

# CoreStation

Guía de instalación de

Versión 1.07

Español

ES 101.00.CS-40 V1.07A

# CONTENIDO

## Instrucciones de seguridad 2

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

## Introducción 4

---

Componentes	4
Accesorio	5
Nombre y función de cada pieza	6

## Instalación 12

---

Batería	12
Corriente	13
Conexión de red	14
TCP/IP	14
RS-485	15
Relé	16
Bloqueo a prueba de fallas	16
Bloqueo seguro contra fallas	16
ENTRADA Wiegand	17
Sensor de la puerta y botón de salida	17
ENTRADA AUX	18

## Especificaciones 19

---

Dimensiones	20
-------------	----

## Información de cumplimiento de la FCC 21

---

## Anexos 22

---

Descargos de responsabilidad	22
Aviso de derechos de autor	22
Licencia de código abierto	22
GNU General Public License	23
TERMS AND CONDITIONS	23
GNU Lesser General Public License	30
OpenSSL License	31
Original SSLeay License	33

# 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.

**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.

### **Funcionamiento**

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

- Es posible que el producto no funcione correctamente.

**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 0 °C y 50 °C.**

- Es posible que el producto no funcione correctamente.

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

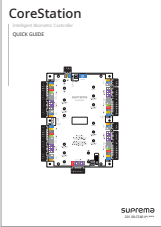
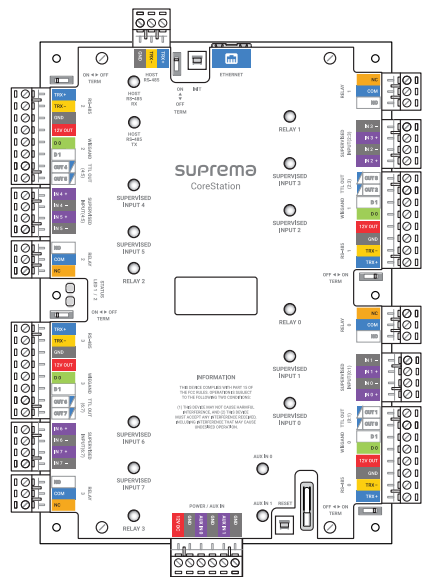
- Limpie el producto con una toalla limpia y seca.
- Si necesita desinfectar el producto, humedezca el paño o la toallita con una cantidad adecuada de alcohol isopropílico y limpie con suavidad todas las superficies expuestas, incluido el sensor de huellas dactilares. Utilice alcohol isopropílico (que 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.

# Introducción

## Componentes

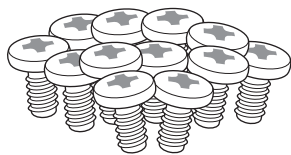


Guía rápida

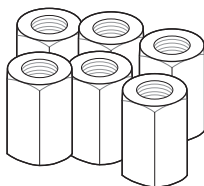


CoreStation

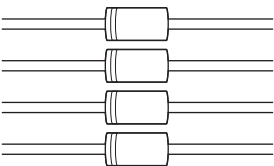
Guía de software de código abierto



Tornillo de fijación x12



Espaciador x6



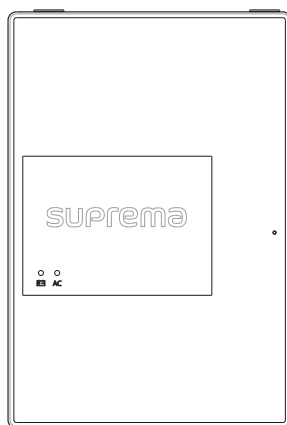
Diodo x4



Los componentes podrían variar según el entorno de instalación.

## Accesorio

Puede comprar un gabinete con CoreStation como accesorio. El gabinete contiene un tablero de control LED, un tablero de distribución de energía, una fuente de alimentación, una batería y un seguro contra alteraciones (Tamper).



## Nombre y función de cada pieza



No.	Nombre	No.	Nombre
1	Conexión del HOST RS-485	20	Botón RESET (Restablecer)
2	Interruptor de resistencia de terminación de HOST RS-485	21	Conexión de ENTRADA AUX (0, 1)
3	Botón INIT (Iniciar)	22	Conexión de alimentación de CoreStation (ENTRADA de 12 VCC)
4	Conexión de Ethernet	23	Conexión del relé 3
5	Conexión del relé 1	24	Entrada TTL (6, 7) o conexión de entrada supervisada (6, 7)
6	Entrada TTL (2, 3) o conexión de entrada supervisada (2, 3)	25	Conexión de salida TTL (6, 7)
7	Conexión de salida TTL (2, 3)	26	Conexión Wiegand 3
8	Conexión Wiegand 1	27	Salida de 12 V
9	Salida de 12 V	28	Conexión RS-485 3
10	Conexión RS-485 1	29	Interruptor de resistencia de terminación RS-485 3
11	Interruptor de resistencia de terminación RS-485 1	30	LED de estado de CoreStation
12	Conexión del relé 0	31	Conexión del relé 2
13	Entrada TTL (0, 1) o conexión de entrada supervisada (0, 1)	32	Entrada TTL (4, 5) o conexión de entrada supervisada (4, 5)
14	Conexión de salida TTL (0, 1)	33	Conexión de salida TTL (4, 5)
15	Conexión Wiegand 0	34	Conexión Wiegand 2
16	Salida de 12 V	35	Salida de 12 V
17	Conexión RS-485 0	36	Conexión RS-485 2
18	Interruptor de resistencia de terminación RS-485 0	37	Interruptor de resistencia de terminación RS-485 2
19	Batería RTC		



- Mantenga presionado el botón **INIT** (Iniciar) durante 2 segundos o más para inicializar el CoreStation actualmente vinculado a un dispositivo y conectarlo a un dispositivo diferente.
- La salida de alimentación (12 V, hasta 1.5 A) de CoreStation se puede utilizar como alimentación para un dispositivo Wiegand cuando CoreStation y el dispositivo Wiegand están conectados. En otras palabras, cuando se conectan 3 dispositivos Wiegand que consumen 200 mA, se puede conectar un dispositivo que consume hasta 900 mA al terminal de salida de energía restante.



