FaceStation F2
設置ガイド

バージョン 1.00
日本語

suprema

目次

安全にお使いいただくために

本製品を安全にお使いいただき、人身への危害や財産への損害を未然に防ぐために、以下の安全に関する指示に従ってください。

⚠ 警告

誤った使い方をすると、重傷または死亡につながる可能性があります。

設置場所

直射日光や紫外線の下にデバイスを設置しないでください。

- 製品の損傷、誤動作、変色、変形の原因となることがあります。

本製品を、直射日光の当たる場所、湿気の多い場所、埃やすすの多い場所に置かないでください。

- 火災または感電の原因となることがあります。

本製品を、熱器具の近くなど高温になる場所に置かないでください。

- 過熱により火災または感電の原因となることがあります。

本製品を、乾燥した場所に設置してください。

- 湿気のある場所に設置すると、製品損傷または感電の原因となることがあります。

本製品を、電磁妨害のない場所に設置してください。

- 電磁妨害を受けると、製品損傷または感電の原因となることがあります。

本製品を、ご自分で設置または修理しないでください。

- 火災や感電の原因となり、人身障害を招く恐れがあります。
- ご自分で本製品を設置または修理したことにより本製品に損傷が生じた場合、無料の A/S サービスは受けられません。

お取り扱い

本製品に、水、飲料または薬品などの液体が入らないようにしてください。

- 火災、感電、製品損傷の原因となることがあります。

⚠ 注意

誤った使い方をすると、軽傷または製品の損傷につながる可能性があります。

設置場所

電源ケーブルを人が通る場所に取り付けないでください。

- 製品損傷または人身傷害を招く恐れがあります。

本製品を、磁石、テレビ、モニター（特にCRTモニター）、スピーカーなど強い磁気を発する物の近くに置かないでください。

- 製品の故障につながる恐れがあります。

DC 24 V および 12 V、2.5 A 以上の電源アダプタのみを使用してください。

- 適切な電源が使用されていないと、製品が正常に動作しない場合があります。

Secure I/O 2、電子ロック、および FaceStation F2 ごとに独立した電源を使用してください。

- これらのデバイスを同じ電源に接続して使用すると、デバイスが正常に機能しない場合があります。

複数のデバイスを設置する場合は、デバイス間に最低限の間隔を空けてください。

- 他のデバイスへの RF 性能が影響を受け、デバイスが通常どおりに動作しなくなる可能性があります。

お取り扱い

本製品を落下させたり、衝撃を与えたりしないでください。

* 製品の故障につながる恐れがあります。

パスワードを他の人に漏らすことにないように注意して管理し、定期的にパスワードを変更してください。

* 不正侵入が発生する可能性があります。

製品のボタンを強く押したり、鋭利な工具で押したりしないでください。

* 製品の故障につながる恐れがあります。

本製品を清掃する場合、水、ベンゼン、またはアルコール等を使用せずに、柔らかい乾いた布で製品を拭いてください。

* 製品の故障につながる恐れがあります。

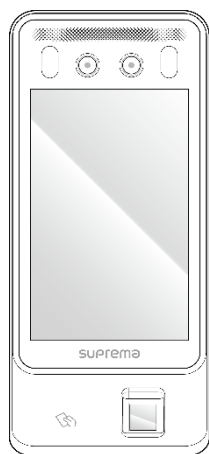**FaceStation F2 は、静電容量式ボタンを使用します。雨天のために湿った環境になっている、または製品の表面に水分が付着している場合は、使用する前に、乾いたタオルで製品を拭いてください。**

RTC バッテリー

正しくないタイプのバッテリーに交換すると、バッテリーが爆発する恐れがあります。
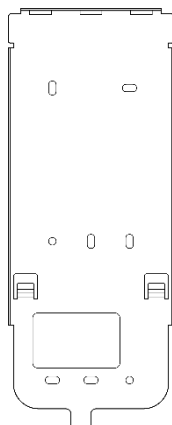
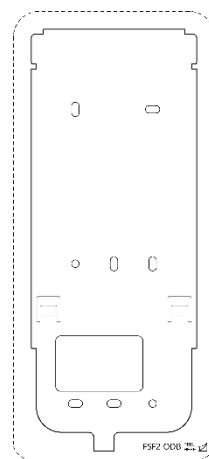バッテリーの廃棄は、地域または国際的な該当する廃棄物規制に従ってください。

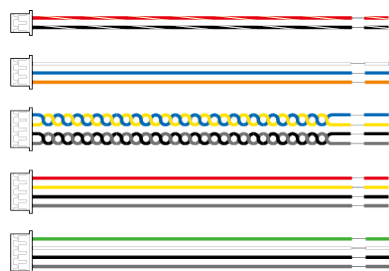---

はじめに

部品

FaceStation F2

壁用ブラケット

穴あけ用テンプレート

接続ケーブル
（1 × 2 ピン、1 × 3 ピン、3 × 4 ピン）
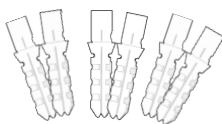
PVC アンカー × 6

固定ねじ × 6

120 Ω 抵抗器

ダイオード
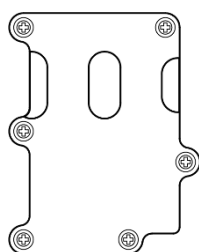
ケーブルカバー

ブラケット固定ねじ
（星形）

クイックガイド

オープンソースの
ソフトウェアガイド

注意

- 部品は設置環境によって異なる場合があります。
- 製品をブラケットに組み付ける際、セキュリティを強化するために、製品固定ねじの代わりに付属のブラケット固定ねじ（星形）を使用できます。

