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</tbody>
</table>
Safety information

Please read this safety instructions before you use the product to prevent injury to yourself and others and to prevent property damage. The term ‘product’ in this manual refers to the product and any items provided with the product.

Instructional icons

⚠️ **Warning**: This symbol indicates situations that could result in death or severe injury.

⚠️ **Caution**: This symbol indicates situations that may result in moderate injury or property damage.

🔍 **Note**: This symbol indicates notes or additional information.

---

**Warning**

**Installation**

Do not install or repair the product arbitrarily.
- This may result in electric shock, fire, or product damage.
- Damages caused by any modifications or failure to follow installation instructions can void the manufacturer's warranty.

Do not install the product in a place with direct sunlight, moisture, dust, soot, or a gas leak.
- This may result in electric shock or fire.

Do not install the product in a location with heat from an electric heater.
- This may result in fire due to overheating.

Install the product in a dry location.
- Humidity and liquids may result in electric shock or product damage.

Do not install the product in a location where it will be affected by radio frequencies.
- This may result in fire or product damage.

**Operation**

Keep the product dry.
- Humidity and liquids may result in electric shock, fire, or product damage.

Do not use damaged power supply adapters, plugs, or loose electrical sockets.
- Unsecured connections may cause electric shock or fire.

Do not bend or damage the power cord.
- This may result in electric shock or fire.
Caution

Installation

Do not install the product under direct sunlight or UV light.
• This may result in product damage, malfunction, discoloration, or deformation.

Do not install the power supply cable in a location where people pass by.
• This may result in injury or product damage.

Do not install the product near magnetic objects, such as a magnet, TV, monitor (especially CRT), or speaker.
• The product may malfunction.

Use the IEC/EN 62368-1 approved power adapter that supports higher power consumption than the product. It is highly recommended to use the power adapter sold by Suprema.
• If the right power supply is not used, the product may malfunction.
• Refer to the Power in the product specifications for maximum current consumption specifications.

Operation

Do not drop the product or cause impacts to the product.
• The product may malfunction.

Do not press buttons on the product by force or do not press them with a sharp tool.
• The product may malfunction.

Do not store your product in very hot or very cold places. It is recommended to use the product at temperatures from 0 °C to 50 °C.
• The product may malfunction.

When cleaning the product, mind the following.
• Wipe the product with a clean and dry towel.
• If you need to sanitize the product, moisten the cloth or the wipe with a proper amount of rubbing alcohol and gently clean all exposed surfaces including the fingerprint sensor. Use rubbing alcohol (containing 70% Isopropyl alcohol) and a clean, non-abrasive cloth like lens wipe.
• Do not apply liquid directly to the surface of the product.

Do not use the product for anything other than its intended use.
• The product may malfunction.

RTC Battery

Use of an unapproved or incorrect type of battery may result in a risk of explosion. Discard the battery according to the appropriate regional or international waste regulations.
Introduction

Components

Components may vary according to the installation environment.
**Accessory**

You can purchase an enclosure with CoreStation as an accessory. The enclosure includes a power status LED board, power distribution board, power supply, and tamper. To learn how to install the CoreStation in the enclosure, refer to *Using the CoreStation with the enclosure*.

