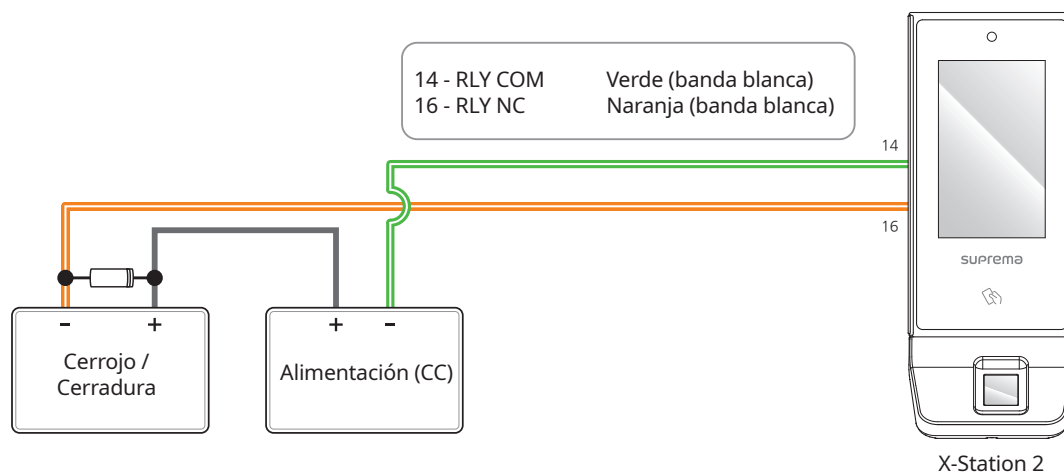
## Conexión de entrada TTL



## 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 abrirá. Si la fuente de alimentación del producto se corta debido a una falla de la alimentación o a un factor externo, la puerta se abre.



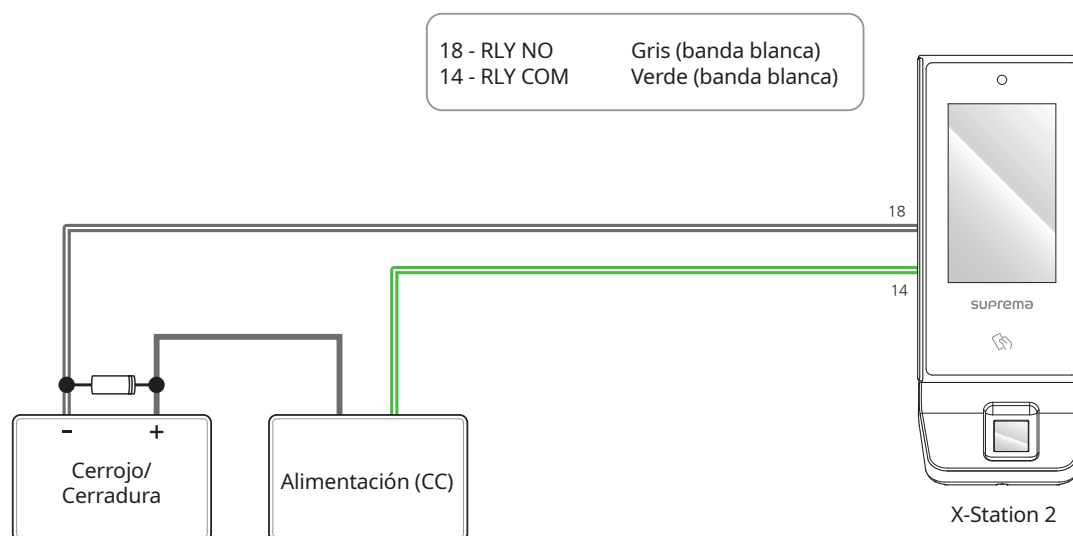
- Instale un diodo a ambos lados de las conexiones de la cerradura de la puerta como se muestra en la figura para proteger el contacto de la corriente inversa, que se produce cuando la cerradura opera.
- Utilice una fuente de alimentación independiente para X-Station 2 y la cerradura de la puerta.
- Para mayor comodidad, los lectores inteligentes autónomos de Suprema contienen relés internos que pueden bloquear o desbloquear directamente las puertas sin controladores externos. Sin embargo, para las aplicaciones de control de acceso que necesitan más seguridad, 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 contacto independiente para un control de bloqueo, como los Secure I/O 2, DM-20 o CoreStation de Suprema instalados del 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 bloquea.