各部品の名前と機能

LED ランプ
赤外線カメラ
ビジュアルカメラ
LCD 画面
RF カードおよびモバイル
アクセスカード認証ユニット
指紋センサー

スピーカー
イーサネット
TTL 入力（4 ピン）
Wiegand 入力/出力
（4 ピン）
RS-485（4 ピン）
リレー（3 ピン）
電源（2 ピン）
SAM カードスロット
USB（Type-C）ケーブルスロット
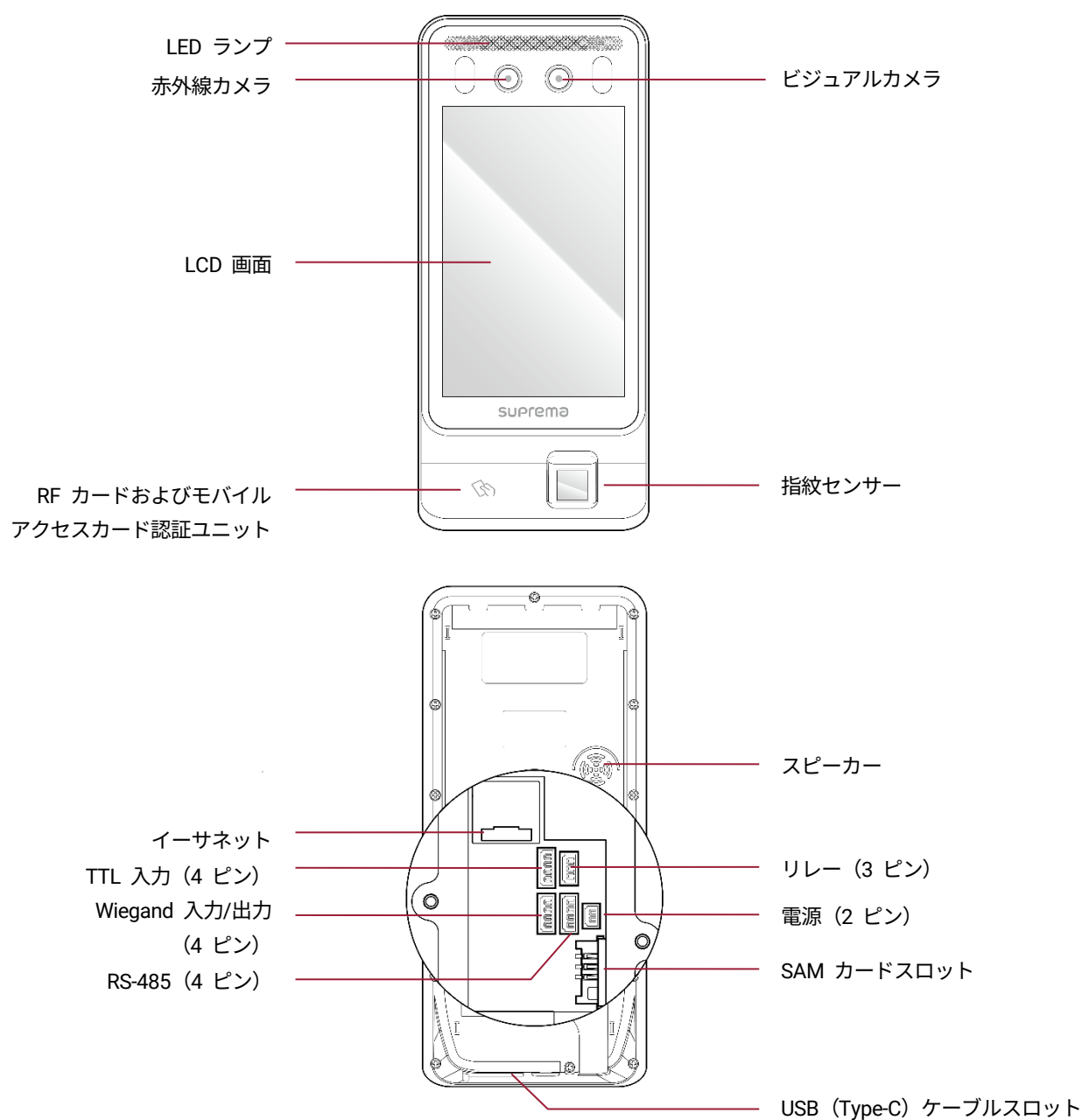
名前	説明
LED ランプ	暗い場所でユーザーが検出されるとオンになります。
赤外線カメラ	赤外線の顔画像をキャプチャーします。
ビジュアルカメラ	実際の顔画像をキャプチャーします。
LCD 画面	操作用の UI があります。
RF カードおよびモバイル アクセスカード認証ユニット	入室用にカードをスキャンする部品。
指紋センサー	指紋を読み取ります。

スピーカー	音を鳴らします。
イーサネット	イーサネットケーブルを接続します。
TTL 入力（4 ピン）	TTL 入力ケーブルを接続します。
リレー（3 ピン）	リレーケーブルを接続します。
Wiegand 入力/出力 （4 ピン）	Wiegand 入出力ケーブルを接続します。
電源（2 ピン）	電源ケーブルを接続します。
RS-485（4 ピン）	RS-485 ケーブルを接続します。
SAM カードスロット	SAM カードを挿入します。
USB（Type-C） ケーブルスロット	USB ケーブルを接続します。

ケーブルとコネクタ

電源装置

ピン	名前	色
1	PWR +VDC	赤（白のストライプ）
2	PWR GND	黒（白のストライプ）

リレー

ピン	名前	色
1	RLY NO	白
2	RLY COM	青
3	RLY NC	オレンジ

RS-485

ピン	名前	色
1	485 TRXP	青
2	485 TRXN	黄
3	485 GND	黒
4	SH GND	グレー

TTL 入力

ピン	名前	色
1	TTL IN0	赤
2	TTL IN1	黄
3	TTL GND	黒
4	SH GND	グレー

Wiegand 入力および出力

ピン	名前	色
1	WG D0	緑
2	WG D1	白
3	WG GND	黒
4	SH GND	グレー

正しい顔の登録と認証方法

顔の登録時の注意点

- 顔を登録する際は、デバイスと顔の距離を 60 cm から 100 cm の間で維持します。
- 顔の表情を変えないように注意してください。
- 目や眉が隠れないように注意してください。
- マスクや眼鏡は着用しないでください。
- 画面に二人の顔が映らないように注意してください。一度に一人の顔を登録してください。
- 画面の指示に従わない場合、顔の登録に時間がかかったり、失敗したりする可能性があります。

顔認証時の注意点

- デバイスの画面の中央に顔が表示されていることを確認します。ガイドラインが表示されたら、画面に表示される指示に従って顔認証を行います。
- 顔の一部がマスクやサングラスで隠れている場合は、認証が失敗することがあります。顔を覆わないでください。デバイスが眉と顔の両方を認識できるようにしてください。

指紋を登録する方法

指紋の認証率を上げるために、指紋を正しく登録してください。FaceStation F2 では、ユーザーの指紋入力の角度と位置が変化しても指紋を認識できます。指紋を登録する際に次の点に注意すると、認証率が上がる場合があります。

指紋を入力する指を選ぶ

- 特定の指の指紋を使用できない場合、例えば片手で荷物を持ち上げていたり、指に怪我をしていたりする場合に備えて、ユーザーごとに最大 10 個の指紋を登録できます。
- 指紋がうまく認識されない場合は、2 回連続して同じ指で登録すると認証率が上がる場合があります。
- 指に切り傷がある場合や、指紋がはっきりしない場合は、別の指の指紋を登録します。
- 指紋をスキャンする際に人差し指または中指を使用することを推奨します。指紋センサーの中央に別の指を正確に置くことが難しい場合は、認証率が低下する場合があります。
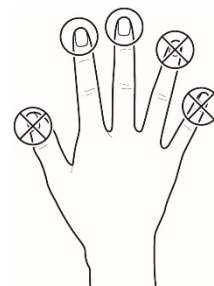
指紋の登録方法

1 「センサーに指を置いてください」というメッセージが指紋の登録用の LCD 画面に表示されたら、指紋を登録する指を指紋認証ユニットに置き、認証率を上げるために指を軽く押し付けます。
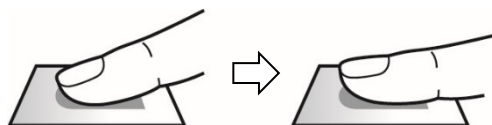
2 ビープ音の後に再入力画面が表示されたら、登録した指の指紋を再度スキャンします（登録する指の指紋を 2 回スキャンします）。

注意

指紋の登録に関する注意

指紋認識時には最初に登録した指紋と照合されるため、最初の指紋登録が最も重要です。指紋を登録する際は次の点に注意してください。

- 指をセンサーに密着させてしっかりと押し付けます。
- 指紋の中央をセンサーの中央に合わせてください。
- 指に切り傷がある場合や、指紋がはっきりしない場合は、別の指の指紋を登録します。
- 画面の指示に従って、指を動かさずに指紋を正しくスキャンします。
- 指を動かしてセンサーとの接触面が小さくなったり指の角度が変わったりすると、指紋認証が行われない場合があります。

指紋認識が失敗した場合

FaceStation F2 は、季節の変化や指の状態にかかわらず、指紋を認識できます。ただし、認証率は、外部環境や指紋入力方法によって異なる場合があります。

指紋認証がスムーズにいかない場合は、以下の措置を講じることをお勧めします。

- 指が水や汗で濡れている場合は、指を乾かしてからスキャンします。
- 指が乾燥し過ぎている場合は、指先に息を当ててから指をスキャンします。
- 指を切った場合は、別の指の指紋を登録します。
- 最初に登録した指紋が正しくスキャンされていない場合があるため、**「指紋の登録に関する注意」** に従って、もう一度指紋を登録してください。

