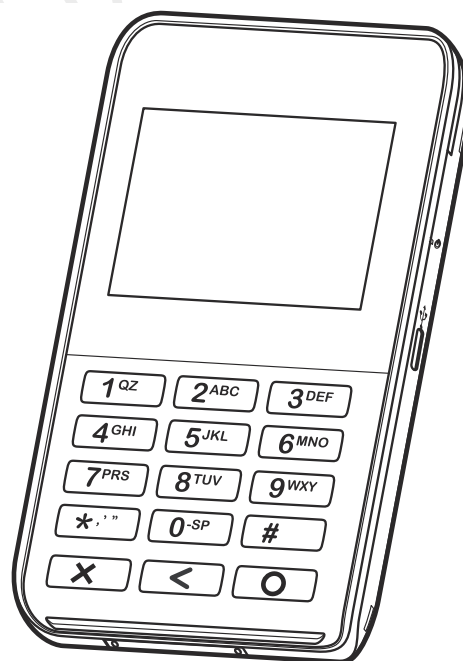


e265

Installation Guide



e265 Installation Guide
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Comments? Please e-mail all comments on this document to your local Verifone Support Team.

WARNING



The e355 uses a lithium-ion rechargeable battery. Do not dispose the e355 in a fire. Lithium-ion polymer batteries must be recycled or disposed of properly. Do not dispose lithium-ion polymer batteries in municipal waste sites.



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PREFACE

This guide is your primary source of information for setting up the e265.

Audience

This guide is useful for anyone installing an e265 device. Basic descriptions of the device features are also provided.

Organization

This guide is organized as follows:

Chapter 1, Device Overview. Provides an overview of the e265.

Chapter 2, Device Setup. Explains how to set up the e265 device. It tells you how to select a location, establish power connection, and install the MSAM card.

Chapter 3, Specifications. Discusses power requirements and dimensions of the e265.

Chapter 4, Maintenance. Explains how to maintain your e265.

Chapter 5, Verifone Service and Support. Provides information on how to contact your local Verifone representative or service provider, and information on how to order accessories or documentation from Verifone.

Chapter 6, Troubleshooting Guidelines. Provides troubleshooting guidelines, should you encounter a problem in device installation.

Related Documentation

To learn more about the e265, refer to the following set of documents:

e265 Certifications and Regulations Sheet

VPN DOC087-301-EN

e265 Quick Installation Guide

VPN DOC087-302-EN

e265 Web site

www.paywaremobile.com




Conventions and Acronyms

This section describes the conventions and acronyms used in this guide.

Various conventions are used to help you quickly identify special formatting.

Table 1 describes these conventions and provides examples of their use.

Table 1 Document Conventions

Convention	Meaning	Example
Blue	Text in blue indicates terms that are cross referenced.	See Conventions and Acronyms .
<i>Italics</i>	Italic typeface indicates book titles or emphasis.	You <i>must</i> install a roll of thermal-sensitive paper in the printer.
Courier	The courier type face is used while specifying onscreen text, such as text that you would enter at a command prompt, or to provide an URL.	<code>http://www.verifone.com</code>
 NOTE	The pencil icon is used to highlight important information.	RS-232-type devices do not work with the PIN pad port.
 CAUTION	The caution symbol indicates possible hardware or software failure, or loss of data.	The device is not waterproof or dustproof, and is intended for indoor use only.
 WARNING	The lightning symbol is used as a warning when bodily injury might occur.	Due to risk of shock do not use the device near water.

Various acronyms are used in place of the full definition. **Table 2** presents acronyms and their definitions.

Table 2 Acronym Definitions

Acronym	Definitions
AC	Alternating Current
ARM	Acorn RISC Machine
EMV	Europay MasterCard and VISA
LCD	Liquid Crystal Display
LED	Light Emitting Diode
NFC	Near Field Communication
MRA	Merchandise Return Authorization
MSAM	Micromodule-Size Security Access Module
PCI	Payment Card Industry
PED	PIN Entry Device
PIN	Personal Identification Number
SIM	Subscriber Identity Module
USB	Universal Serial Bus
VPN	Verifone Part Number

Device Overview

This chapter provides a brief description of the e265.