- There is no optimal height for installing ENCR-10 on the wall. Install it to a safe and convenient location for you to use.
- Fixing screws for the enclosure, CoreStation, and the power supply cable are included in the ENCR-10 package. Use each screw correctly by following the details below.
  - Fixing screws for the enclosure (diameter: 4 mm, length: 25 mm) x 4
  - Fixing screws for CoreStation (diameter: 3 mm, length: 5 mm) x 6
  - Fixing screws for the power supply cable (diameter: 3 mm, length: 8 mm) x 1
Name and function of each part
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>No.</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HOST RS-485 connection</td>
<td>20</td>
<td>RESET button</td>
</tr>
<tr>
<td>2</td>
<td>HOST RS-485 terminating resistance switch</td>
<td>21</td>
<td>AUX IN (0, 1) connection</td>
</tr>
<tr>
<td>3</td>
<td>INIT button</td>
<td>22</td>
<td>CS-40 power connection (DC 12V IN)</td>
</tr>
<tr>
<td>4</td>
<td>Ethernet connection</td>
<td>23</td>
<td>Relay 3 connection</td>
</tr>
<tr>
<td>5</td>
<td>Relay 1 connection</td>
<td>24</td>
<td>TTL input (6, 7) or supervised input (6, 7) connection</td>
</tr>
<tr>
<td>6</td>
<td>TTL input (2, 3) or supervised input (2, 3) connection</td>
<td>25</td>
<td>TTL output (6, 7) connection</td>
</tr>
<tr>
<td>7</td>
<td>TTL output (2, 3) connection</td>
<td>26</td>
<td>Wiegand 3 connection</td>
</tr>
<tr>
<td>8</td>
<td>Wiegand 1 connection</td>
<td>27</td>
<td>12V output</td>
</tr>
<tr>
<td>9</td>
<td>12V output</td>
<td>28</td>
<td>RS-485 3 connection</td>
</tr>
<tr>
<td>10</td>
<td>RS-485 1 connection</td>
<td>29</td>
<td>RS-485 3 terminating resistance switch</td>
</tr>
<tr>
<td>11</td>
<td>RS-485 1 terminating resistance switch</td>
<td>30</td>
<td>CS-40 status LED</td>
</tr>
<tr>
<td>12</td>
<td>Relay 0 connection</td>
<td>31</td>
<td>Relay 2 connection</td>
</tr>
<tr>
<td>13</td>
<td>TTL input (0, 1) or supervised input (0, 1) connection</td>
<td>32</td>
<td>TTL input (4, 5) or supervised input (4, 5) connection</td>
</tr>
<tr>
<td>14</td>
<td>TTL output (0, 1) connection</td>
<td>33</td>
<td>TTL output (4, 5) connection</td>
</tr>
<tr>
<td>15</td>
<td>Wiegand 0 connection</td>
<td>34</td>
<td>Wiegand 2 connection</td>
</tr>
<tr>
<td>16</td>
<td>12V output</td>
<td>35</td>
<td>12V output</td>
</tr>
<tr>
<td>17</td>
<td>RS-485 0 connection</td>
<td>36</td>
<td>RS-485 2 connection</td>
</tr>
<tr>
<td>18</td>
<td>RS-485 0 terminating resistance switch</td>
<td>37</td>
<td>RS-485 2 terminating resistance switch</td>
</tr>
<tr>
<td>19</td>
<td>RTC battery</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Press and hold the **INIT** button for 2 seconds or longer to initialize the CS-40 currently linked with a device and connect it to a different device.
- The power output (12V, up to 1.5A) of CS-40 can be used as the power for a Wiegand device when CS-40 and the Wiegand device are connected. In other words, when 3 Wiegand devices that consume 200mA are connected, a device that consumes up to 900mA can be connected to the remaining power output terminal.
- RTC battery capacity is 226mah. Life expectancy of RTC battery may differ depending on the installation environment and how it is performed. When replacing RTC battery, please use to be compliant with CR2032.
### Communication status LED

<table>
<thead>
<tr>
<th>LED</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOST RS-485 TX</td>
<td>Orange flashing: Transmitting RS-485 data</td>
</tr>
<tr>
<td>HOST RS-485 RX</td>
<td>Green flashing: Receiving RS-485 data</td>
</tr>
<tr>
<td>RELAY (0 ~ 3)</td>
<td>Red lighting: Relay operation</td>
</tr>
<tr>
<td>SUPERVISED INPUT (0 ~ 7)</td>
<td>TTL input</td>
</tr>
<tr>
<td></td>
<td>• Green lighting: Normal Close</td>
</tr>
<tr>
<td></td>
<td>• Off: Normal Open</td>
</tr>
<tr>
<td></td>
<td>Supervised Input</td>
</tr>
<tr>
<td></td>
<td>• Green lighting: Normal Close (short circuit), Normal Open, Switch On</td>
</tr>
<tr>
<td></td>
<td>• Off: Switch Off</td>
</tr>
<tr>
<td>AUX IN (0, 1)</td>
<td>Orange lighting: Receiving AUX signal</td>
</tr>
</tbody>
</table>