## LED de estado de la comunicación

LED	Estado
HOST RS-485 TX	Parpadeo en naranja: Transmisión de datos de RS-485
HOST RS-485 RX	Parpadeo en verde: Recepción de datos de RS-485
RELAY (0 ~ 3)	Iluminación en rojo: Funcionamiento del relé
SUPERVISED INPUT (0 ~ 7)	Entrada TTL <ul style="list-style-type: none"> <li>Iluminación en verde: Normalmente cerrado</li> <li>Apagado: Normalmente abierto</li> </ul> Ingreso supervisado <ul style="list-style-type: none"> <li>Iluminación en verde: Normalmente cerrado (cortocircuito), normalmente abierto, interruptor activado</li> <li>Apagado: Interruptor desactivado</li> </ul>
AUX IN (0, 1)	Iluminación en naranja: Recibiendo la señal AUX

## LED de estado de CoreStation

El estado de CoreStation se puede confirmar mediante los LED DE ESTADO 1/2 ubicados en el lado izquierdo de la parte delantera de la unidad. Estos LED de estado muestran el estado de Ethernet, RS-485 0, RS-485 1, RS-485 2, RS-485 3, RS-485 HOST y del sistema en orden durante 1 segundo cada uno.

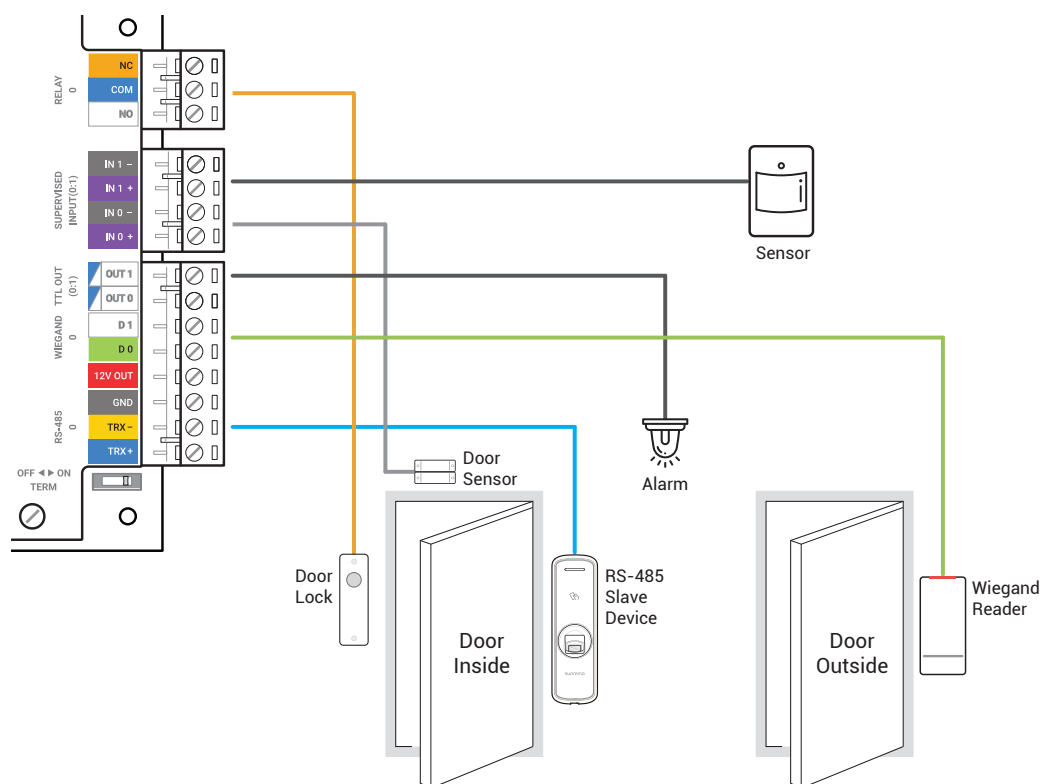
Característica	LED 1	LED 2	Estado
Ethernet	Rojo	Rojo	Falló la conexión a una IP dinámica
	Rojo	Amarillo	La conexión a una IP dinámica está en espera
	Rojo	Celeste	La conexión a una IP estática se realizó correctamente
	Rojo	Azul	La conexión a una IP dinámica se realizó correctamente
	Rojo	Púrpura	Falló la conexión a una IP estática
	Rojo	Apagado	Error de hardware
RS-485 0	Amarillo	Rojo	Sin dispositivo esclavo
	Amarillo	Amarillo	El dispositivo esclavo está desconectado
	Amarillo	Azul	El dispositivo esclavo está normal
	Amarillo	Apagado	Error de hardware
RS-485 1	Verde	Rojo	Sin dispositivo esclavo
	Verde	Amarillo	El dispositivo esclavo está desconectado
	Verde	Azul	El dispositivo esclavo está normal
	Verde	Apagado	Error de hardware
RS-485 2	Celeste	Rojo	Sin dispositivo esclavo
	Celeste	Amarillo	El dispositivo esclavo está desconectado
	Celeste	Azul	El dispositivo esclavo está normal
	Celeste	Apagado	Error de hardware