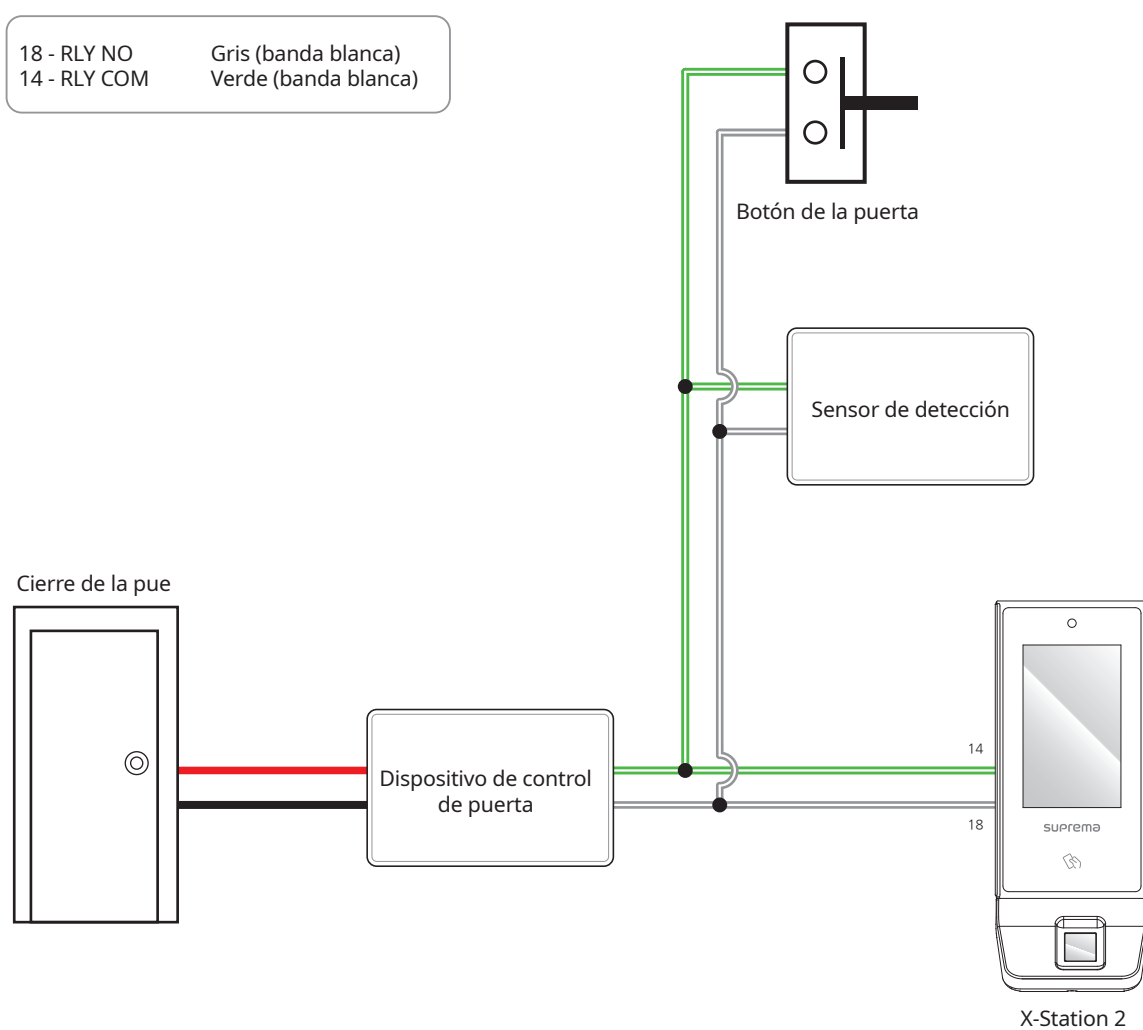
- Instale un diodo a ambos lados de las conexiones de la cerradura de la puerta como se muestra en la figura para proteger el contacto de la corriente inversa, que se produce cuando la cerradura opera.
- Utilice una fuente de alimentación independiente para X-Station 2 y la cerradura de la puerta.
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Tenga cuidado con la dirección de instalación del diodo. Instale el diodo cerca de la cerradura de la puerta.