### The Levels of Access Control

<table>
<thead>
<tr>
<th>Feature</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destructive Attack</td>
<td>I</td>
</tr>
<tr>
<td>Line Security</td>
<td>I</td>
</tr>
<tr>
<td>Endurance</td>
<td>IV</td>
</tr>
<tr>
<td>Standby Power</td>
<td>I</td>
</tr>
<tr>
<td>Single Point Locking Device with Key Locks</td>
<td>I</td>
</tr>
</tbody>
</table>
CS-40 status LED
The status of CS-40 can be confirmed through STATUS LED 1 / 2 located on the left side from the front unit of the product. These status LEDs show the status of Ethernet, RS-485 0, RS-485 1, RS-485 2, RS-485 3, RS-485 HOST, and system in order for 1 second each.

<table>
<thead>
<tr>
<th>Feature</th>
<th>LED 1</th>
<th>LED 2</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethernet</td>
<td>Red</td>
<td>Red</td>
<td>Connection to a dynamic IP failed.</td>
</tr>
<tr>
<td></td>
<td>Red</td>
<td>Yellow</td>
<td>Connection to a dynamic IP is on standby.</td>
</tr>
<tr>
<td></td>
<td>Red</td>
<td>Sky blue</td>
<td>Connection to a static IP succeeded.</td>
</tr>
<tr>
<td></td>
<td>Red</td>
<td>Blue</td>
<td>Connection to a dynamic IP succeeded</td>
</tr>
<tr>
<td></td>
<td>Red</td>
<td>Magenta</td>
<td>Connection to a static IP failed.</td>
</tr>
<tr>
<td></td>
<td>Red</td>
<td>Off</td>
<td>HW error</td>
</tr>
<tr>
<td>RS-485 0</td>
<td>Yellow</td>
<td>Red</td>
<td>No slave device</td>
</tr>
<tr>
<td></td>
<td>Yellow</td>
<td>Yellow</td>
<td>The slave device is disconnected.</td>
</tr>
<tr>
<td></td>
<td>Yellow</td>
<td>Blue</td>
<td>The slave device is normal.</td>
</tr>
<tr>
<td></td>
<td>Yellow</td>
<td>Off</td>
<td>HW error</td>
</tr>
<tr>
<td>RS-485 1</td>
<td>Green</td>
<td>Red</td>
<td>No slave device</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>Yellow</td>
<td>The slave device is disconnected.</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>Blue</td>
<td>The slave device is normal.</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>Off</td>
<td>HW error</td>
</tr>
<tr>
<td>RS-485 2</td>
<td>Sky blue</td>
<td>Red</td>
<td>No slave device</td>
</tr>
<tr>
<td></td>
<td>Sky blue</td>
<td>Yellow</td>
<td>The slave device is disconnected.</td>
</tr>
<tr>
<td></td>
<td>Sky blue</td>
<td>Blue</td>
<td>The slave device is normal.</td>
</tr>
<tr>
<td></td>
<td>Sky blue</td>
<td>Off</td>
<td>HW error</td>
</tr>
<tr>
<td>RS-485 3</td>
<td>Blue</td>
<td>Red</td>
<td>No slave device</td>
</tr>
<tr>
<td></td>
<td>Blue</td>
<td>Yellow</td>
<td>The slave device is disconnected.</td>
</tr>
<tr>
<td></td>
<td>Blue</td>
<td>Blue</td>
<td>The slave device is normal.</td>
</tr>
<tr>
<td></td>
<td>Blue</td>
<td>Off</td>
<td>HW error</td>
</tr>
<tr>
<td>RS-485 HOST</td>
<td>Magenta</td>
<td>Red</td>
<td>No slave device</td>
</tr>
<tr>
<td></td>
<td>Magenta</td>
<td>Yellow</td>
<td>The slave device is disconnected.</td>
</tr>
<tr>
<td></td>
<td>Magenta</td>
<td>Blue</td>
<td>The slave device is normal.</td>
</tr>
<tr>
<td></td>
<td>Magenta</td>
<td>Off</td>
<td>HW error</td>
</tr>
<tr>
<td>System</td>
<td>White</td>
<td>Red</td>
<td>System locked (by trigger &amp; action of device)</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>Yellow</td>
<td>System locked (by trigger &amp; action of BioStar 2)</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>Green</td>
<td>Connection to BioStar 2 succeeded</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>Sky blue</td>
<td>Connection to BioStar 2 succeeded + Tamper ON</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>Blue</td>
<td>Tamper ON</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>Magenta</td>
<td>System locked (by trigger &amp; action of device) + Tamper ON</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>White</td>
<td>System locked (by trigger &amp; action of BioStar 2) + Tamper ON</td>
</tr>
<tr>
<td></td>
<td>Magenta</td>
<td>Magenta</td>
<td>Migrating the database</td>
</tr>
</tbody>
</table>
Introduction