The e265 connects with various tablet devices for the next generation of PAYware Mobile enterprise. It supports the use of the SPP standard to connect between the e265 and tablet.

Some of the e265's key features include: a fast processor, large memory, the latest PCI 4.0 security, mechanical keypad, integrated contactless and NFC-ready, in a small most versatile form factor.

The e265 is a portable, battery-powered device designed to fit your hands comfortably and is ideal for consumer-facing and merchant-facing retail integrated applications. It has a removable battery that can be charged by external power adapter through a micro-USB connector and gang charger. It also features a crisp 128 x 32 backlit LCD display.

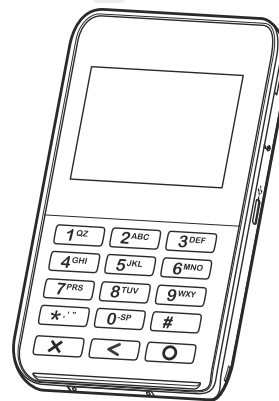


Figure 1 The e265 Unit

Key Features

- **400 MHz ARM11 processor** delivers **power** and **usability** in a **convenient** "hand-over" design
- **Multi-application** operating environment
- **Advanced memory architecture** to meet tomorrow's needs
- **32-bit processing** and **multi-tasking** capabilities
- Offers **unsurpassed performance** on **EMV** smart card transactions
- **Security** architecture exceeds specifications for PCI-PED and sophisticated **file authentication**
- **Multiple connectivity and contactless** options
- **Spill-resistant design** prevents liquid from entering the unit by forcing it down and off the front of the device

Features and Benefits

The e265 provides the right combination of features and functions including a triple-track magnetic-stripe card reader, smart card reader, integrated PIN pad, colored display, and contactless/NFC support.

Exceptional Ease of Use

- The lightweight, compact, stylish, and ergonomic balance allows convenient device hand-off to the consumer for PIN entry or other input.
- Large, well-placed, mechanical keys provide a continuity of user experience between the e265 and the iOS, Android, or Windows device.
- Horizontal magnetic stripe card reader with an enlarged card entrance delivers optimal card swiping and reading without the need to visually guide the card.
- The e265 size is easily able to be dropped in most pockets. An optional hands-free holster is available that fits the server's or clerk's belt so that the e265 can be quickly removed and easily handed to the customer.

Performance and Durability

- Powerful 400-mHz ARM11 processing completes transactions quickly.
- High-capacity lithium-ion polymer battery can rapidly charge and offer 10+ hours of power.
- Standard Micro-USB port allows for convenient product charging.
- Rounded corners to minimize breakage and drop-resistant to 3 feet on concrete surfaces.
- 192 MB of standard memory.

Security

- PCI PED 4.x approved for debit and other PIN-based transactions
- EMV Level 1 type approval
- Tamper-resistant construction, SSL protocols, and VeriShield file authentication
- Supports VeriShield Protect encryption implementations

Contactless Capability

- Advanced contactless architecture that future-proofs investment with a single contactless interface (SingleCI), SoftSAMS, and side-by-side application architecture.
- Large tap zone (above the keypad) that encompasses the PIN pad optimizes user experience.
- Contactless version accepts EMV in addition to magnetic stripe contactless payments as well as PIN-based transactions.



CHAPTER 2

Device Setup

This chapter describes the device setup procedure. You will learn about:

- Usage Guidelines
- Unpacking the Shipping Carton
- Examining e265 Device Features
- Installing/Replacing an MSAM Card
- Manually Starting and Resetting the e265
- Connecting the e265 to a Power Source or a Host Computer
- Color Behavior
- Using the Smart Card Reader
- Using the Magnetic Stripe Reader
- Using the CTLS Reader

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Usage Guidelines

Use the following guidelines when using your e265.

