



Lexmark™

**Optra Compute 500/550**

**Optra Compute CX1000/CX2000**

**Optra VZ1000/VZ5000/VZ5100/  
VZ6100**

---

**User's Guide**

**May 2024**

**[www.lexmark.com](http://www.lexmark.com)**

---

Machine type:

8080









Models:

001, 002, 003, 004

# Contents

- Safety information..... 3**
- Overview..... 4**
  - Overview..... 4
- Learn about the device..... 5**
  - Optra Compute 500/550.....5
  - Optra Compute CX1000..... 6
  - Optra Compute CX2000.....7
  - Optra VZ1000/VZ5000..... 8
  - Optra VZ5100/VZ6100..... 9
  - Understanding the status of the power button and setup button indicator lights.....11
- Set up, install, and configure..... 12**
  - Optra Compute 500/550/CX1000.....12
  - Optra Compute CX2000, Optra VZ1000/VZ5000/VZ5100/VZ6100.....18
  - Outbound network requirements..... 26
- Using Optra Portal..... 27**
  - Enrolling the device in Optra Portal.....27
  - Adding workflows and deploying skills.....30
- Troubleshooting..... 32**
  - Cannot connect to the portal..... 32
  - Cannot enroll the device..... 32
  - Cannot deploy a skill..... 33
- Additional setup.....35**
  - Mounting the device on a wall.....35
- Notices..... 39**
  - Product information..... 39
  - Edition notice.....39
- Index.....48**

## Safety information

-  **CAUTION—POTENTIAL INJURY:** To avoid the risk of fire or electrical shock, connect the power adapter and/or power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.
-  **CAUTION—POTENTIAL INJURY:** To avoid the risk of fire or electrical shock, use only the power adapter and/or power cord provided with this product or the manufacturer's authorized replacement.
-  **CAUTION—POTENTIAL INJURY:** To avoid the risk of fire or electrical shock, make sure that the power cord is completely seated in the appliance inlet of the power adapter or in the device itself.
-  **CAUTION—SHOCK HAZARD:** To avoid the risk of electrical shock, do not place or use this product near water or wet locations.
-  **CAUTION—SHOCK HAZARD:** To avoid the risk of electrical shock, do not make any electrical connections during a lightning storm.
-  **CAUTION—POTENTIAL INJURY:** Do not cut, twist, bind, crush, or place heavy objects on the power cord. Do not subject the power cord to abrasion or stress. Do not pinch the power cord between objects such as furniture and walls. If any of these things happen, a risk of fire or electrical shock results. Inspect the power cord regularly for signs of such problems. Remove the power cord from the electrical outlet before inspecting it.
-  **CAUTION—SHOCK HAZARD:** To avoid the risk of electrical shock when cleaning the exterior of the device, unplug the power cord from the electrical outlet and disconnect all cables before proceeding.
-  **CAUTION—POTENTIAL INJURY:** The lithium battery in this product is not intended to be replaced. There is a danger of explosion if a lithium battery is incorrectly replaced. Do not recharge, disassemble, or incinerate a lithium battery. Discard used lithium batteries according to the manufacturer's instructions and local regulations.

If Power over Ethernet (PoE) is used to power this device, then the circuit must not exit the building. This product is not certified for use on a PoE circuit that goes outside of the building.

This product is designed, tested, and approved to meet strict global safety standards with the use of specific manufacturer's components. The safety features of some parts may not always be obvious. The manufacturer is not responsible for the use of other replacement parts.

Refer service or repairs, other than those described in the user documentation, to a service representative.

**SAVE THESE INSTRUCTIONS.**

# Overview

## Overview

The Lexmark™ Optra™ product portfolio is a suite of enterprise-class IoT edge devices and management software. Each device comes pre-provisioned with the Microsoft Azure IoT Edge runtime environment and IoT credentials, and maintains a connection to Lexmark's device management portal, Optra Portal. The portal hosts a set of interfaces where you can install a "skill" to groups of devices to perform certain functions.

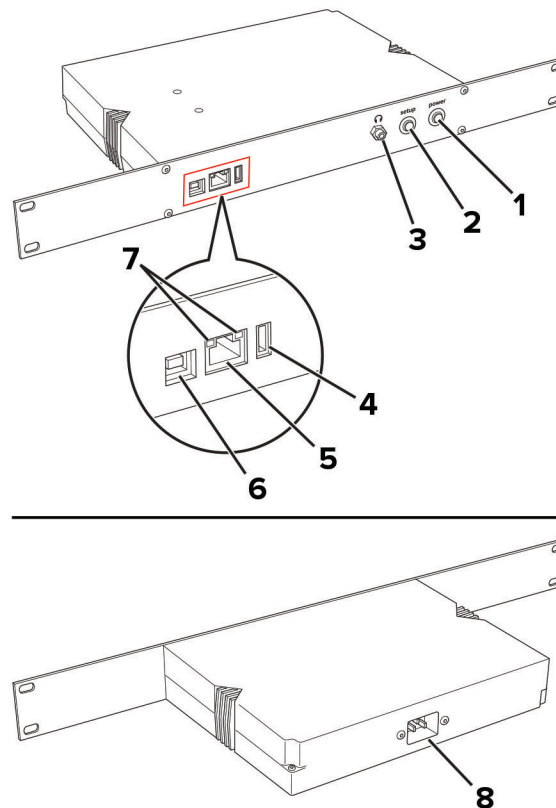
For developers, these skills are packaged as containers in the Docker containerization platform. These containers are given access to a set of underlying hardware on the devices.