Installation example
CS-40 is a centralized access control system that can perform biometric authentication. CS-40, designed as an enterprise system, can save the information of up to 500,000 users and execute matching of 400,000 fingerprints per second.

Both access control and attendance management can be used through the linkage with BioStar 2, and various interfaces are provided, including RS-485 (OSDP), Wiegand, Supervised input, and AUX.

System diagram
Up to 64 RS-485 devices can be connected to CS-40, and when DM-20 is connected using a daisy chain, Wiegand devices can be expanded up to 132.
Overall Connection Diagram
The enclosure contains an LED control board, power distribution board, power supply, battery, and tamper.
• Do not connect to a receptacle controlled by a switch.
Installation

1. Fix a spacer on the position to mount CoreStation using a fixing screw.
2. Fix the product on top of the fixed spacer firmly using a fixing screw.
Power Connection

- Make sure to use separate power for the access control device and CS-40.
- Use the IEC/EN 62368-1 approved power adapter that supports higher power consumption than the product. If you wish to connect and use another device to the power supply adapter, you should use an adapter with a current capacity which is the same or larger than the total power consumption required for the terminal and another device.
  - Refer to the Power in the product specifications for maximum current consumption specifications.
- DO NOT extend the length of power cable when using the power adapter.

- It is recommended to connect and use an Uninterruptible Power Supply (UPS) to prevent power failure.
Network connection

TCP/IP

LAN connection (connecting to a hub)
You can connect the product to a hub using a general type CAT-5e cable.

LAN connection (connecting to a PC directly)
CS-40 has automatic MDI/MDI-X function, so it can be connected to a PC directly using a normal type CAT-5e cable.
RS-485 Connection
CS-40 supports 5 RS-485 ports, and up to 31 devices can be connected to each RS-485 port.

- The number of RS-485 devices connected to CS-40 cannot exceed 64.
- Use an AWG24 twisted pair with a maximum length of 1.2 km for the RS-485 cable.
- Connect terminating resistance (120 Ω) to both ends of the RS-485 daisy chain connection. If connected to the middle line, the signal level will weaken and the communication performance will deteriorate. Make sure to connect it to both ends of the daisy chain connection. Set the termination switch (TERM) to ON for CS-40.

- RS485 wire size shall be over 26 AWG and all wiring must comply with National Electrical Code, ANSI/NFPA 70.
**Relay**

**Fail Safe Lock**

In order to use the Fail Safe Lock, connect the NC relay as shown in the figure below. There is normally a current flowing through the relay for the Fail Safe Lock. When the relay is activated, blocking the current flow, the door will open. If the power supply to the product is cut off due to a power failure or an external factor, the door will open.

- Connect a diode to both ends of the power input as shown in the figure below when installing a deadbolt or a door strike. Make sure to connect the Cathode (direction to the stripe) to the + part of the power while paying attention to the direction of the diode.