Environmental Factors

- Select a flat support surface, such as a countertop or table, to keep the device safe in between uses.
- Do not use the device where there is high heat, dust, humidity, moisture, or caustic chemicals or oils.
- Keep the device away from direct sunlight and anything that radiates heat, such as a stove or motor.
- Do not use the device outdoors.

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.

Personal Security Considerations

The e265 is a handover device. Always exercise extreme caution when conducting transactions especially during PIN entry.

- Hand the e265 directly to the cardholder for PIN entry.
- Encourage the cardholder to hold the e265 close to avoid others from seeing the information entered.

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).
- Do not use the device near water or in moist conditions.

Unpacking the Shipping Carton

Open the shipping carton and carefully inspect its contents for possible tampering or shipping damage. The e265 is a secure product and any tampering may cause the device to cease to function properly.

To unpack the shipping carton

- 1 Remove and inspect the following items:
 - e265 unit
 - USB to Micro-USB cable
- 2 Remove all plastic wrapping from the unit and other components.

- 3 Remove the clear protective film from the unit.



Do not use a unit that has been damaged or tampered with. The e265 comes equipped with tamper-evident labels. If a label or component appears damaged or if the device appears to have been opened, please notify the shipping company and your Verifone representative or service provider immediately.

- 4 Save the shipping carton and packing material for future repacking or moving the device.

NOTE



Charge the e265 device for eight hours before initial use.

Examining e265 Device Features

Before you continue the installation process, familiarize yourself with the features of the e265. (See [Figure 3](#) and [Figure 2](#))

NOTE



Verifone ships variants of the e265 for different markets. Your device may have a different configuration. The following devices may or may not be present: a CTLS reader or smart card reader. However, the basic processes described in this guide remain the same, regardless of device configuration.

Front View The front panel includes the following features:

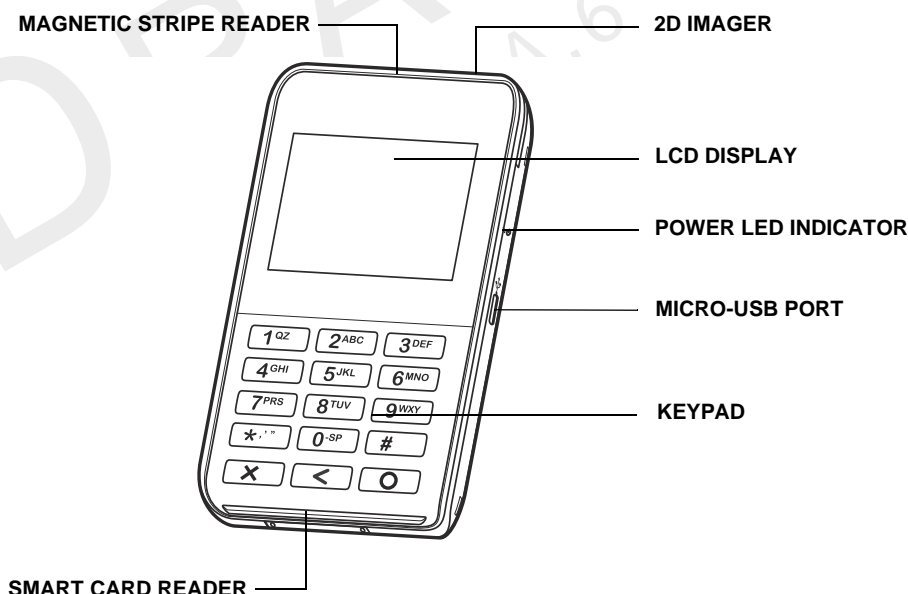


Figure 2 e265 Device Features (Front View)

- A 128 x 32 pixel backlit **LCD Display**
- A **Power LED Indicator** beside the Micro-USB port indicates the e265 device's operational state.

