

e280

Installation Guide

Verifone Part Number: DOC087-603-EN-D, Revision D02



www.verifone.com

e280 Installation Guide
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Preface

This guide is the primary source of information for setting up the e280 and e280s V2 devices.

Audience

This guide is intended for the users involved in e280/e280s V2 device installation.

Organization

This guide is organized as follows:

- Chapter 1: [Device Overview](#) - Provides an overview of the e280/e280s V2 device.
- Chapter 2: [Device Setup](#) - Provides instructions on configuring the e280/e280s V2 device.
- Chapter 3: [Specifications](#) - Provides the power requirements and dimensions of the e280/e280s V2 device.
- Chapter 4: [Maintenance and Cleaning](#) - Explains how to maintain the device.
- Chapter 5: [Service and Support](#) - Furnishes information on contacting local Verifone representatives or service providers, as well as details on ordering accessories or documentation from Verifone.
- Chapter 6: [Accessories](#) - Provides the range of accessories and cables with corresponding part numbers.
- Chapter 7: [Troubleshooting Guidelines](#) - Provides guidance for addressing issues that may arise during device installation.

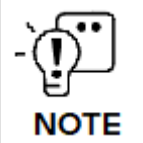


Related Documentation

To learn more about the e280/e280s V2, refer to the following documents associated with the Verifone Part Numbers (VPNs).

e280 Certifications and Regulations	VPN DOC087-601-EN
e280 Quick Installation Guide	VPN DOC087-602-EN
e280s V2 Certifications and Regulations	VPN DOC087-605-EN
e280s V2 Quick Installation Guide	VPN DOC087-606-EN

Conventions

The following table describes the conventions and provides examples of their use.

Convention	Meaning	Example
<p style="text-align: center;">Blue</p>	<p>Text in blue indicates terms that are cross-referenced.</p>	<p>See Conventions.</p>
	<p>The bulb icon is used to highlight important information.</p>	<p>If exchanging cables use a Verifone-approved cable.</p>
	<p>The caution symbol indicates possible hardware or software failure or loss of data.</p>	<p>Avoid placing metallic objects at the front of the card reader.</p>
	<p>The lightning symbol is used as a warning when bodily injury might occur.</p>	<p>For safety, do not string cables or cords across a walkway.</p>

1. Device Overview

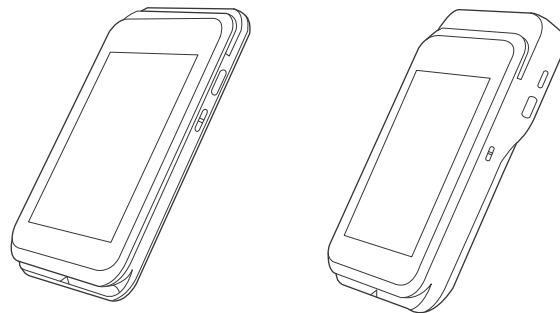
This chapter provides a brief description of the e280/e280s V2 device.

The e280/e280s V2 device is a secure wireless handheld mobile payment device that allows electronic payment transactions to be processed. This payment processing solution with a fully integrated POS (Point-of-Sale) can scan barcodes, QR (Quick Response) codes and products with the help of an integrated camera.

In combination with Verifone Connect digital services, it enables clients to remotely monitor and update their devices using Verifone’s estate management solution. The e280/e280s V2 device supports Bluetooth and Wi-Fi. It also meets PCI (Payment Card Industry) - PTS (PIN Transaction Security) 5.X SRED (Secure Reading and Exchange of Data) requirements for maximum security.

The e280/e280s V2 device’s small, sleek, design makes it easily pocketable while supporting all payment methods like Magnetic stripe, EMV (Europay MasterCard and VISA), and NFC (Near Field Communication)/CTLS (Contactless), including Apple Pay, Google Pay, and Samsung Pay mobile wallets. The easy-to-read color touch screen supports all payment-related user interactions, including barcode scanner and secure PIN ((Personal Identification Number) entry.