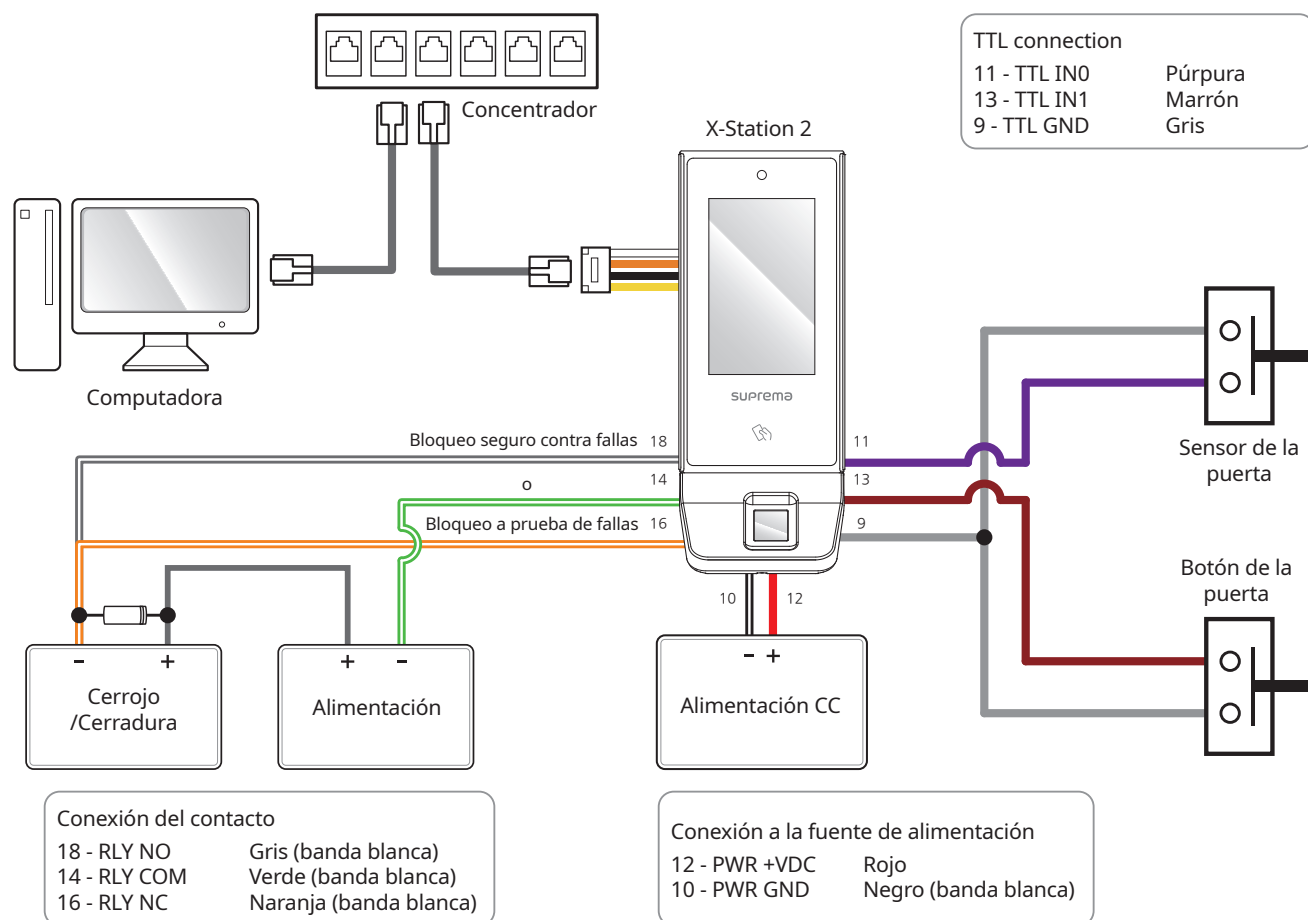


## Conexión de puerta automática



## Conexión autónoma (Standalone)

X-Station 2 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.