設置場所

ブラケットと製品の固定

1 付属のドリル用テンプレートを使用して、製品を取り付ける正しい位置を決定します。
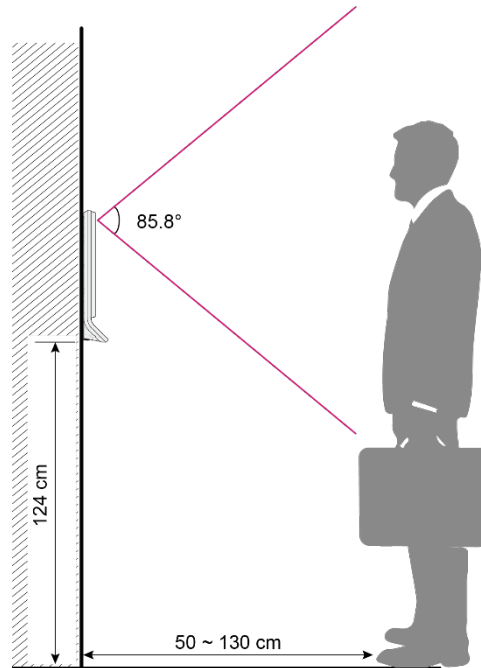
注意
• デバイスを設置する際の最適な高さは 124 cm です。 • デバイスは直射日光や紫外線が当たらない場所に設置してください。 • ユーザーが認証しようとしたときに顔が直射日光にさらされないように、設置位置を調整します。

2 固定ねじをブラケットに通して、FaceStation F2 の取り付け位置にブラケットをしっかり固定します。
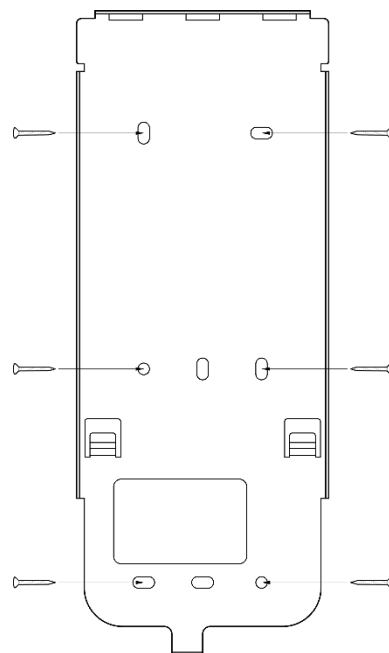
注意

- コンクリート壁に FaceStation F2 を設置する場合は、ドリルで穴を開け、PVC アンカーを挿入して、固定ねじで固定します。
- RF 干渉を回避するには、最小分離距離を維持する必要があります。

壁の厚さ	距離
100 mm	200 mm
120 mm	180 mm
150 mm	150 mm
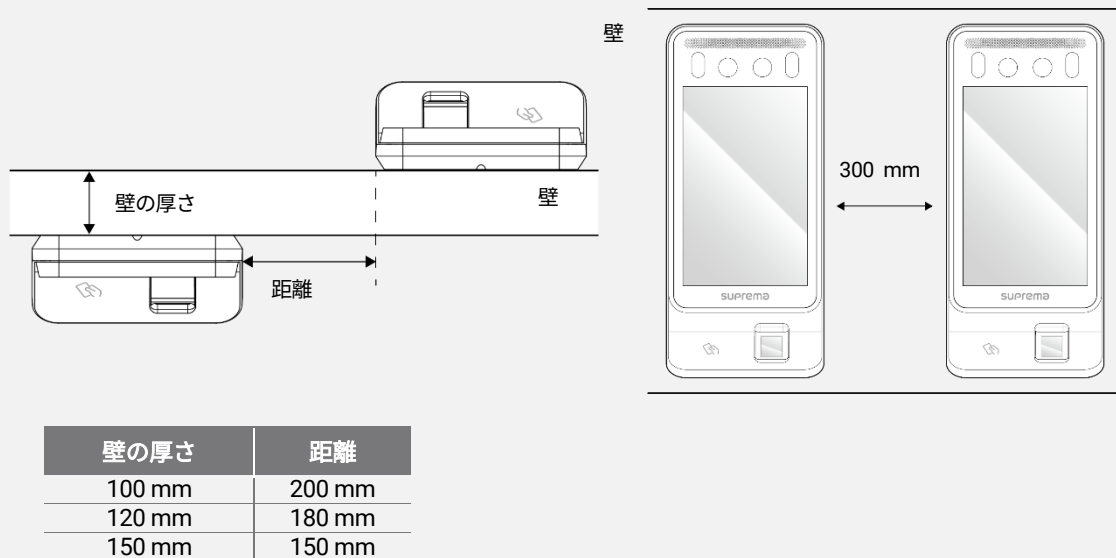
- Suprema Mobile Access を使用するときは、BLE 干渉を回避するために、デバイス間の距離を 1 m 以上に保ちます。

3 FaceStation F2 を固定ブラケットに取り付けます。
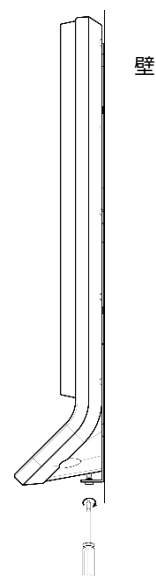
4 FaceStation F2 の製品固定ねじを回転させて、FaceStation F2 をブラケットに組み付けます。

壁

電源装置の接続

FaceStation F2

1 - PWR +VDC	赤（白のストライプ）
2 - PWR GND	黒（白のストライプ）
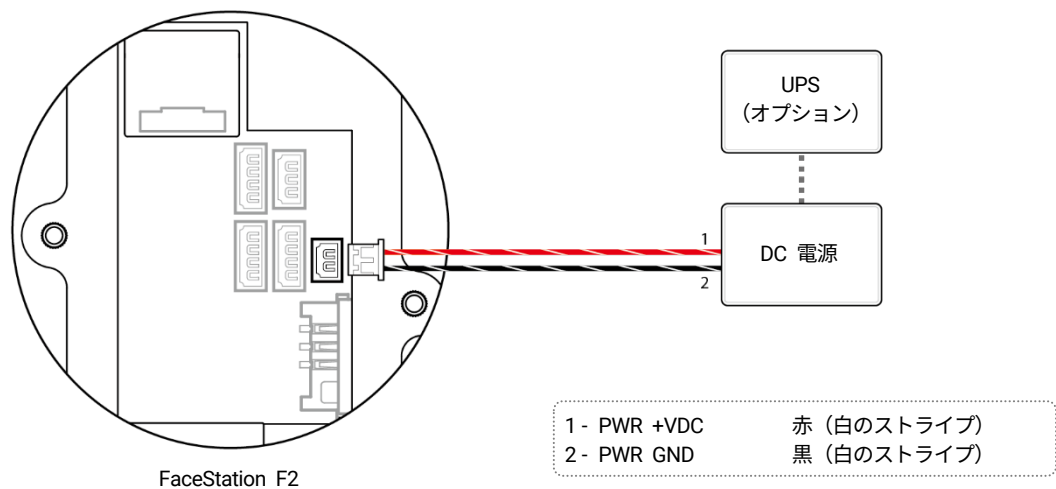
注意