- A **Micro-USB port** located on the right side for data connection and power charging. You can also use this connect the e265 to a computer using a standard USB to Micro-USB cable (VPN CBL000-049-01-A). (See [Connecting the e265 to a Power Source or a Host Computer](#))
- Two types of keys on the mechanical keypad:
 - a 12-key **keypad**
 - Three **color-coded function keys** below the keypad

CAUTION



Do NOT paste anything on the keypad surface to avoid malfunction.

- A **Smart Card Reader** to process smart card transactions (See [Using the Smart Card Reader](#))
- A **Magnetic Stripe Reader**, for performing debit or credit card transactions (See [Using the Magnetic Stripe Reader](#)).
- **LEDs** that act as CTLS activity, system power, and charging indicators (See [Color Behavior](#))
- A **CTLS functionality** for contactless payments (See [Using the CTLS Reader](#))

Back View The front panel includes the following features:

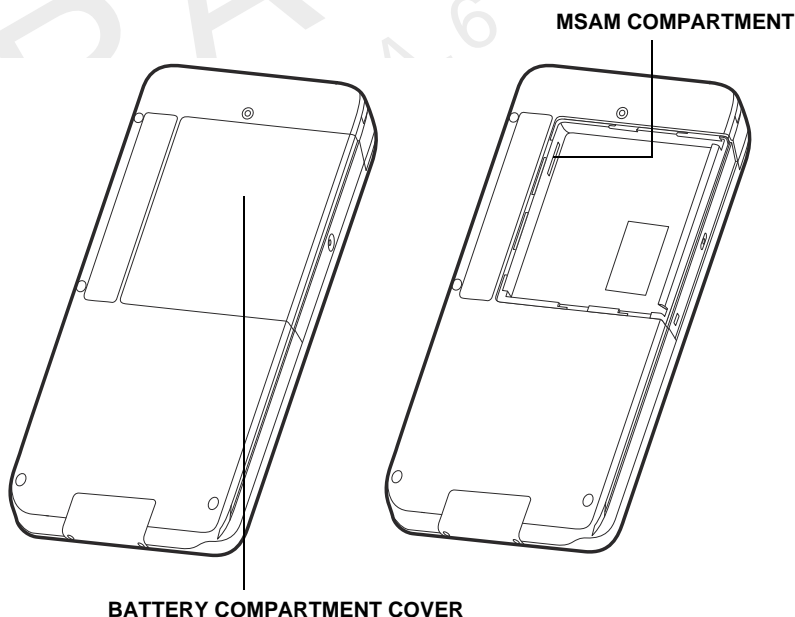


Figure 3 e265 Device Features (Back View)

- A **Battery Compartment Cover**. Remove the cover to access the removable battery and the MSAM compartment.

- An **MSAM (Micromodule-Size Security Access Module) Compartment** to support stored-value card programs or other merchant card requirements. (See [Installing/Replacing an MSAM Card](#))



The MSAM compartment is located inside the battery compartment. Remove the battery to display the access the compartment.

Installing/Replacing an MSAM Card

When you first receive your e265, you may need to install an MSAM card or you may need to replace an old card.



Observe standard precautions when handling electrostatically sensitive devices. Electrostatic discharges can damage this equipment. Verifone recommends using a grounded anti-static wrist strap.



Not all applications require the use of an MSAM card.

To install/replace MSAM

- 1 Unplug any cables or chargers from the e265.
- 2 Remove the screw from the battery cover.