Figure: 1 e280 and e280s V2 Devices



Features and Benefits

- | | |
|-----------|---|
| Processor | <ul style="list-style-type: none"> • Cortex A9, 300 MHz |
| Memory | <ul style="list-style-type: none"> • 512MB Flash • 512MB DDR (Double Data Rate) |

Display	<ul style="list-style-type: none"> • 3.5" HVGA Color Touchscreen
Keypad	<ul style="list-style-type: none"> • On-screen, Navigator possible
Payment	<ul style="list-style-type: none"> • MSR (Magnetic Stripe Reader) • SCR (Smart Card Reader) • CTLS • QR Code
Communication	<ul style="list-style-type: none"> • Bluetooth 4.2 BLE • 2.4 GHz + 5 GHz Wi-Fi • 802.11 a, b, g, n, ac
Physical Interface	<ul style="list-style-type: none"> • USB (Universal Serial Bus)-C port
Barcode Scanner	<ul style="list-style-type: none"> • Integrated image engine for 1D and 2D barcode reading.
Terminal Dimensions	<p>For e280</p> <ul style="list-style-type: none"> • Length: 121 mm • Width: 67 mm • Height: 14.15 mm • Weight: 165 g <p>For e280s V2</p> <ul style="list-style-type: none"> • Length: 128.4 mm • Width: 67 mm • Height: 23 mm • Weight: 225 g
Security	<ul style="list-style-type: none"> • PCI PTS 5.X approved • SRED • Supports AES (Advanced Encryption Standard) DUKPT (Derived Unique Key Per Transaction)
Power Supply	<ul style="list-style-type: none"> • Input: AC 110V~240V/50~60 Hz/0.3A • Output: DC 5V/1A
Card Reader	<ul style="list-style-type: none"> • Triple track MSR • EMV L1-approved smart card • ISO (International Organization for Standardization) • NFC/CTLS

- | | |
|---------------|--|
| Environmental | <ul style="list-style-type: none"> • Operating temperature: 0°C to 45°C (32°F to 113°F) • Storage temperature: -20°C to 60°C (-4°F to 140°F) • Relative humidity: 5% to 95% • Non-condensing |
| Battery | <ul style="list-style-type: none"> • e280 - Embedded 1660mAh battery • e280s V2 - Embedded 2890mAh battery |

Features and Benefits

Following are the features and benefits:

Ease of Use

- The e280/e280s V2 device is Verifone’s perfect companion with ultimate flexibility catering to micro-merchants to tier 1 retailers.
- The lightweight, compact, stylish, and ergonomically balanced device provides a convenient payment experience for the user.
- Easy to hold, easy to carry. The e280/e280s V2 device’s compact size allows it to easily fit in your pocket and handle with a wrist or neckband through lanyard holes.
- The customer-friendly color touchscreen device supports easy on-screen interaction, signature capture and secure PIN entry.
- The LCD (Liquid Crystal Display) for unlimited application possibilities and easy readability under various lighting conditions.
- Magnetic stripe card reader for optimal card reading.

Performance and Durability

- Secure and powerful 300 MHz processing encrypts and completes transactions quickly.
- High-capacity, embedded, lithium-ion battery pack (1660mAh for e280 and 2890mAh for e280s V2).
- The USB-C port allows a convenient way for product charging as well as connecting to accessories.
- Rounded corners and drop resistant to less than 1.2 m on the concrete floor to minimize breakage.
- The dynamic combination of Bluetooth and Wi-Fi, wireless payment convenience, fewer dropped transactions and flexible point-of-sale options.

Application Environment

- Reliable operating system and powerful tools to create a rich customer experience.

Payment Types

Accommodates all payment types:

- Magnetic stripe
- EMV
- Contactless/NFC
- Mobile wallets with barcode scanner and signature capture

Security

- PCI PED (PIN Entry Device) 5.0 approved for PIN-based transactions
- SSL (Secure Sockets Layer) protocols
- Direct key injection using industry-standard HSMs (Hardware Security Module)
- VeriShield Retain
- VeriShield Remote Key
- Verifone Secure Data
- VeriShield Total Protect
- MasterCard TQM
- IPP8 functionality plus multiple DUKPT engines
- EMV L1 and L2
- ISO7816-3, ISO7816-10 and EMV 4.3 standards

Connectivity

USB host/device port

- Support UART0 software debug (TXD0, RXD0)
- USB 2.0 high speed
- Support 5V/200mA for external USB peripherals
- USB host or device is configured by the software
- USB-C port is on the left hand side

Bluetooth (wireless communication)

- Bluetooth 4.2 BLE
- Support Eddystone + iBeacon
- RF (Radio Frequency) transmitter output power Class 1

- RF receiver GFSK typical -90 dBm, n/4 PSK typical -90 dBm, 8 DPSK typical -83 dBm
- UART3 interface for SOC communicates to BT

Wi-Fi

- Wi-Fi 2.4 GHz and 5 GHz; a, b, g, n, ac
- Supports 2.5 GHz and 5 GHz
- SDIO (Secure Digital Input/Output) for host interface

Charger IC

- Single-cell switching mode Li-Ion battery charger
- Power path management integrated
- Programmable charging parameters
- Support dual inputs from either charging pins or USB connector

Main Battery

For e280 device

- Non-removable battery pack
- Use ID pin of battery to identify different battery sources by AIN5_BATT_ID
- Nominal capacity/voltage: 1660mAh/3.8V

For e280s V2 device

- Non-removable battery pack
- Use ID pin of battery to identify different battery sources by AIN5_BATT_ID
- Nominal capacity/voltage: 2890mAh/3.8V

Fuel Gauge

- Host-side fuel gauge with Coulomb counter function.