- IEC/EN 60950-1 の認可を受けた 2,500 mA 以上の DC 24 V または DC 12 V（± 10 %）の電源アダプタを使用します。別のデバイスを電源アダプタに接続して使用する場合は、端末と別のデバイスに必要な合計の電力消費量以上の電流容量を備えたアダプタを使用してください。
- Secure I/O 2、電子ロック、および製品ごとに独立した電源を使用してください。これらのデバイスを同じ電源に接続して使用すると、デバイスが正常に機能しない場合があります。
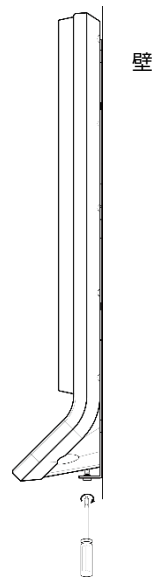- 電源装置を接続するときは、FaceStation F2 と電源装置の距離に注意してください。FaceStation F2 は、接続ケーブルの長さを最短に保つために、電源装置にできるだけ近い位置で接続する必要があります。ケーブルが正しく接続されていないと、デバイスが誤動作を起こす恐れがあります。FaceStation F2 が電源から離れている場合は、16 AWG または 18 AWG ケーブルを使用することをお勧めします。接続距離は、使用するケーブルの規格と設置環境によって異なる場合があります。FaceStation F2 は DC 24 V と DC 12 V の両方の電源をサポートしているため、ケーブルの仕様に従って最大長を確認し、ユニットに適切に電力が供給されるようにします。

ケーブル規格	最大延長長さ	
	DC 24 V	DC 12 V
16 AWG	150 m	50 m
18 AWG	136 m	30 m
20 AWG	90 m	20 m

- 電源アダプタ（DC 24 V（± 10 %）、2.5 A）を使用する場合は、電源ケーブルの長さを延長しないでください。
- 電源装置用に CAT5 UTP 2 線を使用しないでください。

ネットワーク接続

TCP/IP

LAN 接続（ハブに接続）

一般的なタイプの CAT-5e ケーブルを使用して、製品をハブに接続できます。

ハブ

PC
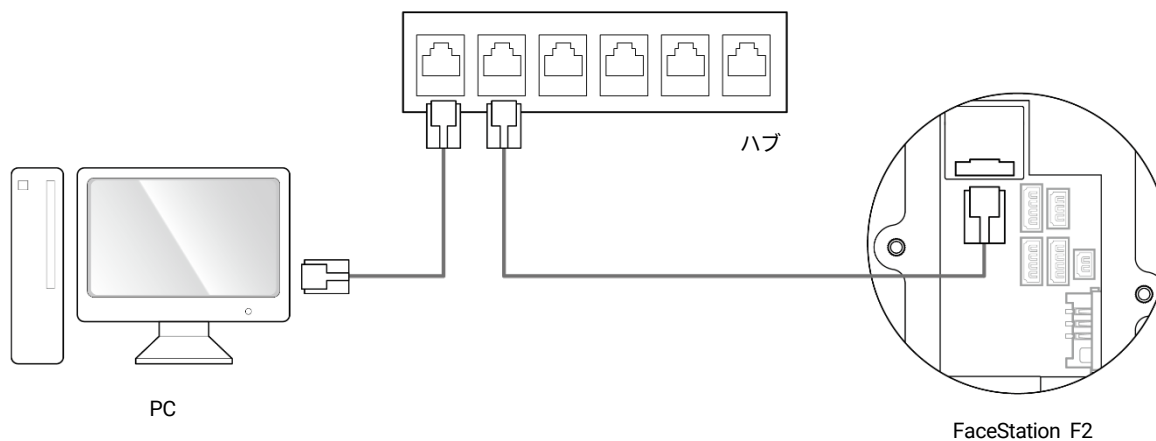
FaceStation F2

LAN 接続（PC への直接接続）

FaceStation F2 には、通常のストレートタイプの CAT-5e ケーブルまたはクロスケーブルを使用して直接 PC に接続できるように、自動 MDI/MDIX 機能が搭載されています。

PC

FaceStation F2
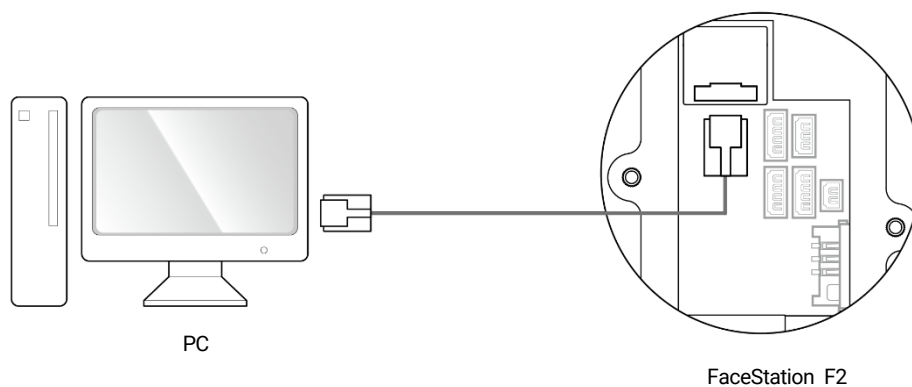
注意

- ギガビットネットワークスイッチを使用する場合は、以下の情報を参照してください。
  - Cat5e UTP（シールドなしツイストペア）ケーブルを使用します。
  - ネットワーク接続には、ケーブルの 4 ペア（8 線）すべてを使用します。
  - 他の目的にケーブルのペアを使用しないでください。