RS-485 3	Azul	Rojo	Sin dispositivo esclavo
	Azul	Amarillo	El dispositivo esclavo está desconectado
	Azul	Azul	El dispositivo esclavo está normal
	Azul	Apagado	Error de hardware
RS-485 HOST	Púrpura	Rojo	Sin dispositivo esclavo
	Púrpura	Amarillo	El dispositivo esclavo está desconectado
	Púrpura	Azul	El dispositivo esclavo está normal
	Púrpura	Apagado	Error de hardware
Sistema	Blanco	Rojo	Sistema bloqueado (por activación y acción del dispositivo)
	Blanco	Amarillo	Sistema bloqueado (por activación y acción de BioStar 2)
	Blanco	Verde	La conexión a BioStar 2 se realizó correctamente
	Blanco	Celeste	La conexión a BioStar 2 se realizó correctamente + Seguridad contra alteraciones ACTIVADA
	Blanco	Azul	Seguridad contra alteraciones ACTIVADA
	Blanco	Púrpura	Sistema bloqueado (por activación y acción del dispositivo) + Seguridad contra alteraciones ACTIVADA
	Blanco	Blanco	Sistema bloqueado (por activación y acción de BioStar 2) + Seguridad contra alteraciones ACTIVADA
	Púrpura	Púrpura	Migrar la base de datos

## Ejemplo de instalación

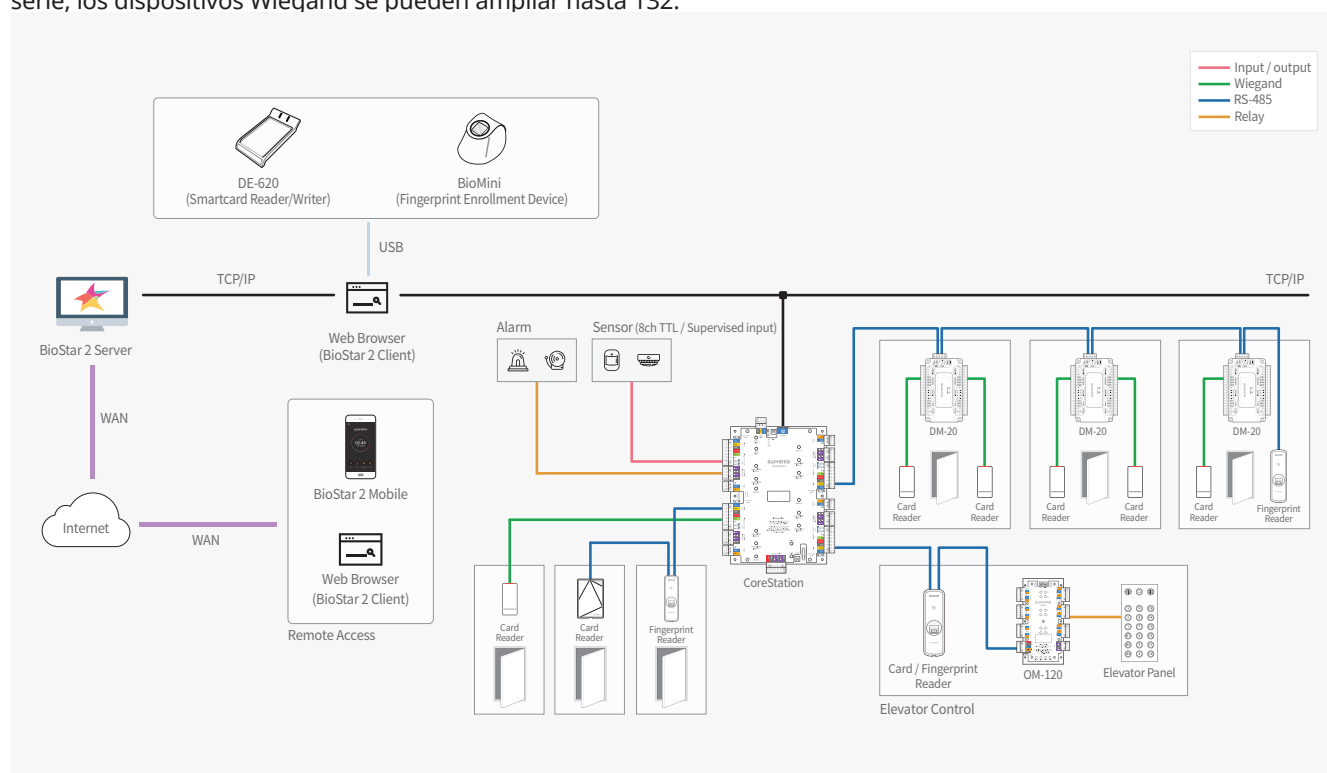
CoreStation es un sistema de control de acceso centralizado que puede realizar la autenticación biométrica. CoreStation, diseñado como un sistema empresarial, puede guardar la información de hasta 500,000 usuarios y ejecutar la coincidencia de 400,000 huellas dactilares por segundo.

El control de acceso y la administración de la asistencia se pueden utilizar a través del enlace con BioStar 2 y las diversas interfaces que se proporcionan, incluso RS-485 (OSDP), Wiegand, entrada supervisada y AUX.