Para mayor comodidad, los lectores inteligentes autónomos de Suprema contienen relés internos que pueden bloquear o desbloquear directamente las puertas sin controladores externos. Sin embargo, para las aplicaciones de control de acceso que necesitan más seguridad, 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 contacto independiente para un control de bloqueo, como los Secure I/O 2, DM-20 o CoreStation de Suprema instalados del lado seguro de la puerta.

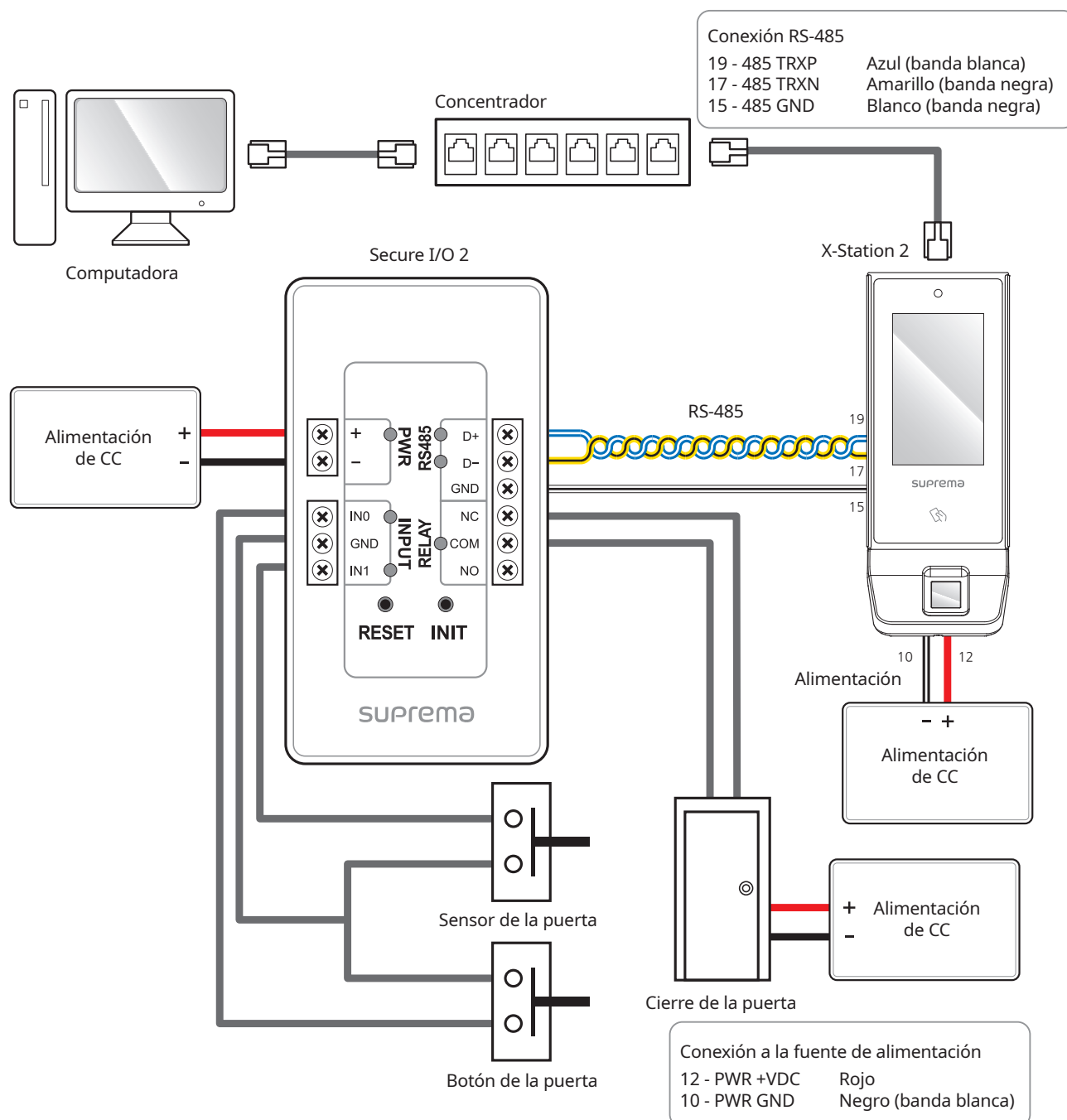


- X-Station 2 se puede utilizar para controlar varias puertas con dispositivos esclavos, a través de RS485. Los dispositivos esclavos se utilizan solamente como lectores y la autenticación se realiza en el dispositivo maestro.
- Para obtener más información, comuníquese con el equipo de asistencia técnica 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 X-Station 2 con un cable RS-485. Con este dispositivo se puede