TTL 入力接続

ドアセンサー

ケーブルシールド
（オプション）

ドアボタン

1

4

1 - TTL IN0	赤
2 - TTL IN1	黄
3 - TTL GND	黒
4 - SH GND	グレー

FaceStation F2
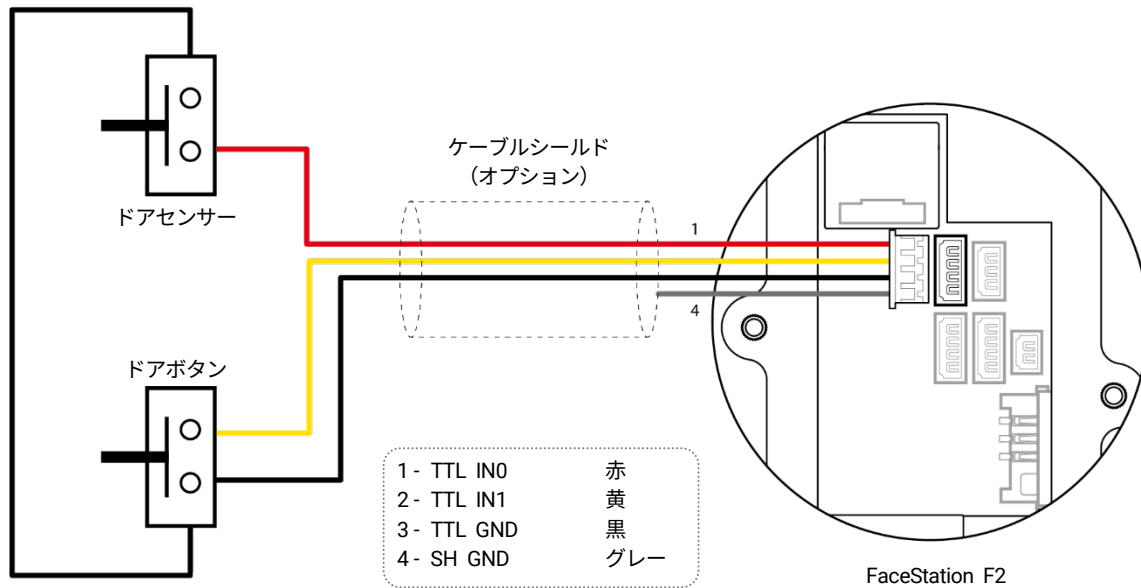
リレー接続

フェールセーフロック

フェールセーフロックを使用するために、下の図のように N/C リレーを接続します。通常、フェールセーフロック用のリレーには電流が流れています。リレーが作動して電流が遮断されると、ドアが開きます。停電や外部の要因のために製品に接続した電源が切断された場合は、ドアが開きます。
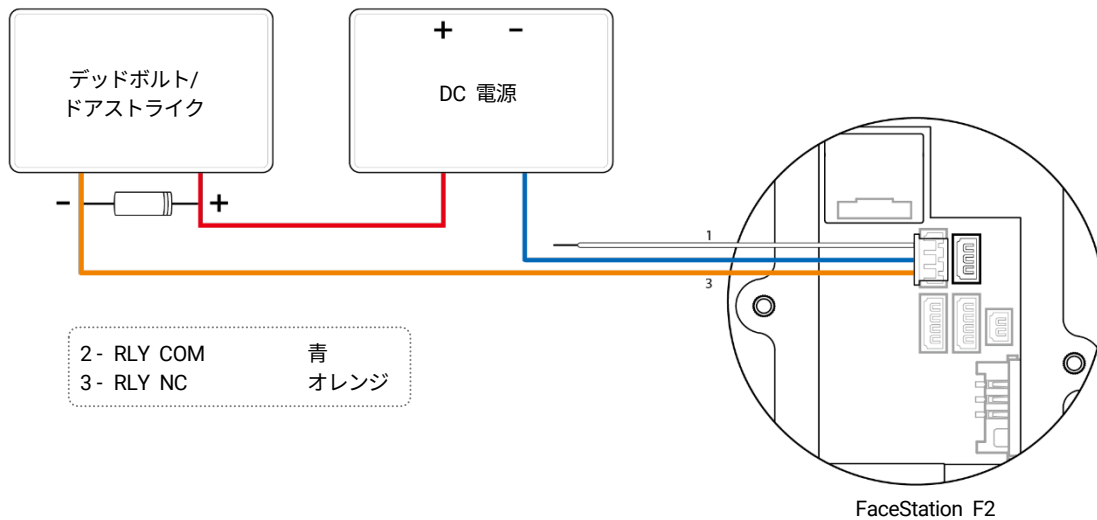
2 -	RLY COM	青
3 -	RLY NC	オレンジ

FaceStation F2

> **注意**
> - 図のようにドアロックワイヤーの両側にダイオードを取り付けて、ドアロックの作動時に発生する逆電流からリレーを保護します。
> - ダイオードの設置方向に注意してください。ダイオードはドアロックの近くに取り付けます。
> - FaceStation F2 とドアロックには別々の電源を使用してください。
> - Suprema のスタンドアロン型インテリジェントリーダーには、外部コントローラなしでドアを直接ロック/アンロックできる内部リレーが内蔵されており、利便性が向上しています。ただし、セキュリティを必要とする入退管理の用途では、ドアのロック解除を引き起こす可能性のある改ざん攻撃を防止するため、リーダーの内部リレーの使用はお勧めしません。このような用途では、ドアの安全な側に設置された Suprema の Secure I/O 2、DM-20、CoreStation などのロックコントロールには個別のリレーユニットを使用することを強くお勧めします。

フェールセキュアロック

フェールセキュアロックを使用するには、下の図のように N/O リレーを接続します。通常、フェールセキュアロック用のリレーに電流は流れていません。電流がリレーによって作動すると、ドアが開きます。停電や外部の要因のために、製品に接続した電源が切断された場合は、ドアがロックします。
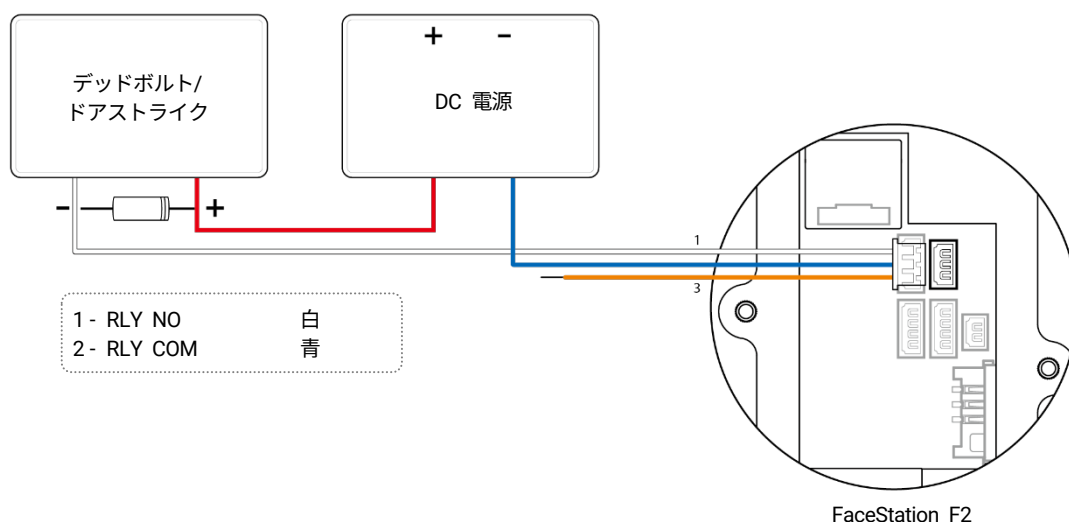
1 -	RLY NO	白
2 -	RLY COM	青

FaceStation F2

> **注意**
> - 図のようにドアロックワイヤーの両側にダイオードを取り付けて、ドアロックの作動時に発生する逆電流からリレーを保護します。
> - ダイオードの設置方向に注意してください。ダイオードはドアロックの近くに取り付けます。
> - FaceStation F2 とドアロックには別々の電源を使用してください。
> - Suprema のスタンドアロン型インテリジェントリーダーには、外部コントローラなしでドアを直接ロック/アンロックできる内部リレーが内蔵されており、利便性が向上しています。ただし、セキュリティを必要とする入退管理の用途では、ドアのロック解除を引き起こす可能性のある改ざん攻撃を防止するため、リーダーの内部リレーの使用はお勧めしません。このような用途では、ドアの安全な側に設置された Suprema の Secure I/O 2、DM-20、CoreStation などのロックコントロールには個別のリレーユニットを使用することを強くお勧めします。