This document provides instructions on how to set up and use the device and how to use the portal.

# Learn about the device

## Optra Compute 500/550

**Warning—Potential Damage:** To avoid loss of data or device malfunction, do not touch the USB cable or the device in the areas shown while actively operating.

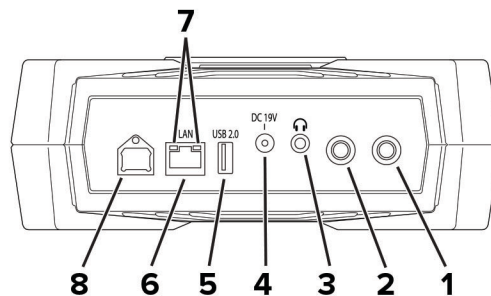


	Part	Function
1	Power button	Turn the device on or off.
2	Setup button	<ul style="list-style-type: none"> <li>Enroll the device in Optra Portal—Press the button briefly.</li> <li>Reset the device to its factory default settings—Press and hold the button as the device is being turned on until the power button blinks rapidly.</li> </ul>
3	Headphones jack	Insert headphones or a speaker.
4	USB port	Attach a supported USB device, such as a flash drive or the MarkNet™ network adapter, which is purchased separately.
5	Ethernet port	Connect the device to a network.
6	USB device port	<p>Connect the device to a computer to access the Embedded Web Server (EWS) and manage on-device settings.</p> <p>If the only available connection is a Wi-Fi network, then use the EWS to configure Wi-Fi connection. You can also use the EWS to configure the Ethernet network settings.</p>

	Part	Function
7	Ethernet port indicator lights	Check the network connection status. <b>Notes:</b> <ul style="list-style-type: none"> <li>The light on the left indicates connection.</li> <li>The light on the right indicates activity.</li> </ul>
8	Power cord socket	Connect the device to a properly grounded electrical outlet.

## Optra Compute CX1000

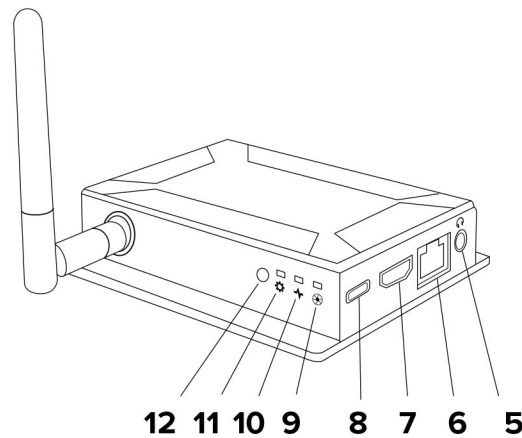
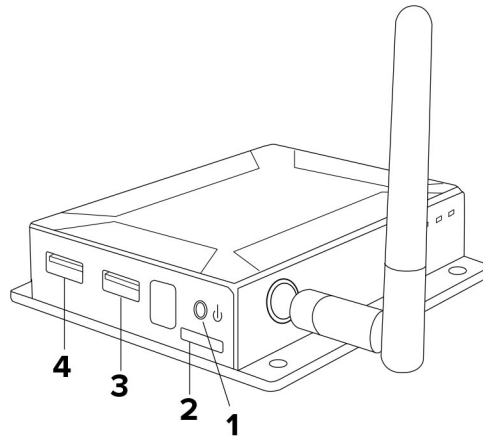
**Warning—Potential Damage:** To avoid loss of data or device malfunction, do not touch the USB cable or the device in the areas shown while actively operating.