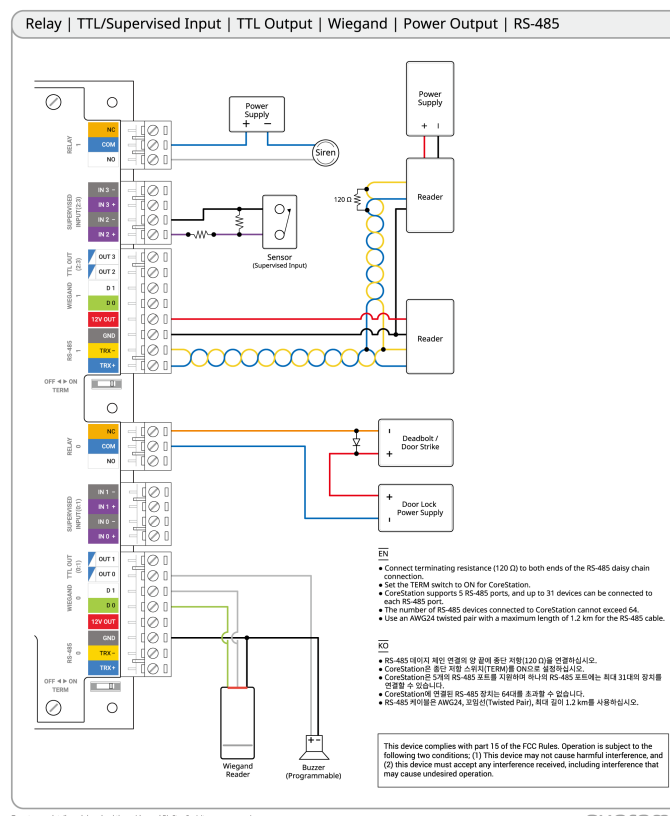
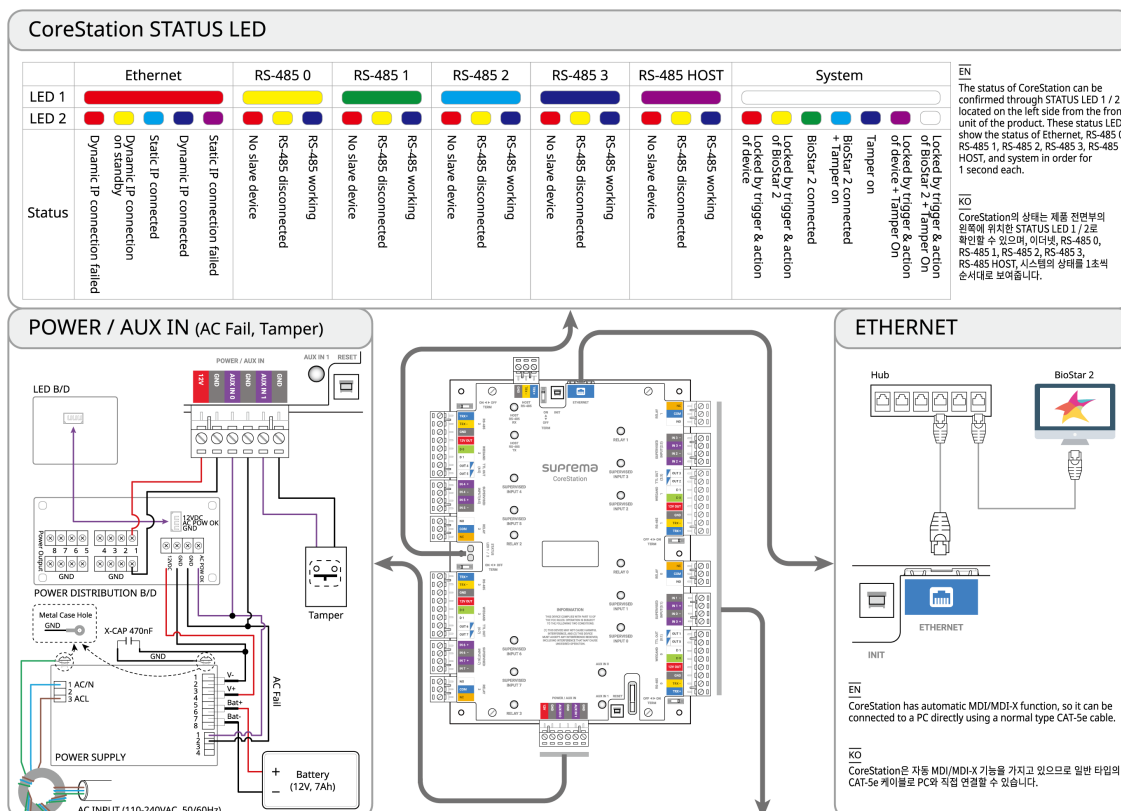
## Diagrama del sistema

Se pueden conectar hasta 64 dispositivos RS-485 a CoreStation y, cuando se conectan DM-20 mediante una conexión en serie, los dispositivos Wiegand se pueden ampliar hasta 132.



## Diagrama de conexión global

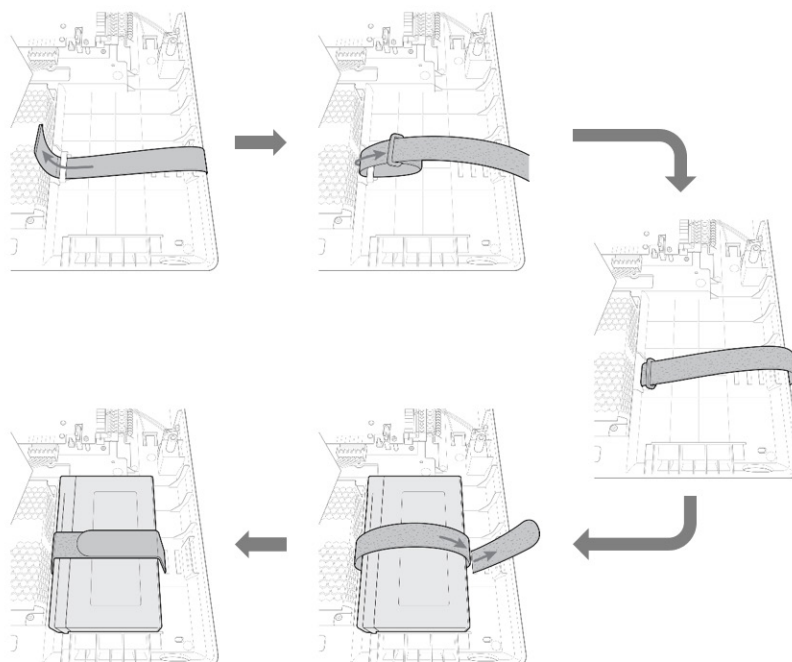
El gabinete contiene un tablero de control LED, un tablero de distribución de energía, una fuente de alimentación, una batería y un seguro contra alteraciones (Tamper).