**Fail Secure Lock**

In order to use the Fail Secure Lock, connect NO relay as shown in the figure below. There is normally no current flowing through the relay for the Fail Secure Lock. When the current flow is activated by the relay, the door will open. If the power supply to the product is cut off due to a power failure or an external factor, the door will lock.

- Connect a diode to both ends of the power input as shown in the figure below when installing a deadbolt or a door strike. Make sure to connect the Cathode (direction to the stripe) to the + part of the power while paying attention to the direction of the diode.
Wiegand IN

Door sensor and Exit button
SUPERVISED INPUT terminals No. 0 ~ No. 7 can be set to be used for normal TTL input or supervised input.
**AUX IN**

A power failure detector or a tamper can be connected to the AUX IN terminal.
Using the CoreStation with the enclosure
CoreStation can be installed inside the enclosure (ENCR-10) for physical and electrical protection. The enclosure includes a power status LED board, power distribution board, power supply, and tamper. The enclosure is sold separately.

Securing the battery
Insert the battery velcro strap into the enclosure and secure the battery.

- Use a backup battery with 12 VDC and 7 Ah or higher. This product was tested with ‘ES7-12’ battery of ‘ROCKET’. It is recommended to use a battery corresponding to ‘ES7-12’.

- The battery is sold separately.
- If the dimension of the backup battery is larger than the recommended specification, it may not be able to be mounted in the enclosure or the enclosure may not close after it is mounted. Also, if the shape and dimension of the terminals are different, the battery cannot be connected using the cable provided.
Installing the CoreStation in the enclosure

1. Check the position to install the CoreStation in the enclosure.

2. After positioning the CoreStation in the enclosure, fix it with the fixing screws.
Power / AUX IN
You can connect an Uninterruptible Power Supply (UPS) to prevent power failure. And a power failure detector or a dry contact output can be connected to the AUX IN terminal.

- Make sure to use separate power for the access control device and CS-40.
- Use the IEC/EN 62368-1 approved power adapter that supports higher power consumption than the product. If you wish to connect and use another device to the power supply adapter, you should use an adapter with a current capacity which is the same or larger than the total power consumption required for the terminal and another device.
  - Refer to the Power in the product specifications for maximum current consumption specifications.
- DO NOT extend the length of power cable when using the power adapter.
- Use a backup battery with 12 VDC and 7 Ah or higher. This product was tested with ‘ES7-12‘ battery of ‘ROCKET‘. It is recommended to use a battery corresponding to ‘ES7-12‘.
**Factory Default**

You can factory reset the CoreStation in the CoreStation SETUP Manager.

1. Access the CoreStation SETUP Manager and click **CONFIGURE**.
2. Click **Factory Default**.

- You can only use **Factory Default** when the root certificate is stored on the device.
- You can view or manage the network settings of CS-40 and monitor the status of slave devices, input and output ports, and Wiegand ports by accessing the CS-40 Setup Manager.
- CS-40 Setup Manager is supported with CS-40 firmware version 1.3.1 or later. If you are using a firmware version lower than 1.3.1, upgrade the CS-40 firmware on the BioStar 2.
- For more information on CS-40 Setup Manager, refer to the user guide. To download the user guide, visit the Suprema website ([https://www.supremainc.com](https://www.supremainc.com)).
- You can verify the current version of BioStar2 software when CS-40 is reprogrammable when connected to a network.
- For more information, contact the Suprema technical support team ([https://support.supremainc.com](https://support.supremainc.com)).
# Product Specifications