Bluetooth Pairing

The e280/e280s V2 device can pair with any phone or tablet, any POS and a variety of accessories to create the perfect mobile solution.

The micro-merchants can easily accept payments on the go when the e280/e280s V2 device is paired with Verifone’s iOS/Android POS application and gateway.

2. Device Setup

This section outlines the setup procedures covering the following segments:

- [Device Location](#)
- [Inside the Shipping Carton](#)
- [Device Features](#)
- [Examining Connection Port](#)
- [Using the Battery](#)
- [Battery Behavior \(No Power Pack\)](#)
- [Connecting the Terminal Power Pack](#)
- [Charging the Battery](#)
- [Using the Smart Card Reader](#)
- [Using the Magnetic Card Reader](#)
- [CTLS Transaction](#)
- [Using the Barcode](#)
- [Wi-Fi/BT Support](#)

Device Location

The following are the guidelines used to select an ideal location for the device.

Ease of Use

- The e280/e280s V2 is a portable lightweight device that is styled to easily fit into your pocket.
- Easily accept payments anywhere, any type, including mobile wallets and alternative payment methods.

Environmental Factors

- Select a flat support surface, such as a countertop or table, to keep the device. Please store your e280/e280s V2 device in a dry area:
 - Operation temperature is 0 to 45 degrees (32°C to 113°F).
 - Storage temperature is -20 to 60 degrees (-4°F to 140°F).
- Select a location convenient for both the merchant and the cardholder.
- Keep the device away from direct sunlight and anything that radiates heat, such as a stove or motor.

- Do not use the device where there is high heat, dust, humidity, moisture, caustic chemicals, or oils.



CAUTION

The device is not waterproof or dustproof and is intended for indoor use only. Any damage to the unit from exposure to rain or dust may void any warranty.

L'appareil n'est ni étanche ni étanche à la poussière et est destiné à une utilisation en intérieur uniquement. Tout dommage causé à l'appareil par une exposition à la pluie ou à la poussière peut annuler toute garantie.

Personal Security Considerations

The e280 device can be used as a handover device. Always exercise extreme caution while processing the transaction, especially during the PIN entry session.

- Handover the e280 device directly to the cardholder for PIN entry.
- Encourage the cardholder to hold the e280 device as close as possible to secure the data entry.

Electrical Considerations

- Avoid using this product during electrical storms.
- Avoid locations near electrical appliances or other devices that cause excessive voltage fluctuations or emit electrical noise (for example, air conditioners, electric motors, neon signs, high-frequency or magnetic security devices, or computer equipment).
- Avoid using the device near water or in moist conditions.



WARNING

Do not use the device near water, including a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool to avoid shock or damage.

N'utilisez pas l'appareil à proximité de l'eau, y compris d'une baignoire, d'un lavabo, d'un évier de cuisine ou d'une buanderie, dans un sous-sol humide ou à proximité d'une piscine pour éviter tout choc ou dommage.

Inside the Shipping Carton

Open the shipping carton and carefully inspect its contents for possible tampering or shipping damage of the devices. The e280 device is a secure product and any tampering may cause it to cease the function or to operate in a secured way.

To unpack the shipping carton

To unpack the shipping carton:

- 1 Carefully inspect the shipping carton and its contents for possible tampering or damage.

- 2 Validate the authenticity of the sender by verifying the shipping tracking number and other information located on the product order paperwork.
- 3 Remove and inspect the following items:
 - e280 unit
 - USB-C to USB-A cable



NOTE

Verifone ships variants of e280 and e280s V2 devices for different markets. Your unit may have different options or accessories described in this section.

- 4 Remove all plastic wrapping from the device and other components.
- 5 Remove the clear protective film from the display.
- 6 Inspect the device for possible tampering. See how to identify signs of tampering in section [Periodic Inspection](#) section.
- 7 Save the shipping carton and packing material for future repacking or moving of the device.



CAUTION

Do not use a tampered or damaged device. This device comes equipped with tamper-evident labels. If a label or component appears damaged, please notify the shipping company and your Verifone service provider immediately.

N'utilisez pas un appareil altéré ou endommagé. Cet appareil est équipé d'étiquettes inviolables. Si une étiquette ou un composant semble endommagé, veuillez en informer immédiatement la compagnie maritime et votre fournisseur de services Verifone.