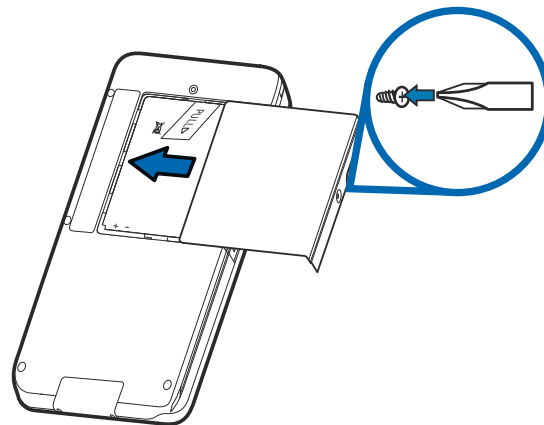


Figure 4 Removing the Battery Cover

- 3 Slide the cover outwards, away from the device.
- 4 Remove the battery by gently pulling the plastic tab to access the MSAM compartment. The MSAM compartment is located on the left side of the battery compartment.

- 5 Insert the MSAM card with the gold contacts facing up. Make sure that the MSAM card is fully inserted to be able to re-insert the battery.



The MSAM slot has a spring-loading mechanism. To remove an MSAM card from the slot, simply press the card into the slot and then release to eject the card.

- 6 Re-insert the battery by aligning the gold contacts in the battery with the pins on the e265 device.



The plastic tab attached to the battery allows you to easily remove the battery from the compartment. Make sure that the plastic tab is still visible after insertion.

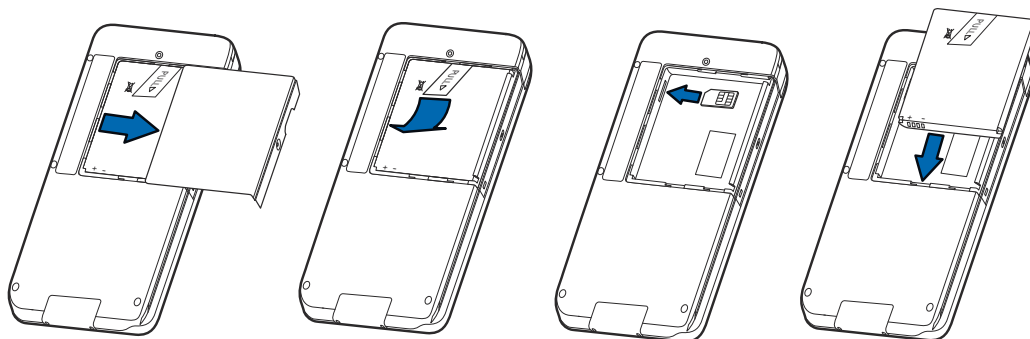


Figure 5 Inserting an MSAM Card

- 7 Place the battery cover back and tighten the screw.

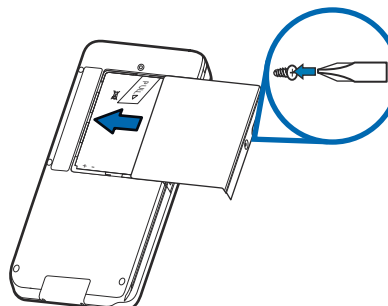


Figure 6 Returning the Battery Cover

Manually Starting and Resetting the e265

To turn on the e265, press and hold the **Enter** key for at least five seconds. The Reset Button is located just above the Power LED Indicator.



The Reset Button resets the device to its initialized state. **NEVER** use the Reset Button unless instructed by a Verifone support representative.

Connecting the e265 to a Power Source or a Host Computer

Plug the wall-mount charger to an external power source and connect it to the e265 to charge the device. You can also connect the e265 to a computer to synchronize data and/or charge the device.

NOTE



Charge the e265 device for eight hours before initial use.

To Connect the e265 to a Wall-mount Charger

- 1 Plug the Verifone-certified wall-mount charger into a wall outlet or powered surge protector.
- 2 Insert the Micro-USB cable into the port located on the side of the e265.