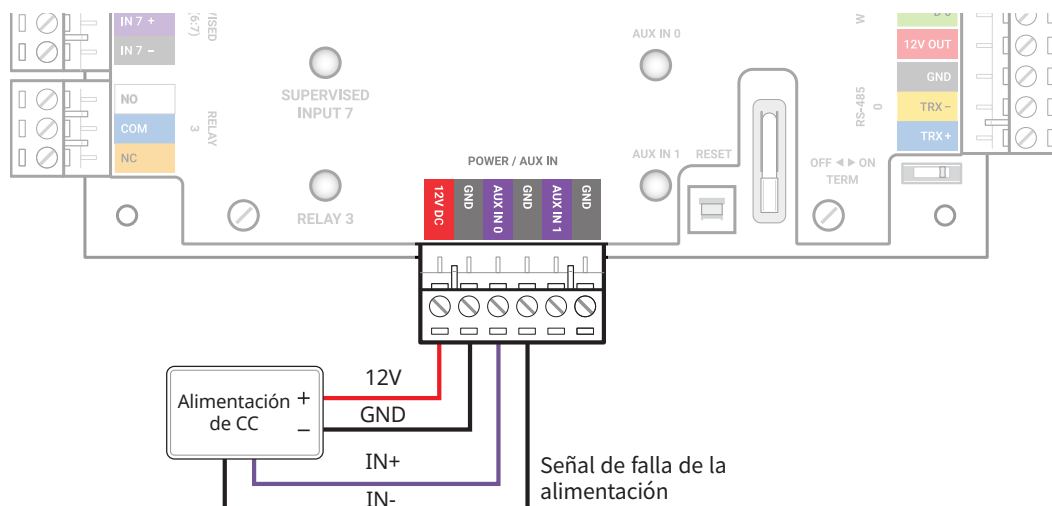
## Instalación

- 
- INFORMATION**
- THIS DEVICE COMES WITH A 10 YEAR WARRANTY. THE USER MUST ACCEPT ANY RISK OF DAMAGE TO THE DEVICE OR TO THE DATA STORED IN THE DEVICE. THE USER MUST ACCEPT ANY RISK OF DAMAGE TO THE DEVICE OR TO THE DATA STORED IN THE DEVICE. THE USER MUST ACCEPT ANY RISK OF DAMAGE TO THE DEVICE OR TO THE DATA STORED IN THE DEVICE.

Inserte la correa de velcro de la batería en el alojamiento y asegure la batería.



# Corriente

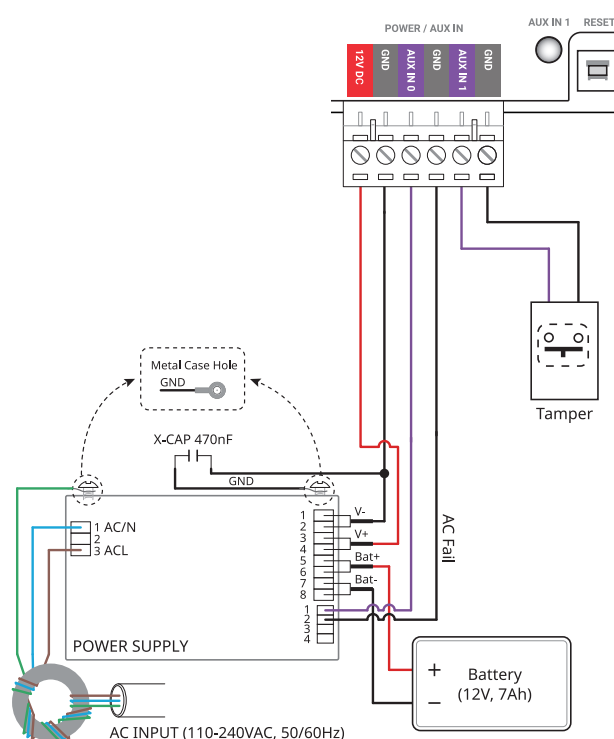


- Asegúrese de utilizar una alimentación independiente para el dispositivo de control de acceso y CoreStation.
- Utilice las especificaciones de alimentación correctas (12 V, 3 A).



- Se recomienda conectar y utilizar una fuente de alimentación ininterrumpida (UPS) para evitar fallas de alimentación.

## Alimentación (gabinete)



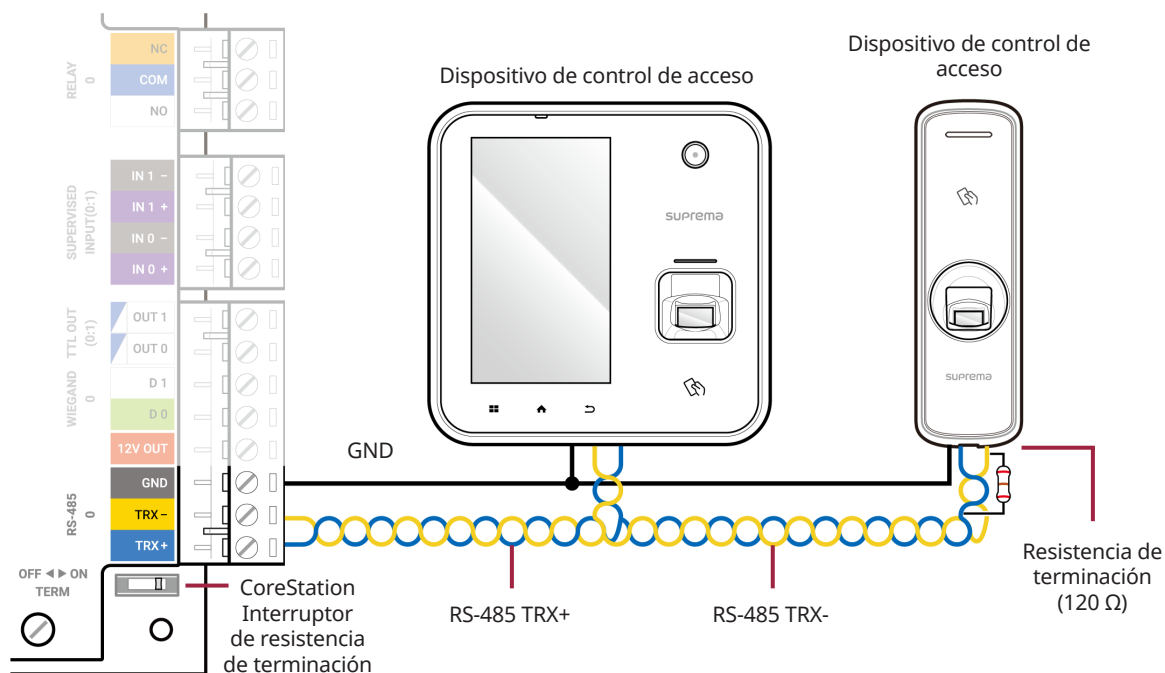


## RS-485

CoreStation admite 5 puertos RS-485 y se pueden conectar hasta 31 dispositivos a cada puerto RS-485.