Periodic Inspection

Periodically inspect the device for possible tampering. Signs of tampering include:

- Overlays in the PIN pad area.
- Wires protruding out of the device.
- Foreign objects are inserted into the smart card slot or magnetic stripe slot.
- Any bumps in the casing below the magnetic stripe slot and any noticeable additional magnetic stripe head from the side.
- Signs of damage to the tamper-evident labels.
- A Tamper Warning message appearing on the device display.

- If any device is found to be tampered, please remove it from service immediately, keep it available for potential forensics investigation, and notify your company security officer and your local Verifone representative or service provider. To contact Verifone, please see [Service and Support](#) section.



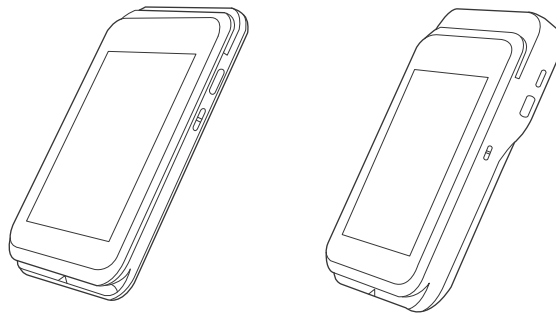
NOTE

- Charge the e280/e280s V2 device for eight hours before initial use.
- The e280/e280s V2 device includes an embedded coin cell battery that will power the security circuit of the device in case the main battery fails to charge. This internal coin cell battery is not rechargeable and has a life of 2 years.
- Ensure not to store the device for more than 1 week without charging, else the secondary battery gets discharged in turn reducing the life of the battery.

Device Features

Familiarize yourself with the features before continuing with the installation process.

Figure: 2 e280 and e280s V2 Device Features (Front Panel)



Front Panel

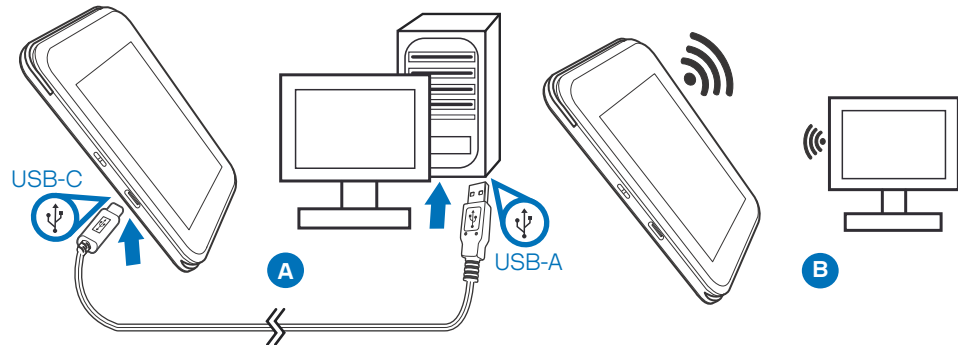
The front panel includes the following features:

- The e280/e280s V2 device has a colored capacitive-touch LCD Display.
- A smart card reader is built into the bottom of the device to process smartcard-based debit or credit transactions. For directions on how to use a smart card, see [Using the Smart Card Reader](#).
- A magnetic card reader is built into the top part of the device for performing debit or credit card transactions. The card can be swiped from either direction. To ensure a proper read of the magnetic swipe card, insert the magnetic card from left to right, magnetic stripe facing the back using the proper direction, with the magnetic stripe facing up. For directions on how to use a magnetic card, see [Using the Magnetic Card Reader](#).

Examining Connection Port

The e280 device has one primary USB-C port for power-up and download.

Figure: 3 The e280s V2 Primary USB-C Port



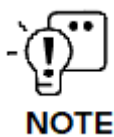
Using the Battery

The e280 device uses a single-cell Li-ion battery. The internal logic of the battery prevents both overcharging and undercharging (a fault condition in which the battery level goes well below the minimum acceptable charge and the battery becomes unusable).

Battery Features

Following are the features of the battery:

- Single Li-ion cell.
- A safety circuit that:
 - Prevents cell damage from overcharge, over-discharge, or overheating.
 - Activates when the battery is left in an unused device for extended periods.



- Disconnecting and unplugging the device power pack reduces the life of the coin cell battery which does not recharge and must be replaced if drained.
- Conserve battery power by turning the e280 device off when not in use. Do not let the battery charge fall below 10% for an extended period of time as this may permanently diminish the battery capacity. Recharge the battery by attaching the USB-C end of the power pack to the device and plugging the other end of the power pack into a wall outlet.