	Part	Function
1	Power button	Turn the device on or off.
2	Setup button	<ul style="list-style-type: none"> <li>Enroll the device in Optra Portal—Press the button briefly.</li> <li>Reset the device to its factory default settings—Press and hold the button as the device is being turned on until the power button blinks rapidly.</li> </ul>
3	Headphones jack	Insert headphones or a speaker.
4	Power adapter port	Connect the device to the included power adapter and to a properly grounded electrical outlet.
5	USB 2.0 port	Attach a supported USB device, such as a flash drive.
6	Ethernet port	Connect the device to a network.
7	Ethernet port indicator lights	Check the network connection status. <b>Notes:</b> <ul style="list-style-type: none"> <li>The light on the left indicates connection.</li> <li>The light on the right indicates activity.</li> </ul>
8	USB device port	Connect the device to a computer to access the Embedded Web Server (EWS) and manage on-device settings. If the only available connection is a Wi-Fi network, then use the EWS to configure Wi-Fi connection. You can also use the EWS to configure the Ethernet network settings.

## Optra Compute CX2000

**Warning—Potential Damage:** To avoid loss of data or device malfunction, do not touch the USB cable or the device in the areas shown while actively operating.

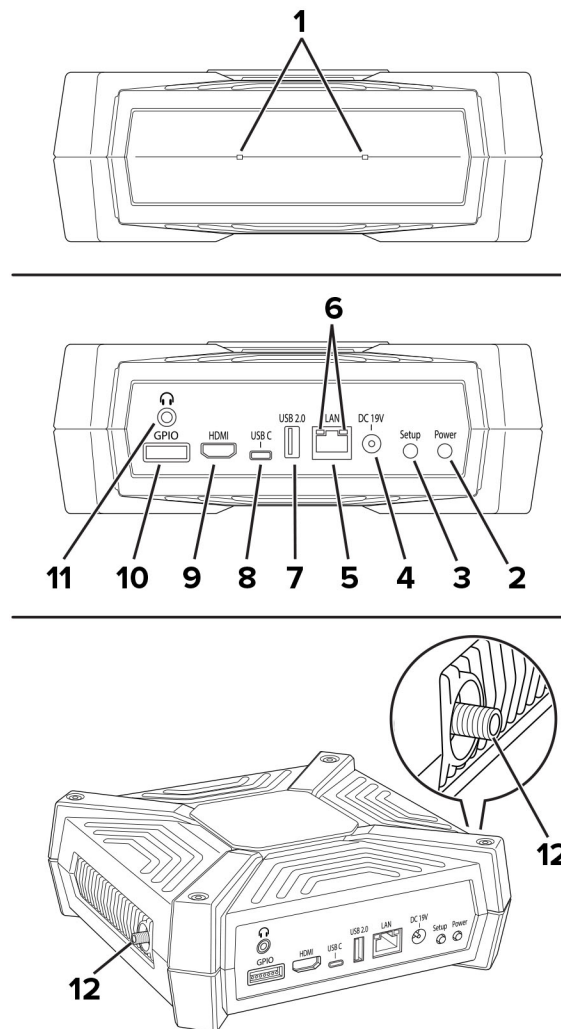


	Part	Function
1	Power button	Turn the device on or off.
2	SD card slot	Expand the storage capacity of the device.
3	USB 2.0 port	Attach a supported USB device, such as a flash drive.
4	USB 3.0 port	<ul style="list-style-type: none"> <li>Connect the device to a computer to access the Embedded Web Server and manage on-device settings.</li> <li>Attach a supported USB device, such as a flash drive.</li> </ul>
5	Headphones jack	Insert headphones or a speaker.
6	Ethernet port	Connect the device to a network.
7	HDMI port	Transmit video and audio signals to an HDMI monitor.
8	USB C power port	Connect the device to the included power adapter and to a properly grounded electrical outlet.
9	Skills activity indicator light	Check whether a skill is running.

	Part	Function
10	Device status indicator light	Check the status of the device.
11	Setup indicator light	Check the status of the setup process.
12	Setup button	<ul style="list-style-type: none"> <li>Enroll the device in Optra Portal—Press the button briefly.</li> <li>Reset the device to its factory default settings—Press and hold the button as the device is being turned on until the power button blinks rapidly.</li> </ul>

## Optra VZ1000/VZ5000

**Warning—Potential Damage:** To avoid loss of data or device malfunction, do not touch the USB cable or the device in the areas shown while actively operating.



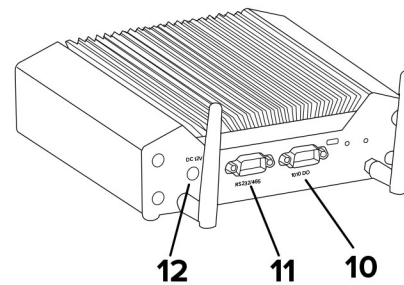
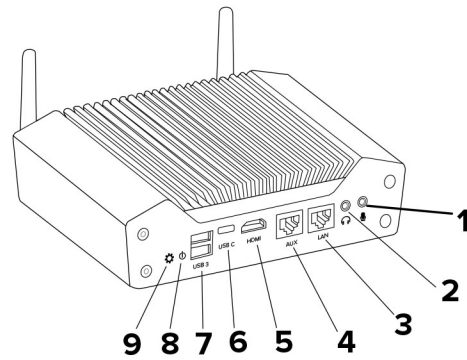
	Part	Function
1	Microphones	Detect or record sound.
2	Power button	Turn the device on or off.