- La cantidad de dispositivos RS-485 conectados a CoreStation no puede superar los 64.
- Utilice un cable de par trenzado AWG24 con una longitud máxima de 1.2 km para el cable RS-485.
- Conecte la resistencia de terminación (120  $\Omega$ ) a ambos extremos de la conexión en serie RS-485. 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. Configure el interruptor de terminación (TERM) en ON (Encendido) para CoreStation.





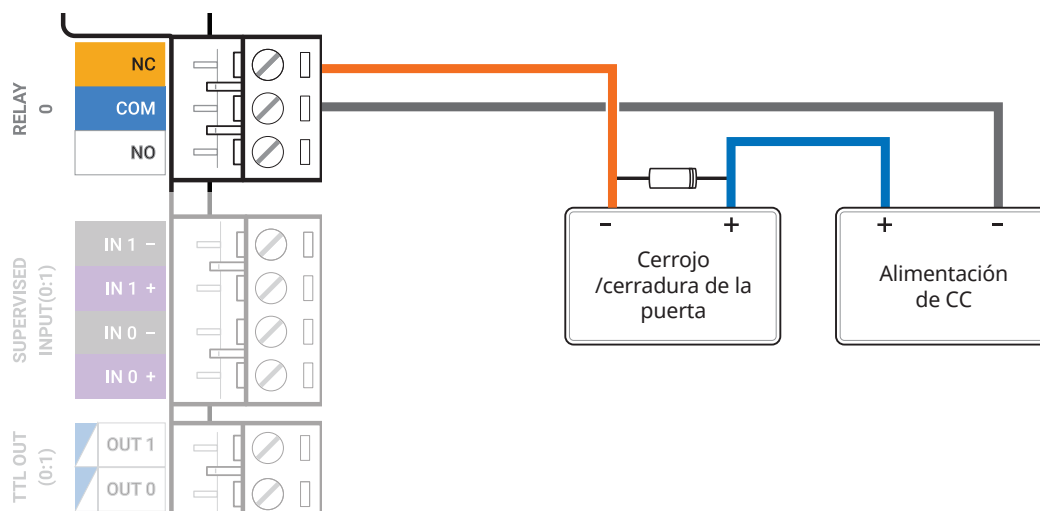
# Relé

## Bloqueo a prueba de fallas

Para utilizar el bloqueo a prueba de fallas, conecte el relé 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 abre.



- Conecte un diodo a ambos extremos de la entrada de alimentación, como se muestra en la figura siguiente, cuando instale un cerrojo o la cerradura de la puerta. Asegúrese de conectar el cátodo (dirección a la banda) a la parte + de la alimentación mientras presta atención a la dirección del diodo.