Battery Behavior (No Power Pack)

The device shifts to power pack mode and starts automatically when the e280 device is connected to a non-battery power source, regardless of the battery charge state.

Manual Startup Hold the start button for about 10 seconds until the device displays the startup screen.



NOTE

Once the device is powered up, the Verifone ADK MAC screen is displayed.

Manual Shutdown Hold the start button for about 10 seconds until the message is displayed on the screen. Touch the "Off" selection to turn off.



NOTE

The screen is blank when the device has no power.

Connecting the Terminal Power Pack Connect the e280 device to the provided USB cable and insert the other end into any USB charger head for initial charging.



CAUTION

Using an incorrectly rated power supply may damage the device or cause it not to work as specified. Before troubleshooting, ensure that the power supply being used to power the device matches the requirements specified on the bottom of the device. (See [Specifications](#) for detailed power supply specifications.) You can use any standard USB charger.

L'utilisation d'une alimentation électrique mal évaluée peut endommager l'appareil ou l'empêcher de fonctionner comme spécifié. Avant le dépannage, assurez-vous que l'alimentation électrique utilisée pour alimenter l'appareil correspond aux exigences spécifiées au bas de l'appareil. (Voir Spécifications pour les spécifications détaillées de l'alimentation électrique.) Vous pouvez utiliser n'importe quel chargeur USB standard.



Do not plug the power pack into an outdoor outlet or operate the device outdoors. During the transaction, disconnecting the power by unplugging the device from a wall power while at a very low battery charge may cause transaction data files not yet stored in the device memory to be lost.

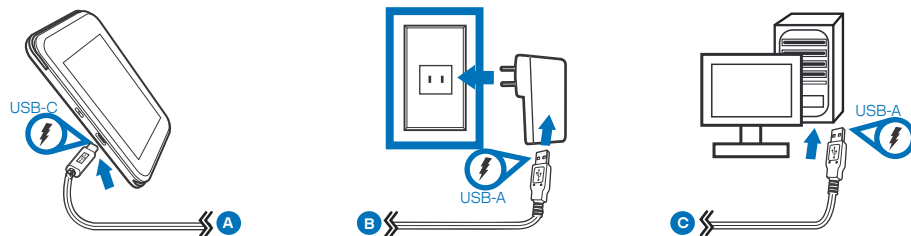
Ne branchez pas le bloc d'alimentation sur une prise extérieure et ne faites pas fonctionner l'appareil à l'extérieur. Pendant la transaction, débrancher l'alimentation en débranchant l'appareil d'une prise murale alors que la batterie est très faible peut entraîner la perte des fichiers de données de transaction non encore stockés dans la mémoire de l'appareil.

Each e280 device comes with a power supply cable, a USB-C cable is used to connect the device directly to the USB outlet for charging the battery. The e280 device is equipped with USB universal input.

To Connect the Terminal Power Supply

- 1 Insert the USB-C plug into the USB-C port of the e280 device, as shown in the figure below.

Figure: 4 e280s V2 Power Supply Connection



- 2 Plug the USB cable into a USB wall outlet or to the output of a standard USB power supply.

TIP: To protect against possible damage caused by lightning strikes and electrical surges, consider installing a power surge protector.

Charging the Battery

Once you unpack the e280/e280s V2 device, connect the power pack to the unit for eight hours or until fully charged.

- Charge the e280/e280s V2 device for eight hours before initial use.
- In case the device is tampered, and the main battery fails to charge, the extra battery provided with the e280/e280s V2 device will power the security of the device. This extra battery has a life of 2 years.

- Ensure not to store the device for more than 1 week without charging, else the secondary battery gets discharged in turn reducing the life of the battery.
- Disconnecting and unplugging the device power pack will reduce the life of the coin cell battery and might not recharge. You might have to replace the battery if the battery is drained.
- Conserve the battery power by turning the e280/e280s V2 device off when not in use. Do not let the battery charge fall below 10% for an extended period-of-time as this may permanently reduce the battery capacity. Recharge the battery by attaching the USB-C end of the power pack to the device and plug the other end of the power pack into a wall outlet.
- The e280 device automatically shuts down when the battery reaches the critically low charge state. In this case, the battery must be recharged for a minimum of half an hour before it can power the device. It may take several recharge attempts to reset the safety circuit when charging the battery that has been discharged below this critical state.

Battery Life Charging and discharging the battery will reduce the life of the battery.



Do not dispose of the battery in the fire. Li-ion batteries must be recycled or disposed of properly. Do not dispose of Li-ion batteries in municipal waste sites.