自動ドア接続

```
1 - RLY NO        白
2 - RLY COM       青
```

ドアボタン

検出センサー

自動ドア
制御装置

1

3

ドアロック
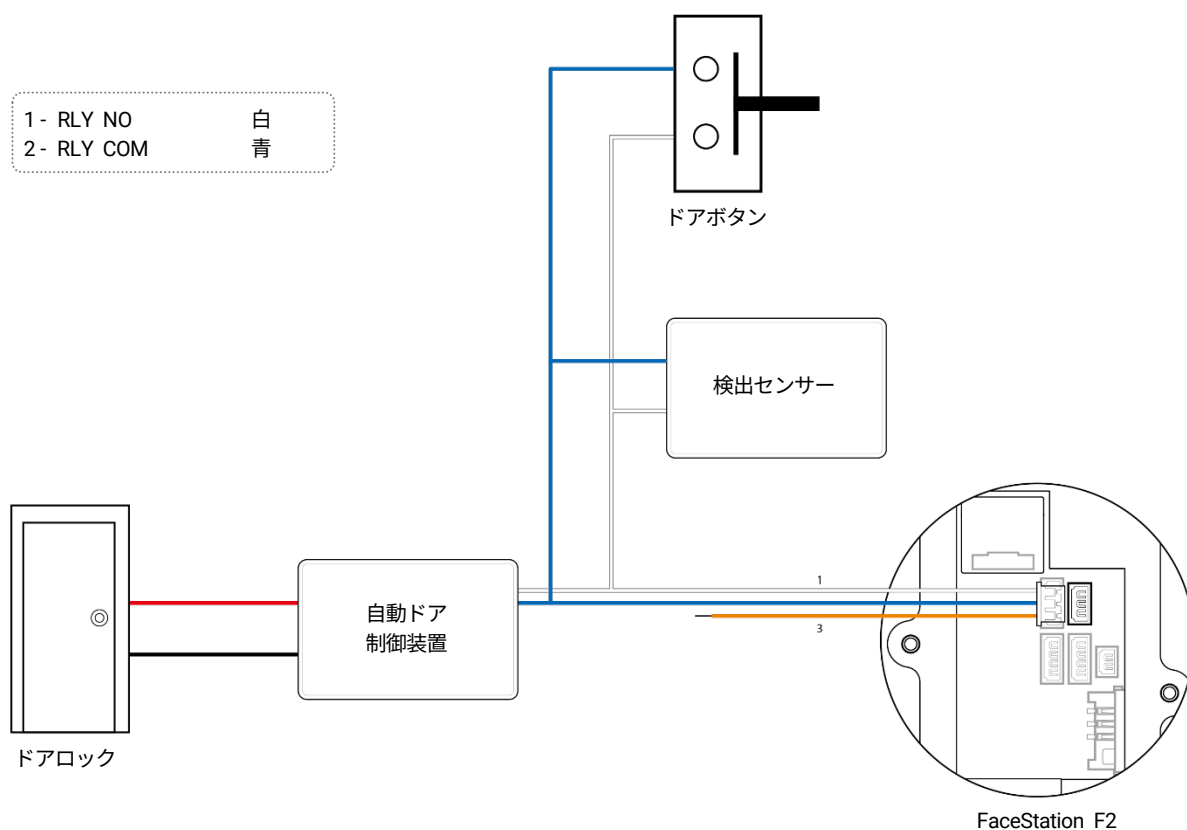
FaceStation F2

スタンドアロンでの接続

FaceStation F2 は、個別の I/O デバイスを接続せずにドアロック、ドアボタン、およびドアセンサーに直接接続できます。
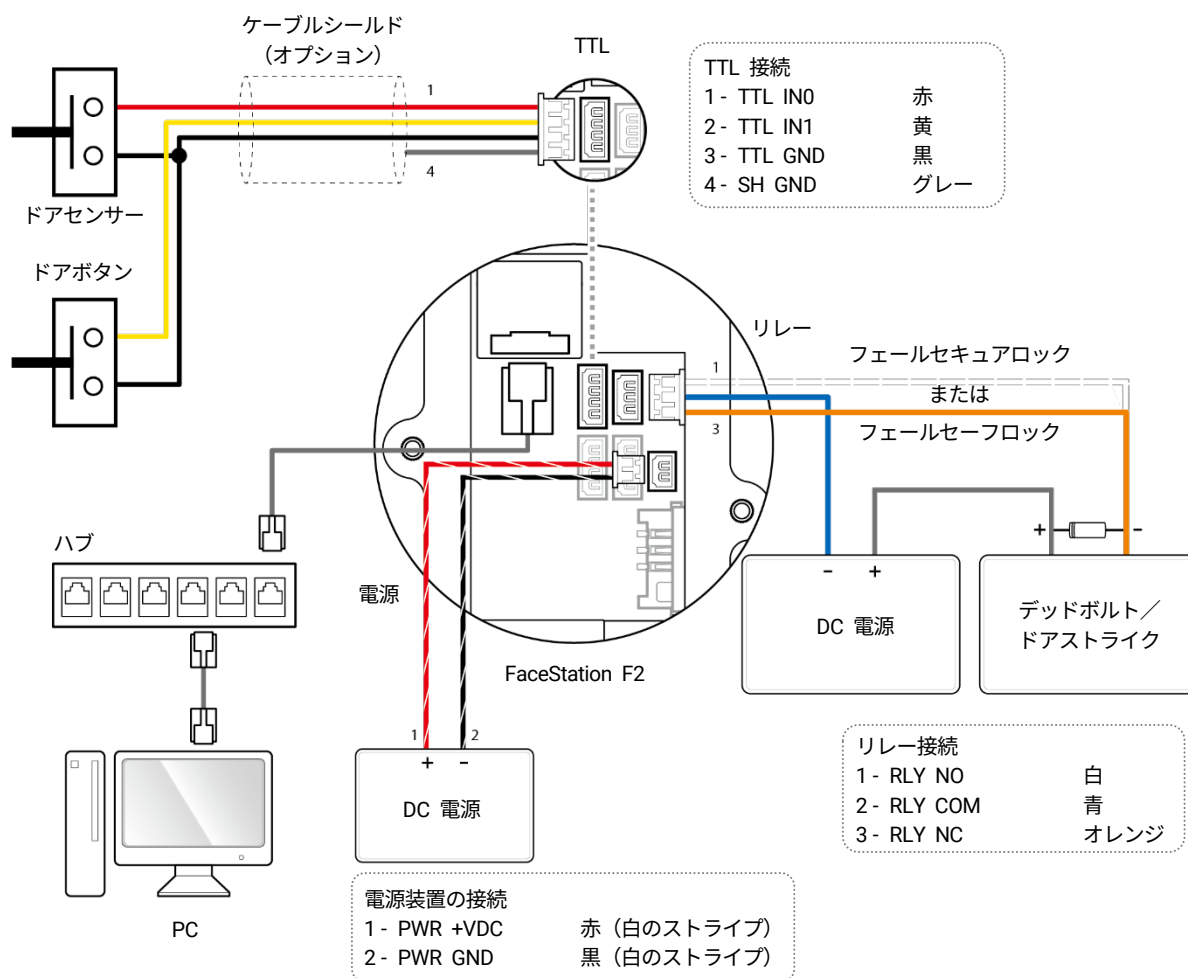
注意

- FaceStation F2 は、RS-485 ケーブルでスレーブデバイスと接続したマルチドアコントローラとして使用できます。スレーブデバイスはダミーリーダーとして使用され、認証はマスターデバイスで実行されます。
- 指紋認証デバイスが FaceStation F2 でスレーブデバイスとして設定されている場合、別の FaceStation F2 をスレーブデバイスとして追加することはできません。
- 指紋認証デバイスがマスターデバイスの場合、FaceStation F2 をスレーブデバイスとして追加することはできません。
- FaceStation F2 がマスターデバイスであるときに FaceStation F2 をスレーブデバイスとして接続すると、1 台の FaceStation F2 だけをスレーブデバイスとして追加できます。
- FaceStation F2 が顔認証端末のスレーブデバイスとして設定されている場合、Secure I/O 1 および DM-20 を 1 台ずつ接続できます。
- FaceStation F2 が顔認証端末のスレーブデバイスとして設定されている場合、追加の OM-120 を接続できます。
- 接続できるスレーブデバイスの最大数は、認証方式、ユーザー数、およびデバイス数によって異なります。また、スレーブデバイスの数が認証の速度に影響します。
- 1 台のマスターデバイスで 31 台のスレーブデバイスを制御できます。RS-485 の帯域幅では、最高 7 台の指紋認証デバイスを接続できます。
- Suprema のスタンドアロン型インテリジェントリーダーには、外部コントローラなしでドアを直接ロック/アンロックできる内部リレーが内蔵されており、利便性が向上しています。ただし、セキュリティを必要とする入退管理の用途では、ドアのロック解除を引き起こす可能性のある改ざん攻撃を防止するため、リーダーの内部リレーの使用はお勧めしません。このような用途では、ドアの安全な側に設置された Suprema の Secure I/O 2、DM-20、CoreStation などのロックコントロールには個別のリレーユニットを使用することを強くお勧めします。
- 詳細については、Suprema 技術サポートチーム（support.supremainc.com）にお問い合わせください。

Secure I/O 2 への接続

Secure I/O 2 は、RS-485 ケーブルで FaceStation F2 に接続できる I/O デバイスです。FaceStation F2 と Secure I/O 2 の間の接続が失われたり、外部要因により FaceStation F2 への電源が切断されたりしても、セキュリティを維持できます。