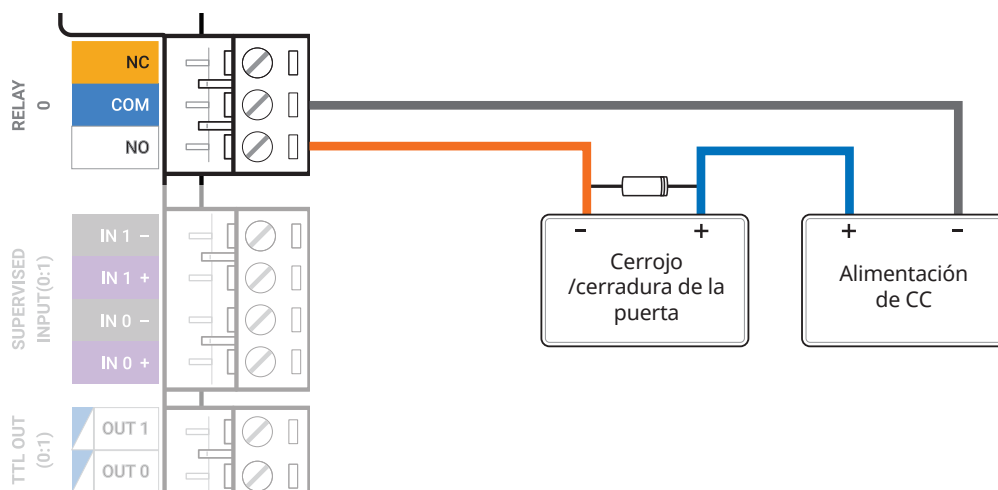


## Bloqueo seguro contra fallas

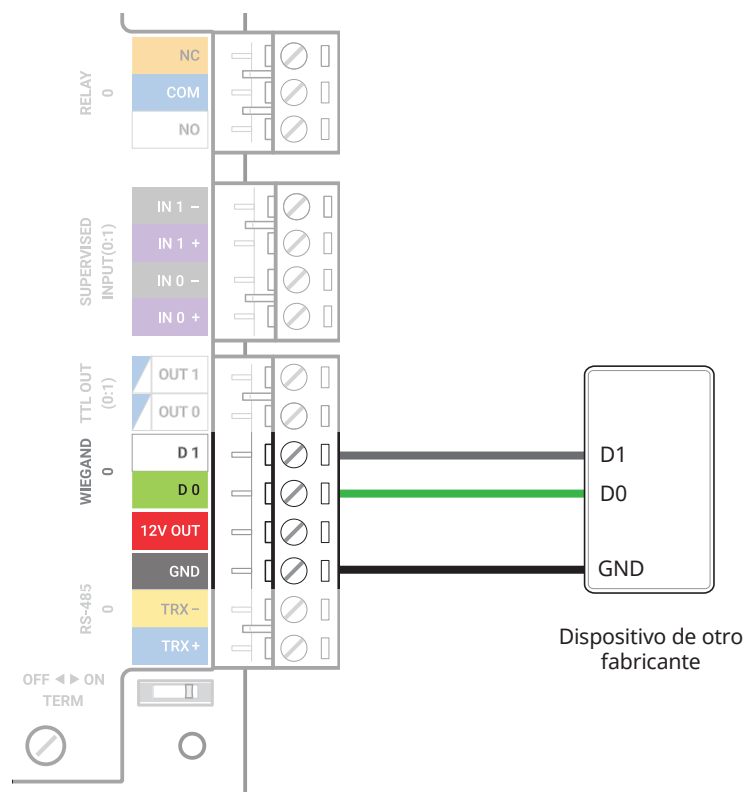
Para utilizar el bloqueo a prueba de fallas, conecte el relé normalmente abierto como se muestra en la figura siguiente. Normalmente, no fluye corriente a través del relé para el bloqueo a prueba de fallas. Cuando el relé activa el flujo de corriente, la puerta se abre. Si la fuente de alimentación del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



- Conecte un diodo a ambos extremos de la entrada de alimentación, como se muestra en la figura siguiente, cuando instale un cerrojo o la cerradura de la puerta. Asegúrese de conectar el cátodo (dirección a la banda) a la parte + de la alimentación mientras presta atención a la dirección del diodo.

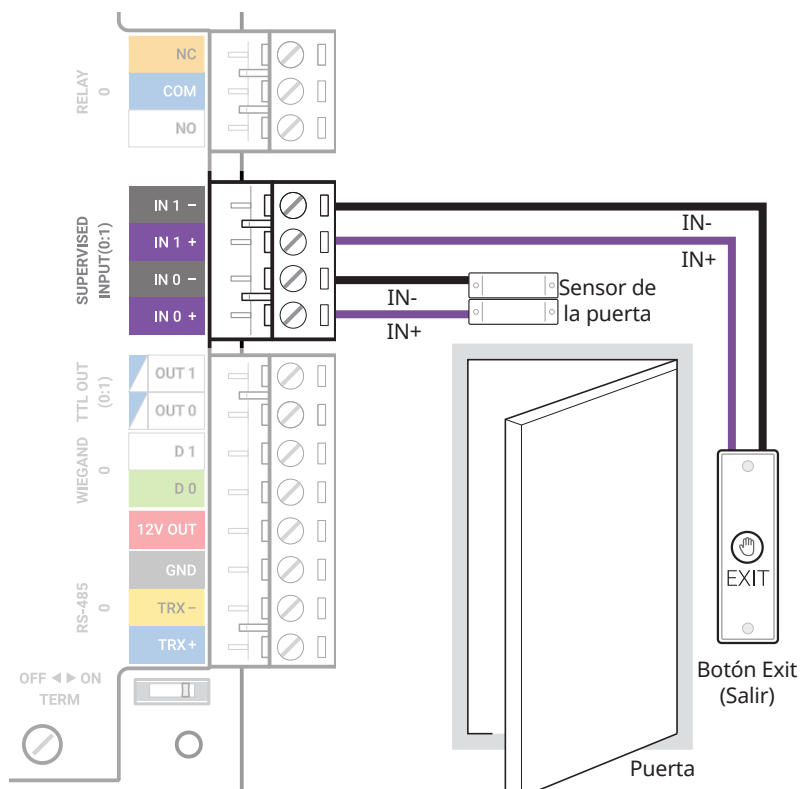


## ENTRADA Wiegand



## Sensor de la puerta y botón de salida

Los terminales de ENTRADA SUPERVISADA números 0 ~ 7 se pueden configurar para utilizarlos como entrada TTL normal o entrada supervisada.