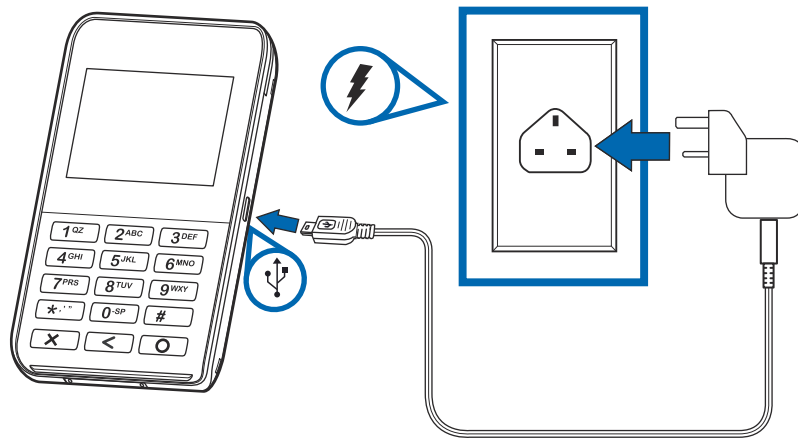


Figure 7 Connecting the e265 to a Wall-mount Charger

To Connect the e265 to a Host Computer via Micro-USB

- 1 Connect the Micro-USB cable into the port located on the side of the e265.
- 2 Connect the other end of the Micro-USB cable into the host computer's USB port.

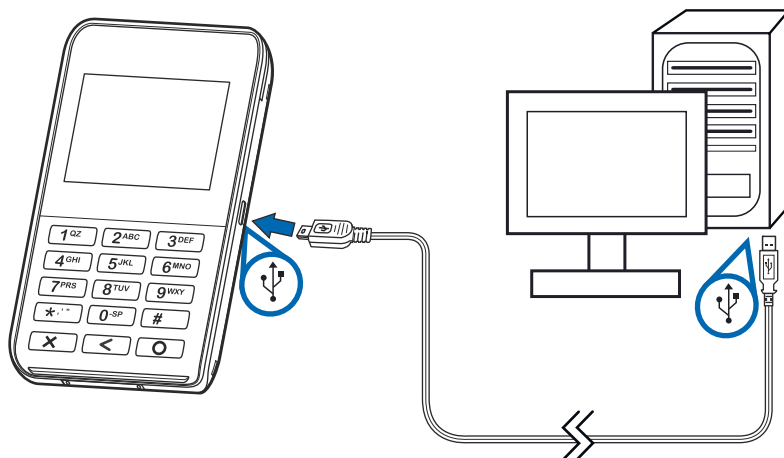


Figure 8 Connecting the e265 to a Host Computer

Color Behavior The following table shows the behavior of the LEDs during various system power states.

Sleep	Battery Low	Battery Extremely Low	Battery Charging	Charging Timer Fault	Normal Operation	LED Behavior
Y						Green, blinks every 4 seconds
	Y					Red, 1Hz rate, 50% duty cycle (Battery low condition: battery voltage <3.7V)
		Y				Red, 4Hz rate, 50% duty cycle (Battery extremely low condition: battery voltage <3.6V)
			Y			Orange, 1Hz rate, 50% duty cycle
				Y		Orange, on continuously
					Y	Green, on continuously
						LEDs are turned OFF when charging the e265 on a gang charger

Using the Smart Card Reader

The smart card transaction procedure may vary from one application to another. Verify the procedure with your application provider before performing a smart card transaction.

To conduct a smart card transaction

- 1 Position the smart card with the contacts facing in the same direction as the keypad.
- 2 Insert the card into the reader slot in a smooth, continuous motion until it seats firmly.

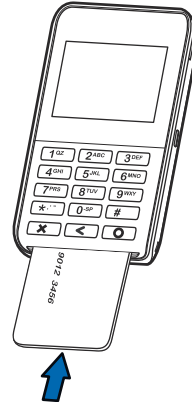


Figure 9 Inserting a Smart Card

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

Using the Magnetic Stripe Reader

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

To conduct a credit/debit card transaction

- 1 Position the card with the magnetic stripe facing backwards.
- 2 To ensure a proper read of the magnetic swipe card, insert the magnetic card from the top of the device, as shown in [Figure 10](#).