Ne jetez pas la batterie au feu. Les batteries Li-ion doivent être recyclé ou éliminé correctement. Ne jetez pas les batteries Li-ion dans les décharges municipales.

Using the Smart Card Reader

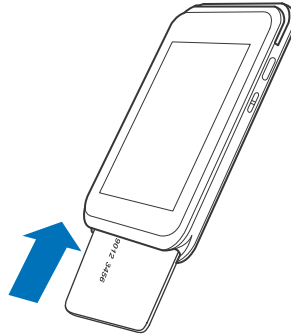
Insert the smart card to proceed with the EMV transaction. EMV supports credit card and debit card transactions.

To Conduct a Smart Card Transaction

- 1 Position the smart card with the contacts facing upward (see illustration below).
- 2 Insert the card into the reader slot in a smooth, continuous motion until it sits firmly.

- 3 Wait for the application to indicate a completed transaction before removing the card. Premature card removal invalidates the transaction.

Figure: 5 Inserting a Smart Card



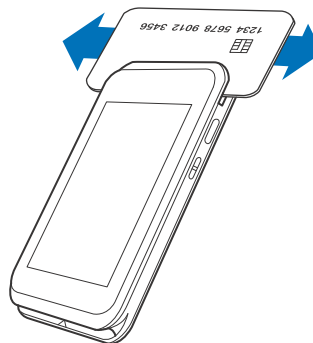
Using the Magnetic Card Reader

Use the magnetic stripe reader to perform credit and debit card transactions.

To Conduct a Debit or Credit card Transaction

- 1 Position the card with the magnetic stripe facing backward.
- 2 To ensure a proper read of the magnetic swipe card, insert the magnetic card from the top of the device and swipe the card from left to right, as shown in the illustration below.

Figure: 6 Using Magnetic Stripe Card

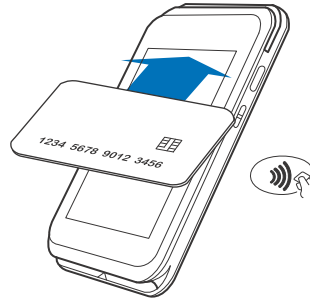


- 3 Swipe the card through the magnetic card reader.

CTLS Transaction

The e280 device supports contactless credit or debit card transactions. To perform a contactless transaction, gently tap the card or hold the card against the surface of the display.

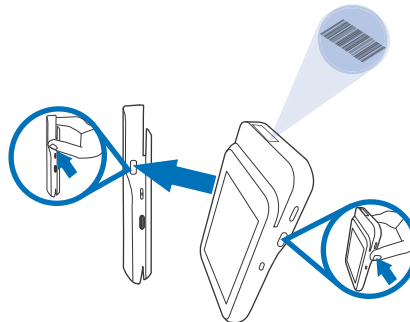
Figure: 7 Using the CTLS Reader



Using the Barcode

The e280s V2 device supports a barcode scanner. To scan the barcode, press the first button located on the left side of the device.

Figure: 8 Using the Barcode Reader



Wi-Fi/BT Support

The e280/e280s V2 device includes an integrated WLAN (Wireless Local Area Network) RF (Radio Frequency) transceiver for Wireless LAN (Local Area Network) systems with advanced power management and an integrated radio transceiver for Bluetooth wireless systems.

Bluetooth Support

Supports BR/EDR (Basic Rate/Enhanced Data Rate) and LE (Low Energy).

Wireless Transaction

The e280/e280s V2 device supports wireless transactions.

MFi Support The e280/e280s V2 device is MFi-certified. MFi (Made for iPod, iPhone, iPad) means Apple has certified that product for use with specific iOS devices via interfaces such as lightning connector, Bluetooth, Wi-Fi etc.

3. Specifications

This chapter provides details on the power requirements, dimensions, and additional specifications of the e280 and e280s V2 devices.

Power Rating

- Input power rating: 5V DC, 1A
- Charging via USB-C to computer system or you can use any smartphone or tablet USB power adapter.

Temperature

- Operating temperature:
 - Temperature: 0°C to 45°C (23°F to 113°F)
 - Relative humidity: 5% to 90% RH non-condensing
- Non-Operating Environment:
 - Temperature: -20°C to 60°C (-4°F to 140°F)
 - Relative humidity: 5% to 93% RH non-condensing

External Dimensions

	e280	e280s V2
• Length:	121 mm	128.4 mm
• Width:	67 mm	
• Depth:	14.15 mm	23 mm

Weight

	e280	e280s V2
• Weight	165 g	225 g

Memory

- 512MB Flash
- 512MB DDR

Magnetic Stripe Card

- Triple-track
- Supports bi-directional card reader
- Swipe speed at 10 IPS to 40 IPS (In-Plane Switching)