# Especificaciones

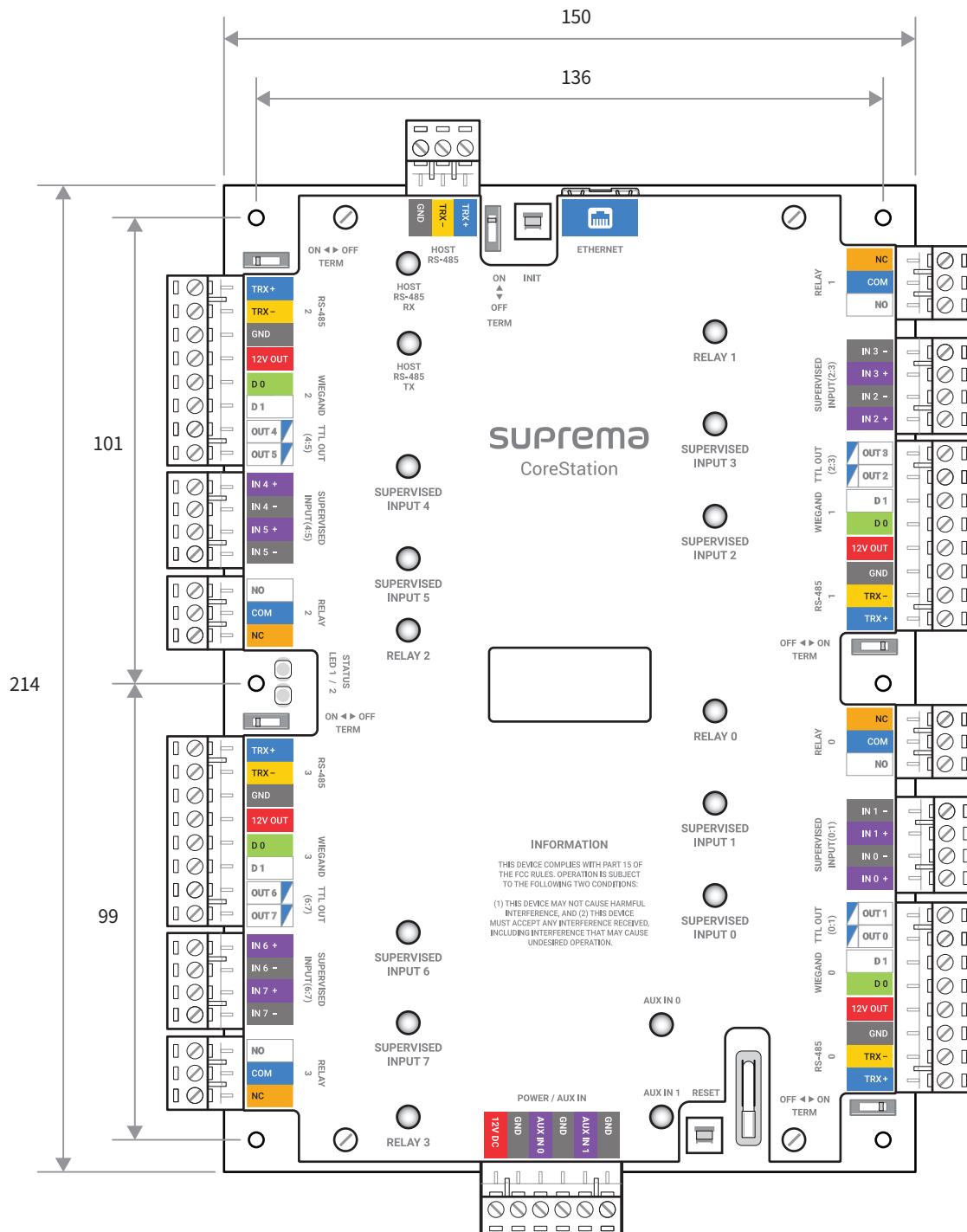
Categoría	Característica	Especificación
General	Modelo	CS-40
	CPU	Octa-core de 1.4 GHz
	Memoria	Memoria flash de 8 GB + 1GB de RAM
	Chip criptográfico	Compatible
	LED	Multicolor <ul style="list-style-type: none"> <li>• STATUS - 2unidades</li> <li>• HOST RS-485 TX - 1unidad</li> <li>• HOST RS-485 RX - 1unidad</li> <li>• SUPERVISED INPUT - 8unidades</li> <li>• RELAY - 4unidades</li> <li>• AUX IN - 2unidades</li> </ul>
	Temperatura de funcionamiento	0°C ~ 50°C
	Temperatura de almacenamiento	-40°C ~ 70°C
	Operación en humedad	0% ~ 80%, sin condensación
	Humedad en almacenamiento	0% ~ 95%, sin condensación
	Dimensión (ancho x alto x profundidad)	150 mm x 214 mm x 21 mm
	Peso	415 g
	Certificaciones	CE, FCC, KC, RoHS, REACH, WEEE, UL 294 Compliant
Capacidad	Máximo de usuarios	500,000
	Máximo de credencial (1:1)	<ul style="list-style-type: none"> <li>• Huella dactilar: 500,000</li> <li>• Facial: 30,000</li> <li>• Tarjeta: 500,000</li> <li>• PIN: 500,000</li> </ul>
	Máximo de credencial (1:N)	<ul style="list-style-type: none"> <li>• Fingerprint: 100,000</li> <li>• Facial: 4,000</li> </ul>
	Máximo de registro de texto	5,000,000
Interfaz	Ethernet	10/100 Mbps, MDI/MDI-X automático
	RS-485	5 canales
	Protocolo de comunicación RS-485	Compatible con OSDP V2
	Wiegand	4 canales
	Relé	4 relés
	Ingreso supervisado	8 canales (entrada TTL seleccionable)
	Salida TTL	8 canales
	Entrada AUX	2 canales (FALLA DE ALIMENTACIÓN DE CA, Seguro contra alteraciones (Tamper))
Eléctrica	Alimentación	CoreStation <ul style="list-style-type: none"> <li>• Voltaje: 12 VCC, corriente: Máximo 3 A</li> </ul> ENTRADA DE CA de la fuente de alimentación (SMPS) <ul style="list-style-type: none"> <li>• 110-240 VAC, 50/60 Hz</li> </ul>
	Salida de alimentación	Voltaje: 12 VCC / Corriente: Máximo 1.5 A
	Entrada del interruptor VIH	Máximo: 5 V / Mínimo: 3 V
	Entrada del interruptor VIL	Máximo 1 V
	Relé	Carga resistiva de 5 A a 30 V CC

\* FaceStation 2 y FaceLite solo están disponibles.

## Dimensiones

(Unidad: mm)

\* La tolerancia es de  $\pm 0.3$  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 comercial. Este equipo genera, utiliza y puede irradiar energía de radiofrecuencia y, si no se instala y utiliza de acuerdo con el manual de instrucciones, podría causar interferencias perjudiciales en las comunicaciones de radio. Es probable que el funcionamiento de este equipo en una zona residencial cause interferencia perjudicial, en cuyo caso se exige al usuario corregir la interferencia a su propio costo.
- **Modificaciones:** Cualquier modificación realizada a este dispositivo que no esté aprobada por Suprema Inc. puede anular la autorización concedida al usuario por la FCC para hacer funcionar este equipo.

## Descargos de responsabilidad

- La información de este manual se proporciona en relación con los productos de Suprema.
- El derecho de uso solo se reconoce para los productos incluidos en los términos y condiciones del acuerdo de venta garantizado por Suprema. No se reconoce el derecho de licencia a otros derechos de propiedad intelectual no tratados en este manual.
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Version 3, 29 June 2007

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