mantener la seguridad incluso si se pierde la conexión entre X-Station 2 y Secure I/O 2, o si se apagó la fuente de poder de X-Station 2 debido a factores externos.

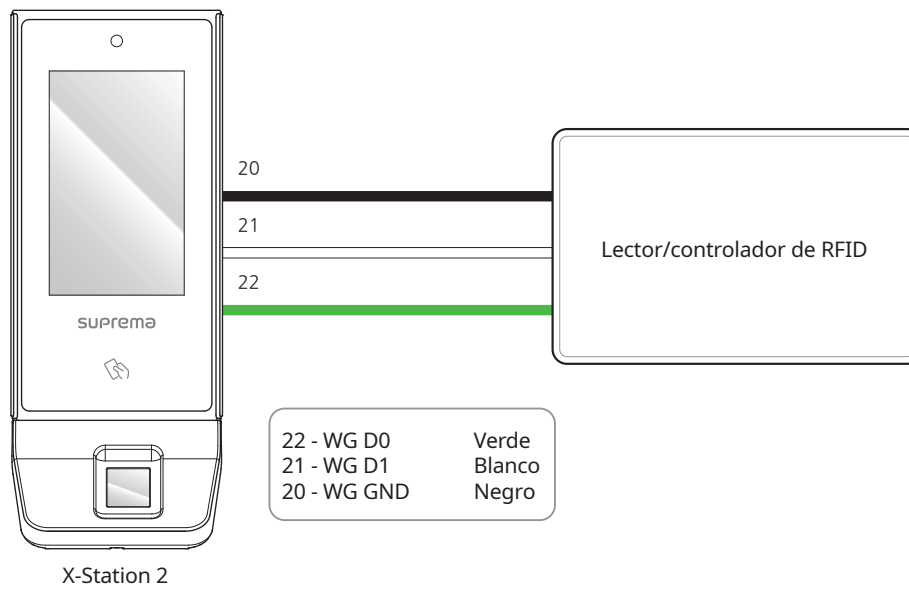
- Utilice un par trenzado AWG24 con una longitud máxima de 1.2 km para el cable RS-485.
- Si se enlaza con una conexión en cadena RS-485, conecte una resistencia de terminación (120  $\Omega$ ) a ambos extremos de la conexión. Si la conexión se realiza a la mitad de la línea, el nivel de la señal se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



- X-Station 2 se puede utilizar para controlar varias puertas con dispositivos esclavos, a través de RS485. Los dispositivos esclavos se utilizan solamente como lectores y la autenticación se realiza en el dispositivo maestro.
- Para obtener más información, comuníquese con el equipo de asistencia técnica de Suprema ([support.supremainc.com](mailto:support.supremainc.com)).