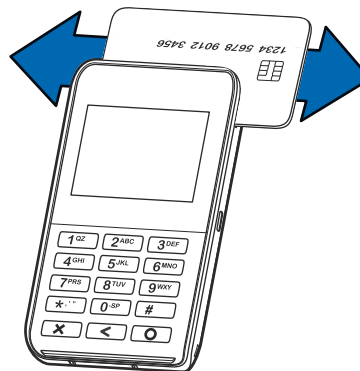


Figure 10 Using Magnetic Stripe Card

- 3 Swipe the card through the magnetic card reader.

Using the CTLS Reader

The e265 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 contactless antenna, located above the keypad and LCD with a CTLS symbol.

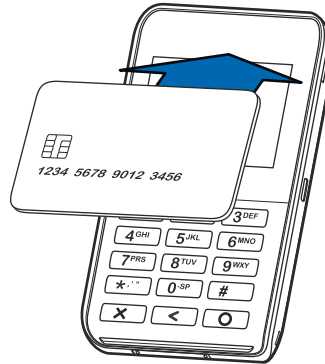


Figure 11 Using the CTLS Reader



Specifications

This chapter discusses power requirements, dimensions, and other specifications of the e265 device.

Power

Charging via Micro-USB to computer system or Verifone-certified power adapter:
5 V DC, 2 A

Temperature

- **Operating Temperature:** -5° to 40°C (23° to 104°F)
- **Relative humidity:** 5% to 95%; RH non-condensing

External Dimensions

- **Length:** 130 mm
- **Width:** 71 mm
- **Depth:** 14.5 mm

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CHAPTER 4

Maintenance

The e265 device has no user-maintainable parts.

Cleaning the Device

To clean the device, use a clean cloth slightly dampened with water and a drop or two of mild soap. For stubborn stains, use alcohol or an alcohol-based cleaner.

CAUTION



Never use thinner, trichloroethylene, or ketone-based solvents – they may cause deterioration of plastic or rubber parts.

Do not spray cleaners or other solutions directly onto the keypad or device display.

Smart Card Reader

Do not attempt to clean the smart card reader. Doing so may void any warranty. For smart card reader service, contact your Verifone distributor or service provider.

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Verifone Service and Support

For e265 problems, contact your local Verifone representative or service provider.

For e265 product service and repair information:

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

Returning a Device for Service

Before returning a e265, you must obtain an MRA number. The following procedure describes how to return one or more devices for repair or replacement (U.S. customers only).

NOTE



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

To return a device for service

- 1 Get the following information from the printed labels at the back of *each* e265 to be returned:
 - Product ID, including the model and part number. For example, “e265” and “M087-XXX-XXX-XXX.”
 - Serial number (S/N nnn-nnn-nnn)
- 2 Obtain the MRA number(s) by completing one of the following:
 - a 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.–8 P.M., Eastern Time.
 - Give the MRA representative the information you gathered in Step 1. If the list of serial numbers is long, you can fax the list, along with the information gathered in Step 1, to the MRA department at 727-953-4172 (U.S.).
 - b Address a fax to “Verifone MRA Dept.” with the model and part number(s)
 - Include a telephone number where you can be reached and your fax number.
 - c Complete the Inquiry Contact Form at http://www.verifone.com/aboutus/contact/contact_form.cfm.

- Address the Subject box with to “Verifone MRA Dept.”
- Reference the model and part number in the Note box.



One MRA number must be issued for each e265 you return to Verifone, even if you are returning several of the same model.

- 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:
 - Assigned MRA number(s).
 - Verifone serial number assigned to the e265 you are returning for service or repair (device serial numbers are located at the back of the unit).
 - Shipping documentation, such as air bill numbers used to trace the shipment.
 - Model(s) returned (model numbers are located on the Verifone label at the back of the e265).