<table>
<thead>
<tr>
<th>Category</th>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Model</td>
<td>CS-40</td>
</tr>
<tr>
<td>CPU</td>
<td></td>
<td>1.4 GHz Octa-core</td>
</tr>
<tr>
<td>Memory</td>
<td></td>
<td>8 GB Flash + 1 GB RAM</td>
</tr>
<tr>
<td>Crypto chip</td>
<td></td>
<td>Supported</td>
</tr>
<tr>
<td><strong>LED</strong></td>
<td></td>
<td>Multi-color</td>
</tr>
<tr>
<td></td>
<td>STATUS -</td>
<td>2ea</td>
</tr>
<tr>
<td></td>
<td>HOST RS-485 TX -</td>
<td>1ea</td>
</tr>
<tr>
<td></td>
<td>HOST RS-485 RX -</td>
<td>1ea</td>
</tr>
<tr>
<td></td>
<td>SUPERVISED INPUT -</td>
<td>8ea</td>
</tr>
<tr>
<td></td>
<td>RELAY -</td>
<td>4ea</td>
</tr>
<tr>
<td></td>
<td>AUX IN -</td>
<td>2ea</td>
</tr>
<tr>
<td>Operating temperature</td>
<td></td>
<td>0 °C ~ 50 °C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td></td>
<td>-40 °C ~ 70 °C</td>
</tr>
<tr>
<td>Operating humidity</td>
<td></td>
<td>0 % ~ 80 %, non-condensing</td>
</tr>
<tr>
<td>Storage humidity</td>
<td></td>
<td>0 % ~ 95 %, non-condensing</td>
</tr>
<tr>
<td>Operational ambient conditions</td>
<td></td>
<td>0 °C ~ 49 °C</td>
</tr>
<tr>
<td>Dimension (W x H x D)</td>
<td></td>
<td>150 x 214 x 21 (mm)</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td>415 g</td>
</tr>
<tr>
<td>Certificates</td>
<td></td>
<td>CE, UKCA, KC, FCC, RCM, RoHS, REACH, WEEE</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>Max. User</td>
<td>500,000&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Max. Credential (1:1)</td>
<td>Fingerprint: 500,000&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Face: 30,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Card: 500,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PIN: 500,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Max. Credential (1:N)</td>
<td>Fingerprint: 500,000&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Face: 4,000</td>
<td></td>
</tr>
<tr>
<td>Max. Text Log</td>
<td></td>
<td>5,000,000</td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td>Ethernet</td>
<td>Support (10/100 Mbps, Auto MDI/MDI-X)</td>
</tr>
<tr>
<td></td>
<td>RS-485</td>
<td>5 ch</td>
</tr>
<tr>
<td></td>
<td>RS-485 Communication Protocol</td>
<td>OSDP V2 compliant</td>
</tr>
<tr>
<td></td>
<td>Wiegand</td>
<td>4 ch</td>
</tr>
<tr>
<td></td>
<td>Relay</td>
<td>4 relays</td>
</tr>
<tr>
<td></td>
<td>Supervised Input</td>
<td>8 ch (TTL input selectable)</td>
</tr>
<tr>
<td></td>
<td>TTL Output</td>
<td>8 ch</td>
</tr>
<tr>
<td></td>
<td>AUX Input</td>
<td>2 ch (AC POWER FAIL, Tamper)</td>
</tr>
<tr>
<td>Category</td>
<td>Feature</td>
<td>Specification</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>Electrical</td>
<td>CoreStation</td>
<td>• Voltage: 12 Vdc</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Current: Max. 3 A</td>
</tr>
<tr>
<td></td>
<td>Power Supply (SMPS) AC INPUT</td>
<td>• 110 – 240 VAC, 50/60 Hz</td>
</tr>
<tr>
<td></td>
<td>Power Output</td>
<td>• Voltage: 12 Vdc</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Current: Max. 1.5 A</td>
</tr>
<tr>
<td></td>
<td>Switch input VIH</td>
<td>• Max.: 5 V</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Min.: 3 V</td>
</tr>
<tr>
<td></td>
<td>Switch input VIL</td>
<td>Max.: 1 V</td>
</tr>
<tr>
<td></td>
<td>Relay</td>
<td>5 A @ 30 VDC Resistive load</td>
</tr>
</tbody>
</table>

- Product specifications are subject to change without notice to improve.
- FaceStation 2 and FaceLite are available only.

1) The number of users registered without any credential data.

2) If a device with a fingerprint sensor is connected as a slave, the slave device can be used for fingerprint authentication.

To have more information about CS-40 and troubleshooting section etc., please refer to the following links.
Dimensions

(Unit: mm)

* The tolerance is ±0.3 mm.
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Version 3, 29 June 2007
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