## Conexión Wiegand

Utilizar como dispositivo de entrada o salida Wiegand



# Especificaciones del producto

Categoría	Característica	Especificación
Credencial	Opción de RF	<ul style="list-style-type: none"> <li><b>XS2-ODPB:</b> 125kHz EM &amp; 13.56MHz MIFARE, MIFARE Plus, DESFire EV1/EV2*, FeliCa</li> <li><b>XS2-OAPB:</b> 125kHz EM, HID Prox &amp; 13.56MHz MIFARE, MIFARE Plus, DESFire EV1/EV2*, FeliCa, iCLASS SE/SR/Seos</li> </ul>
	Rango de lectura de RF**	MIFARE, DESFire, iCLASS, HID Prox, EM: 50 mm / Felica: 30 mm
	Móvil	NFC, BLE
	Scramble keypad (PIN)	Compatible
General	CPU	1.5 GHz Quad Core
	Memoria	Memoria flash de 16 GB + 1 GB de RAM
	Chip criptográfico	Compatible
	Tipo de LCD	LCD en color IPS 4"
	Resolución de LCD	480 x 800
	Sonido	24 bits
	Temperatura de funcionamiento	De -20°C a 50°C
	Temperatura de almacenamiento	De -40°C a 70°C
	Operación en humedad	De 0 % a 80 %, sin condensación
	Humedad en almacenamiento	De 0 % a 90 %, sin condensación
	Tipo de cámara	CMOS de 2 M píxeles
	Resolución de la cámara	1600 x 1200
	Dimensión (ancho x alto x largo)	82 mm x 208.5 mm x 25.9 (53) mm
	Peso	<ul style="list-style-type: none"> <li>Dispositivo: 375 g</li> <li>Soporte central (incluye arandela y tornillo): 86 g</li> </ul>
Huella	Clasificación IP	IP65
	Certificaciones	KC, CE, UKCA, FCC, RCM (Compliance: RoHS, REACH, WEEE)
	Dimensión de la imagen	300 x 400 píxeles
	Resolución	500 dpi
	Plantilla	SUPREMA / ISO19794-2 / ANSI-378
	Extractor/buscador de coincidencias	Con certificación y compatible con MINEX
Capacidad	Certificados de sensores	PIV del FBI e ID móvil FAP20 del FBI
	Identificación facial en vivo	Compatible (basado en software)
	Máximo de usuarios	500,000***
	Máximo de credencial (1:N)	Huella dactilar: 100,000
	Máximo de credencial (1:1)	<ul style="list-style-type: none"> <li>Huella dactilar: 500,000</li> <li>Tarjeta: 500,000</li> </ul>
Interfaz	Máximo de registro de texto	5,000,000
	Registro de imágenes máximo	50,000
	Ethernet	Compatible (10/100 Mbps, MDI/MDI-X automática)
	RS-485	1 canal host o esclavo (seleccionable)
	Wiegand	1 canal de entrada o salida (seleccionable)
	Entrada TTL	2 canales de entrada
	Relé	1 contacto
	USB	USB 2.0 (Maestro)
	PoE	Compatible (compatible con IEEE 802.3af)
	Seguro contra alteraciones (Tamper)	Compatible

Eléctrica	Alimentación	<ul style="list-style-type: none"> <li>Corriente: DC 12 V (Máx. 0.8 A) o DC 24 V (Máx. 0.45 A)</li> <li>Especificaciones recomendadas para el adaptador: DC 12 V (<math>\pm 10\%</math>) con un mínimo de 1500 mA o DC 24 V (<math>\pm 10\%</math>) con un mínimo de 800 mA****</li> </ul>
	Interruptor entrada VIH	Min.: 3 V / Max.: 5 V
	Interruptor entrada VIL	Max.: 1 V
	Interruptor de resistencia de polarización	4.7 k $\Omega$ (The input pots are pulled up with 4.7 k $\Omega$ .)
	Salida Wiegand VOH	More than 4.8 V
	Salida Wiegand VOL	Less than 0.2 V
	Resistencia de polarización de la salida Wiegand	Internally pulled up with 1 k $\Omega$
	Relé	2 A @ 30 VDC Resistive load 1 A @ 30 VDC Inductive load

\* Las tarjetas DESFire EV2 se pueden usar con tarjetas de compatibilidad retroactiva de DESFire EV1. Las funciones de CSN y de tarjeta inteligente son compatibles con X-Station 2.