Communication

- BT 4.2 BLE (Bluetooth Low Energy)
- Wi-Fi 2.4 GHz (a, b, g,n, ac), MFI Certified

Display

- 3.5" HVGA color touchscreen

4. Maintenance and Cleaning

General Care Your device exemplifies superior design and craftsmanship. The following recommendations are provided to help safeguard your warranty coverage:

- Avoid storing the device in hot areas, as elevated temperatures can diminish the lifespan of electronic components, harm batteries, and cause deformation or melting of certain plastics.
- Refrain from storing the device in cold areas, as the return to normal temperatures may lead to moisture formation inside the device, potentially damaging electronic circuit boards.
- Exercise caution to prevent dropping, knocking, or shaking the device, as rough handling can result in the breakage of internal circuit boards and delicate mechanics.

These recommendations are equally applicable to both your device and any accompanying attachments or accessories. If your device is experiencing operational issues, kindly visit the nearest Verifone authorized service provider for maintenance or replacement.

Cleaning & Sanitizing Guidelines Verifone devices should only be gently cleaned to remove dirt, residue, or debris using a lightly water-damped, clean microfiber cloth. One or two drops of pH-neutral, non-scrubbing soap may be used. Do not use solvents, harsh detergents, or abrasive cleaners.

Using improper cleaning methods or products may result in functional and/or cosmetic issues that are not covered under warranty.

Important Guidelines:

- 1 Avoid Direct Application:** Never spray, coat, or pour any liquid, sanitizer, or disinfectant directly onto the device.
- 2 Caution Against Harsh Chemicals:** Avoid using bleach, hydrogen peroxide, thinner, trichloroethylene, or ketone-based solvents, as they can degrade plastic and rubber components.
- 3 Electrostatic Discharge (ESD) Prevention:** Exercise caution to prevent ESD by refraining from vigorously rubbing with a dry towel or similar actions, as they can cause ESD and trigger a tamper alert.



Cleaning Instructions

- 1 Turn off your device.
- 2 Disconnect it from the power source.
- 3 Clean it following the instructions and guidelines as mentioned above. Once completely dry, reconnect to power up.

5. Service and Support

The e280/e280s V2 device does not contain user-serviceable parts. Unless expressly directed, refrain from attempting any service, adjustments, or repairs on the unit under any circumstance.

For product service and repair information:

- USA – Verifone Service and Support Group, 1-800-837-4366
Monday - Friday, 8 A.M. - 8 P.M., Eastern time
- International – Contact your Verifone representative

Returning a Device for Service

You must obtain a Merchandise Return Authorization (MRA) number before returning the terminal to Verifone. The following procedure describes how to return one or more terminals for repair or replacement (U.S. customers only).



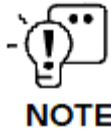
CAUTION

Customers outside the United States are advised to contact their local Verifone representative for assistance regarding service, return, or replacement of devices and accessories.

Il est conseillé aux clients en dehors des États-Unis de contacter leur Verifone local représentant pour obtenir de l'aide concernant l'entretien, le retour ou le remplacement des appareils Et accessoires.

- 1 Get the following information from the printed labels on the back of each e280 device to be returned:
 - Product ID, including the model and part number. For example, “e280” and “M87x-1xx-xx-xxx-x” and “PTID xxxxxxxx”
 - Serial number (S/N nnn-xxx-xxx)
- 2 Obtain the MRA number(s) by completing one of the following:
 - Call Verifone toll-free within the United States at 1-800-Verifone and follow the automated menu options.
 - Select the MRA option from the automated message. The MRA department is open Monday to Friday, 8 A.M. to 8 P.M., Eastern Time.
 - Give the MRA representative the information you gathered in [Step 1](#).
 - Complete the Inquiry Contact Form at <https://www.verifone.com/en/us/contact-us>.
 - Address the Subject box to “Verifone MRA Dept.”

- Reference the model and part number in the Note box.



Each e280/e280s V2 returned to Verifone requires a distinct MRA number to be issued. Even if you are returning multiple terminals of the same model, ensure that a separate MRA number is issued for each unit.

- 3 Describe the problem(s).
- 4 Provide the shipping address where the repaired or replacement unit must be returned.
- 5 Keep a record of the following items:
 - Detail the issue(s) with the e280/e280s V2.
 - Furnish the shipping address for the return of the repaired or replacement unit.
 - Maintain a record of the following elements:
 - Assigned MRA number(s).
 - Verifone serial number linked to the e280/e280s V2 being sent for service or repair (located on the back of the unit).
 - Shipping documentation, including air bill numbers utilized for shipment tracking.
 - Model(s) returned (model numbers can be found on the Verifone label on the back of the e280/e280s V2 device).