- RS-485 ケーブルには、最大長が 1.2 km の AWG 24 ツイストペアを使用します。
- RS-485 のデイジーチェーンで接続する場合は、デイジーチェーン接続の両端に終端抵抗（120 Ω）を接続してください。中央の線に接続すると、信号レベルが小さくなり、通信性能が低下します。必ずデイジーチェーン接続の両端に接続してください。
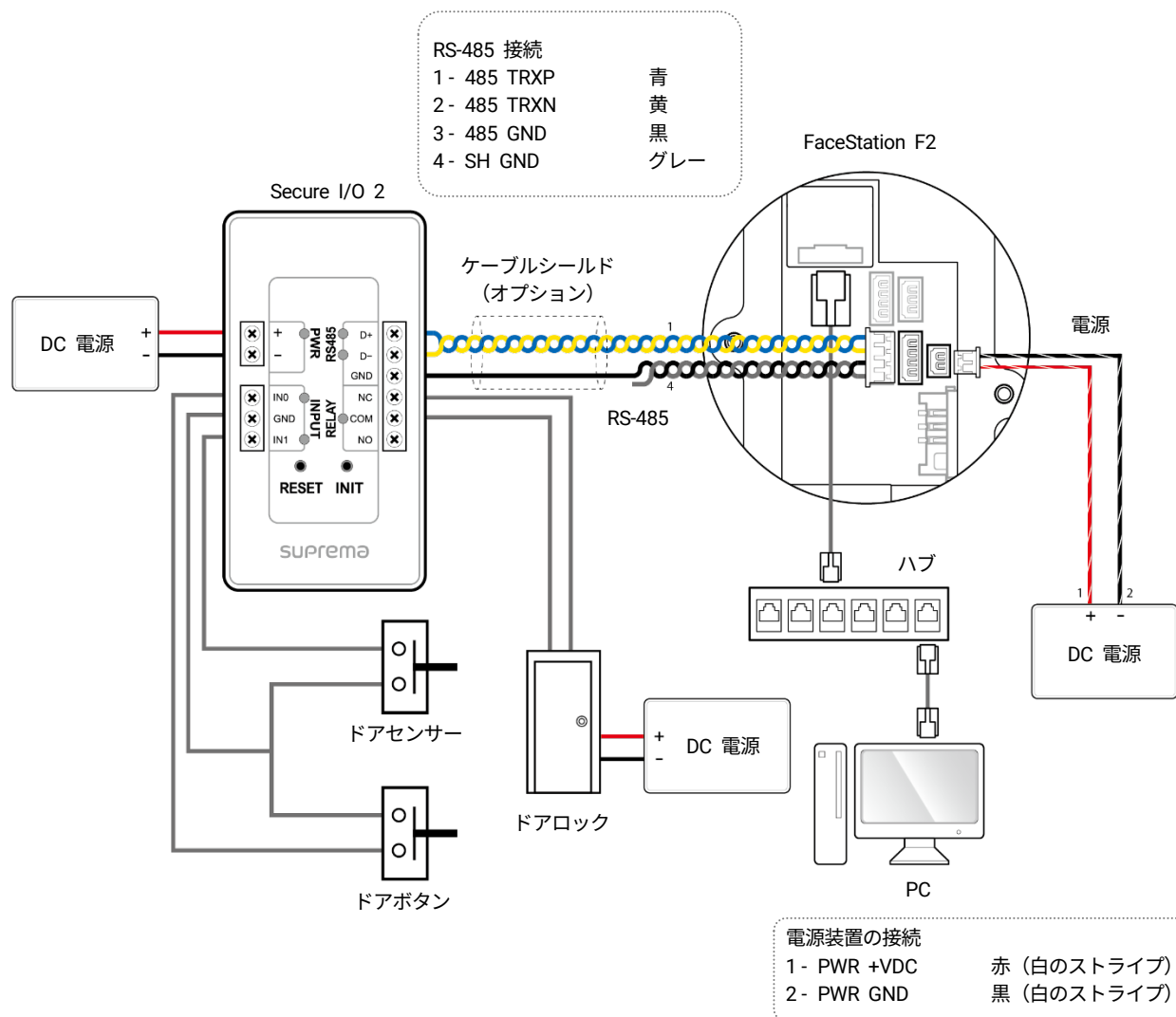

注意

- FaceStation F2 は、RS-485 ケーブルでスレーブデバイスと接続したマルチドアコントローラとして使用できます。スレーブデバイスはダミーリーダーとして使用され、認証はマスターデバイスで実行されます。
- 指紋認証デバイスが FaceStation F2 でスレーブデバイスとして設定されている場合、別の FaceStation F2 をスレーブデバイスとして追加することはできません。
- 指紋認証デバイスがマスターデバイスの場合、FaceStation F2 をスレーブデバイスとして追加することはできません。
- FaceStation F2 がマスターデバイスであるときに FaceStation F2 をスレーブデバイスとして接続すると、1 台の FaceStation F2 だけをスレーブデバイスとして追加できます。
- FaceStation F2 が顔認証端末のスレーブデバイスとして設定されている場合、Secure I/O 1 および DM-20 を 1 台ずつ接続できます。
- FaceStation F2 が顔認証端末のスレーブデバイスとして設定されている場合、追加の OM-120 を接続できます。
- 接続できるスレーブデバイスの最大数は、認証方式、ユーザー数、およびデバイス数によって異なります。また、スレーブデバイスの数が認証の速度に影響します。
- 1 台のマスターデバイスで 31 台のスレーブデバイスを制御できます。RS-485 の帯域幅では、最高 7 台の指紋認証デバイスを接続できます。
- 詳細については、Suprema 技術サポートチーム（support.supremainc.com）にお問い合わせください。