Accessories and Documentation

Verifone produces the following accessories and documentation for the e265. When ordering, please take note of the part number.

- Verifone online store at www.store.verifone.com
- USA – Verifone Customer Development Center, 800-Verifone (837-4366), Monday - Friday, 7 A.M. - 8 P.M., Eastern time
- International – Contact your Verifone representative

Accessories

Verifone Certified Power Adapter	PWR087-300-01-A
Verifone Cleaning Kit	02746-01

Documentation

<i>e265 Certifications and Regulations Sheet</i>	VPN DOC087-301-EN
<i>e265 Quick Installation Guide</i>	VPN DOC087-302-EN
<i>e265 Web site</i>	www.paywaremobile.com

Battery Pack Instructions

Dispose of the battery pack in accordance with all national, state, and local laws and regulations as regionally required. Some batteries may be recycled and may be accepted for disposal at local recycling centers. Please refer to [Installing/Replacing an MSAM Card](#) for instructions on battery removal and insertion.



There is a risk of explosion if the battery is replaced by an incorrect type.



Troubleshooting Guidelines

The troubleshooting guidelines provided in the following section are included to help you install and configure your e265 successfully. Typical examples of malfunction you may encounter while operating your e265 and steps you can take to resolve them are listed in this chapter.

If the problem persists even after performing the outlined guidelines or if the problem is not described below, contact your local Verifone representative for assistance.

NOTE



The e265 comes equipped with tamper-evident labels. The e265 unit contains no user serviceable parts. Do not, under any circumstance, attempt to disassemble the device. Perform only those adjustments or repairs specified in this guide. For all other services, contact your local Verifone service provider. Service conducted by parties other than authorized Verifone representatives may void any warranty.

CAUTION



Use only a Verifone-supplied power pack. 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 at the bottom of the device. (See [Specifications](#), for detailed power supply specifications.) Obtain the appropriately rated power supply before continuing with troubleshooting.

Device Does Not Start

- Ensure that the battery charge state is not below the critically low level.
- Recharge the battery.
- Check if the battery is properly inserted. Remove the screw from the battery cover. Slide the cover outwards, away from the device and check if the device and battery contacts are aligned.

Device Display Does Not Show Correct/Readable Info

- Recharge the battery.
- Connect the e265 into a known-good power supply (if available) to see if this clears the problem.
- If the problem persists, contact your local Verifone representative for assistance.

Blank Display

When the e265 display screen does not show correct or clearly readable information:

- Check device power connection.
- Remove and reapply power to the device. To do this, press and hold the power/reset button.
- If the problem persists, contact your local Verifone service provider.

Keypad Does Not Respond

If the keypad does not respond properly:

- Check the device display. If it displays the wrong character or nothing at all when you press a key, follow the steps outlined in [Transactions Fail To Process](#).
- If the problem persists, contact your local Verifone representative.
- Place a paper clip or a similar tool in the hole located on the side of the device to press the Reset Button.

CAUTION



Do NOT paste anything on the keypad surface to avoid malfunction.

Transactions Fail To Process

There are several reasons why the device may not be processing transactions. Use the following steps to troubleshoot failures.

Check the Magnetic Card Reader

- Perform a test transaction using one or more different magnetic stripe cards to ensure the problem is not a defective card.
- The side of the card where the black magnetic stripe is should be visible. Insert the magnetic stripe card from the top of the device going downwards in a smooth and continuous manner (see [Figure 10](#)).

Check the Smart Card Reader

- Perform a test transaction using several different smart cards to ensure the problem is not a defective card.
- Ensure that the card is inserted correctly and that the card is not removed prematurely.
- Ensure the MSAM cards are properly inserted (see [Installing/Replacing an MSAM Card](#)).
- Contact your Verifone distributor or service provider.

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