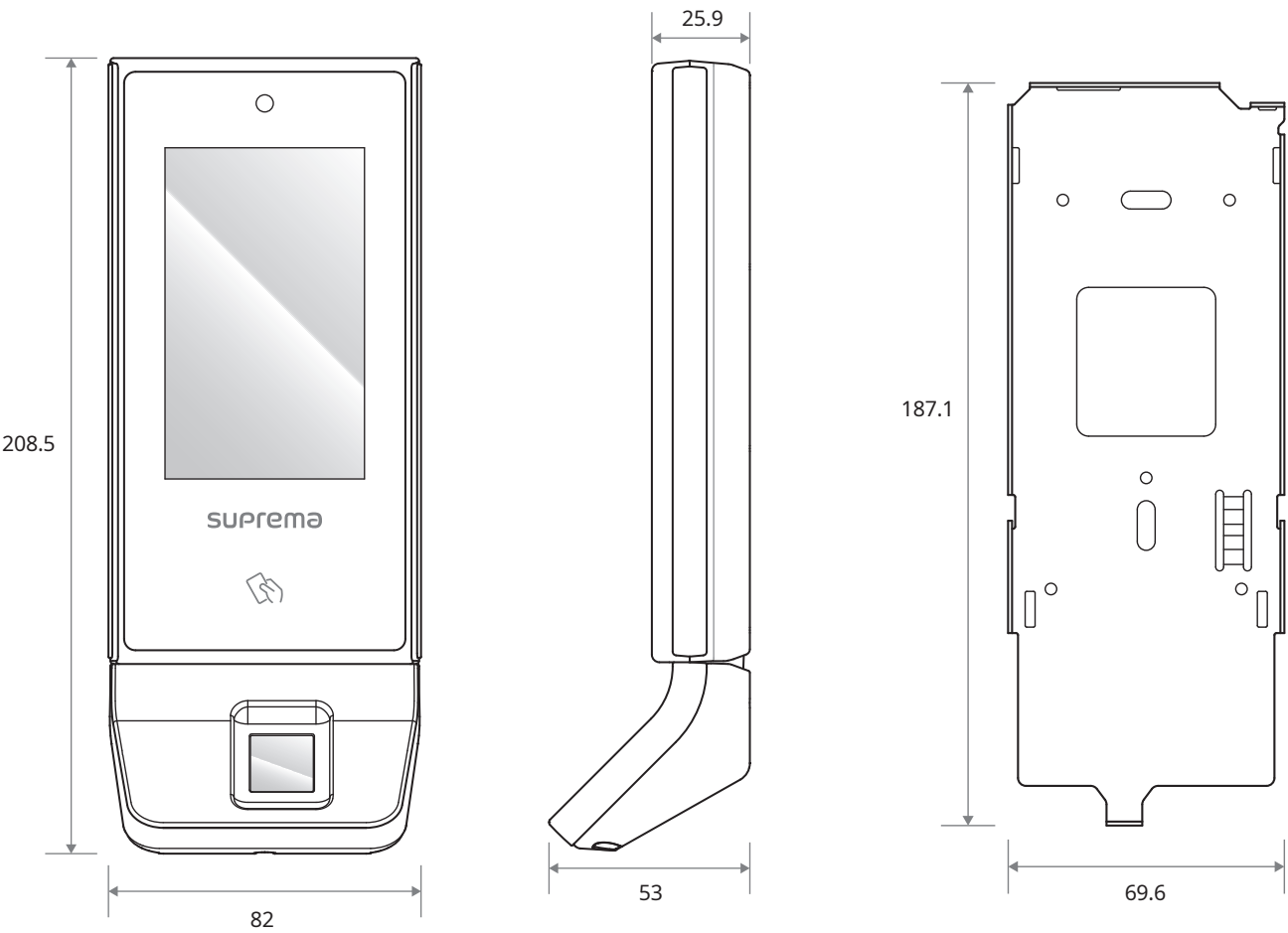
\*\* El rango de lectura de RF varía según el entorno de instalación.

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

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

Dimensiones

(Unit: 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.



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- 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.

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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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Version 3, 29 June 2007

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