Wiegand 接続

Wiegand 入力または出力デバイスとして使用

RFID リーダー
または
コントローラ

ケーブルシールド
（オプション）

1

4

1 - WG D0 　　　　緑
2 - WG D1 　　　　白
3 - WG GND 　　　黒
4 - SH GND 　　　グレー

FaceStation F2
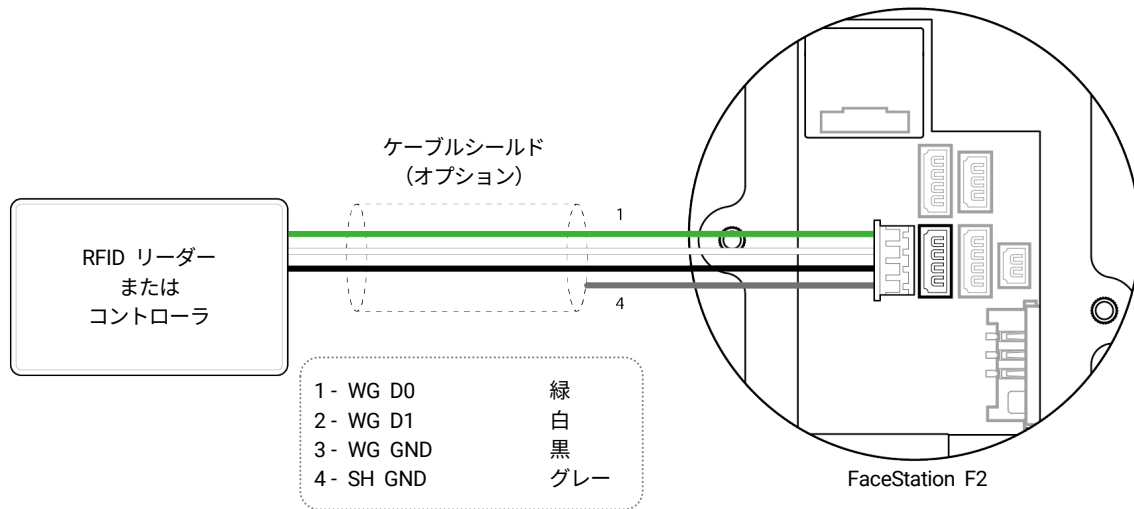
製品仕様

カテゴリ	機能	仕様
認証情報	生体認証	顔、指紋
	RF オプション	125 kHz EM および 13.56 MHz MIFARE、MIFARE Plus、DESFire EV1/EV2*、FeliCa
	RF 読み取り範囲*	EM/MIFARE/DESFire：50 mm、FeliCa：30 mm
	モバイル	NFC、BLE
全般	CPU	1.8 GHz デュアルコア + 1.4 GHz クアッドコア
	メモリ	16GB Flash + 2GB RAM
	LCD タイプ	7 インチ IPS カラー LCD
	LCD 解像度	800 x 1280 ピクセル
	サウンド	16bit
	動作温度	-20℃〜50℃
	保管温度	-40℃〜70℃
	動作湿度	0 %〜80 %（結露なきこと）
	保管湿度	0 %〜90 %（結露なきこと）
	カメラ	2MP 2EA
	寸法（W x H x D）	119.8 x 268.4 x 49.7（mm）
	重量	デバイス：670g ブラケット（ワッシャーとボルトを含む）：205g
	IP 等級	IP65
	証明書	CE、FCC、KC、RoHS、REACH、WEEE
顔	認識対象との距離	0.5〜1.3 m
	認識対象の高さ	1.4〜1.9 m
	照合速度	0.5 秒未満
	Live Face Detection（生体と偽物の識別が可能な顔検出技術）	サポート対象
指紋	画像寸法	300 x 400 ピクセル
	解像度	500 dpi
	テンプレート	SUPREMA/ISO19794-2、ANSI-378
	エクストラクタ/マッチャー	MINEX 認定および準拠
	センサー証明書	FBI PIV および FBI モバイル ID FAP20
	Live Face Detection（生体と偽物の識別が可能な顔検出技術）	あり（SW ベース）
容量	最大ユーザー数（1:1） *1 ユーザーあたり顔または指紋登録1 件の前提	100,000
	最大ユーザー数（1:N） *1 ユーザーあたり顔または指紋登録1 件の前提	• 顔：50,000 • 指紋、カード：100,000
	テキストログの最大数	5,000,000
	画像ログの最大数	50,000
インターフェイス	イーサネット	10/100 Mbps、Auto MDI/MDI-X
	RS-485	1 チャンネルホストまたはスレーブ（選択可能）
	Wiegand	1 チャンネル入力または 1 チャンネル出力（選択可能）
	TTL 入力	2 チャンネル入力
	リレー	リレー 1
	USB	USB 2.0（ホスト）
	タンパー	サポート対象

電気関連	電源	電圧：DC 12V〜DC 24 V 電流：最大 2.5 A
	スイッチ入力 VIH	最小：3 V 最大：5 V
	スイッチ入力 VIL	最大：1 V
	スイッチプルアップ抵抗	4.7 kΩ（入力ポートは 4.7 kΩ でプルアップする）
	Wiegand 出力 VOH	4.8 V 以上
	Wiegand 出力 VOL	0.2 V 未満
	Wiegand 出力プルアップ抵抗	1 kΩ の内部プルアップ
	リレー	電圧：最大 30 VDC 電流：1 A、最大 2 A

* RF 読み取り範囲は、インストール環境によって異なります。

* DESFire EV2 カードは、DESFire EV1 カードとの下位互換性によりサポートされています。CSN およびスマートカード機能は、FaceStation F2 と互換性があります。

寸法

（単位：mm）

119.8

268.4

23.5

49.7

98.4

251.4
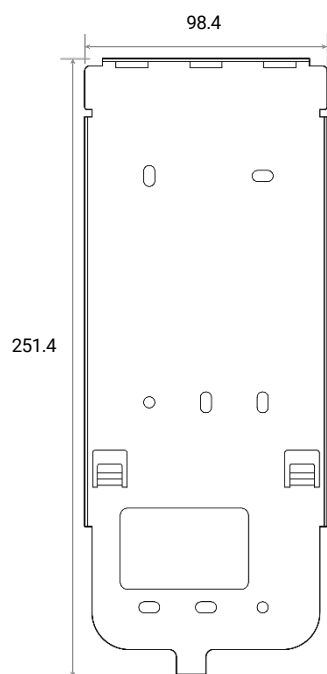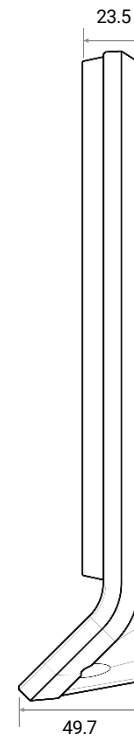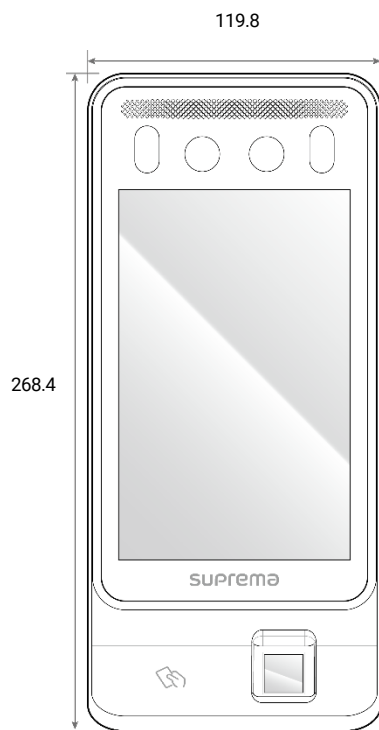
FCC 準拠情報

このデバイスは、FCC 規則第 15 部に準拠しています。

動作は、次の 2 つの条件に従います。

（1）このデバイスは、有害な電波干渉を引き起こしてはなりません。また、

（2）このデバイスは、望ましくない動作を引き起こす可能性のある電波干渉を含め、受信したあらゆる電波干渉を許容する必要があります。

注意：この装置は、FCC 規則の第 15 部に従って、クラス A デジタルデバイスの制限に準拠していることがテストおよび確認されています。これらの制限は、居住地域での設置において有害な電波干渉から適切に保護するためのものです。この装置は、無線周波エネルギーを生成、使用、および放射する可能性があり、指示に従って設置および使用しないと、無線通信に有害な電波干渉が発生することがあります。ただし、特定の設置で電波干渉が発生しないことを保証するものではありません。この装置のオフとオンを切り替えてみて、この装置によってラジオやテレビなどの受信に有害な電波干渉が発生することが判明した場合は、次の方法で電波干渉を解消してみてください。

- 受信アンテナの方向や場所を変更する。
- 装置と受信機の位置を離す。
- 受信機が接続されている回路とは別の回路のコンセントに機器を接続する。
- 販売店や、ラジオまたはテレビの経験豊富な技術者に相談する。

製造元によって明示的に承認されていない変更を行った場合、FCC 規則に基づき、ユーザーの装置を操作する権限が無効になる場合があります。

この機器とそのアンテナを、他のアンテナや送信機と一緒に設置または操作しないでください。

RF 被曝の要件を満たすため、アンテナとこの機器の使用者の間隔を 20 cm 以上空ける必要があります。

EU 適合宣言（CE）

本製品は、RED（Radio Equipment Directive）2014/53/EU の規定に従って CE マークが添付されています。Suprema Inc. はこれによって、本製品が RED（Radio Equipment Directive）2014/53/EU の必須要件およびその他の関連規定に準拠していることを宣言します。

- Bluetooth 出力：-0.1 dBm
- Bluetooth 周波数：2402〜2480 MHz
- NFC 周波数：13.56 MHz
- RFID 周波数：13.56 MHz + 125 kHz

詳細については、次の連絡先にお問い合わせください。

Suprema Inc.

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

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Version 3, 29 June 2007

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