6. Accessories

Verifone provides a range of accessories and documentation for the e280/e280s V2. When placing orders, it is essential to reference the specific part numbers. Here are the available channels for ordering: Verifone online store:

- Verifone - [Contact us](#)
- USA - Verifone Customer Development Center, 1-800-837-4366
Monday - Friday, 7 A.M. - 8 P.M., Eastern time
- International - Contact your Verifone representative

Accessories

Part Number	Part Description
PWR087-300-01-A	Verifone Certified Power Adapter
PN 02746-01	Verifone Cleaning Kit

7. Troubleshooting Guidelines

This chapter compiles common instances of malfunctions that may arise during the operation of your device, along with the corresponding steps to address them. The troubleshooting guidelines outlined in the subsequent sections are incorporated to facilitate the effective installation and configuration of the device. Should you encounter challenges in operating your unit, please refer to these troubleshooting examples. If the issue persists despite following the provided guidelines or if the problem is not covered, kindly reach out to your local Verifone representative for further assistance.



NOTE

The device is equipped with tamper-evident labels and does not contain any user-serviceable parts. It is crucial not to attempt to disassemble the unit under any circumstances. Only perform adjustments or repairs explicitly outlined in this guide. For any other services, please contact your local Verifone service provider. Utilizing services from unauthorized parties may potentially void any existing warranty.



CAUTION

All units require the use of a power supply. Only use a Verifone-supplied power pack. Using an incorrectly rated power supply may damage the unit or cause it to malfunction. Ensure that the power supply used to power the unit matches the specified requirements on the back of the unit (refer to [Specifications](#) for detailed power supply specifications) before troubleshooting. If not, obtain the appropriately rated power supply before continuing with troubleshooting.

Toutes les unités nécessitent l'utilisation d'une alimentation. Utilisez uniquement un bloc d'alimentation fourni par Verifone. L'utilisation d'une alimentation mal calibrée peut endommager l'appareil ou l'empêcher de fonctionner correctement. Assurez-vous que l'alimentation électrique utilisée pour alimenter l'unité correspond aux exigences spécifiées à l'arrière de l'unité (voir [Spécifications](#) pour les spécifications détaillées de l'alimentation électrique) avant le dépannage. Dans le cas contraire, procurez-vous une alimentation électrique appropriée avant de poursuivre le dépannage.

Device Does not Start/Does not Display Correct Readable Information

If the device does not start:

- Ensure that the device is plugged in to a dedicated power source.
- Verify all the cable connections including the proper insertion of the power cable connector.
- If the problem persists, reach out to your local Verifone representative for assistance.

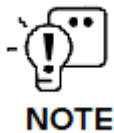
Blank Display

When the device display is blank:

- If the device display appears dark, tap the screen using the stylus. If the unit is in screen-saver mode, touch the screen to activate.
- If the display does shows incorrect or unreadable information, inspect all cable connections. In case the problem persists, reach out to your local Verifone representative for assistance.

Battery Does Not Charge

The e280 device battery must initially be charged fully to ensure proper operation.



-
- Allow the e280 device to remain connected to the power pack for eight hours to ensure the battery receives a full charge.
 - Li-ion batteries are not affected by shallow charging. Furthermore, when the device has no external power source or battery, the coin cell battery provides power to the security circuit.
 - Disconnecting and unplugging the device power pack reduces the life of the coin cell battery, which does not recharge and must be replaced if drained.
 - Conserve battery power by turning the e280 device off when not in use. Do not let the battery charge fall below 10% for an extended period of time as this may permanently diminish the battery capacity. Recharge the battery by attaching the USB end of the power pack to the device and plugging the other end of the power pack into a wall outlet.
 - The e280 device automatically shuts down when the battery reaches the critically low charge state.
 - Charge the device once a week even if the device is not in use.
-

Transactions Fail to Process

Multiple factors could be causing the unit to fail in processing transactions. Utilize the following steps to troubleshoot and identify the root of the failures.

Checking Magnetic Card Reader

To check the magnetic card reader:

- 1 Perform a transaction using one or more distinct magnetic stripe cards to rule out the possibility of a faulty card.
- 2 Ensure that you are swiping cards correctly (see [Using the Magnetic Card Reader](#)).
- 3 Process a transaction manually using the keypad instead of the card reader. If the manual transaction is successful and the issue persists with the card reader, it may indicate a problem with the card reader itself.
- 4 If the problem persists, reach out to your local Verifone representative.

Verifone
2744N University Drive
Coral Springs,
FL 33065, USA



www.verifone.com



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