	Part	Function
3	Setup button	<ul style="list-style-type: none"> <li>Enroll the device in Optra Portal—Press the button briefly.</li> <li>Reset the device to its factory default settings—Press and hold the button as the device is being turned on until the power button blinks rapidly.</li> </ul>
4	Power adapter port	Connect the device to the included power adapter and to a properly grounded electrical outlet.
5	Ethernet port	Connect the device to a network.
6	Ethernet port indicator lights	<p>Check the network connection status.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>The light on the left indicates connection.</li> <li>The light on the right indicates activity.</li> </ul>
7	USB 2.0 HS port	Attach a supported USB device, such as a flash drive.
8	USB 3.0 SS port	<ul style="list-style-type: none"> <li>Connect the device to a computer to access the Embedded Web Server and manage on-device settings.</li> <li>Attach a supported USB device, such as a flash drive.</li> </ul>
9	HDMI port	Transmit video and audio signals to an HDMI monitor.
10	GPIO port	A general purpose interface that is used for input, output, or both.
11	Headphones jack	Insert headphones or a speaker.
12	Antenna connectors	Connect the antennas to the device.

## Optra VZ5100/VZ6100

**Warning—Potential Damage:** To avoid loss of data or device malfunction, do not touch the USB cable or the device in the areas shown while actively operating.



	Part	Function
<b>1</b>	Microphone jack	Insert a microphone.
<b>2</b>	Headphones jack	Insert headphones or a speaker.
<b>3</b>	Ethernet port	Connect the device to a public network.
<b>4</b>	AUX port	Connect the device to a private network.
<b>5</b>	HDMI port	Transmit video and audio signals to an HDMI monitor.
<b>6</b>	USB-C port	Attach a supported USB device, such as a flash drive.
<b>7</b>	USB 3.0 SS ports	<ul style="list-style-type: none"> <li>Connect the device to a computer to access the Embedded Web Server and manage on-device settings.</li> <li>Attach a supported USB device, such as a flash drive.</li> </ul>
<b>8</b>	Power button	Turn the device on or off.
<b>9</b>	Setup button	<ul style="list-style-type: none"> <li>Enroll the device in Optra Portal—Press the button briefly.</li> <li>Reset the device to its factory default settings—Press and hold the button as the device is being turned on until the power button blinks rapidly.</li> </ul>
<b>10</b>	1010 DIO port	Connect the device to sensors, relays, indicators, and other devices.
<b>11</b>	RS-232/RS-485 port	Connect the device to other devices that support serial communication, such as industrial and factory automation and control equipment.
<b>12</b>	Power adapter port	Connect the device to the included power adapter and to a properly grounded electrical outlet.

## Understanding the status of the power button and setup button indicator lights

Setup button light	Power button light	Device status
Off	Blinking	Starting or shutting down
Flickering (irregular blinking)		No network connection to the hub
Blinking		Not enrolled
Blinking	On	Enrolling
On		Enrolled
Off	Flickering (irregular blinking)	Resetting to factory default settings
On	Blinking	Updating firmware

# Set up, install, and configure

## Optra Compute 500/550/CX1000

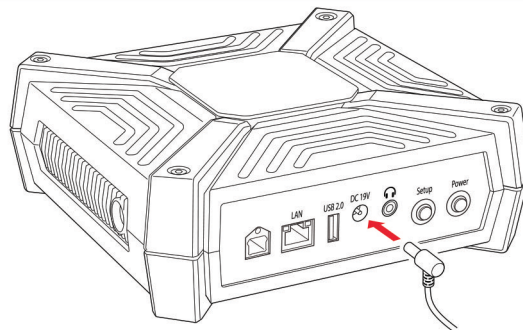
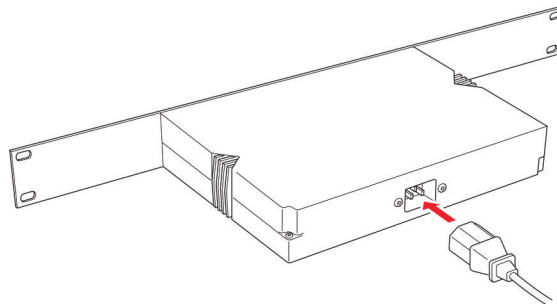
### Notes:

- Optra Compute CX1000 supports wall mounting. For more information, see [“Mounting the device on a wall” on page 35](#) before proceeding with setting up the device.
- If the device is mounted with the ports facedown, then hold the device in place when making cable connections to keep it from being dislodged.

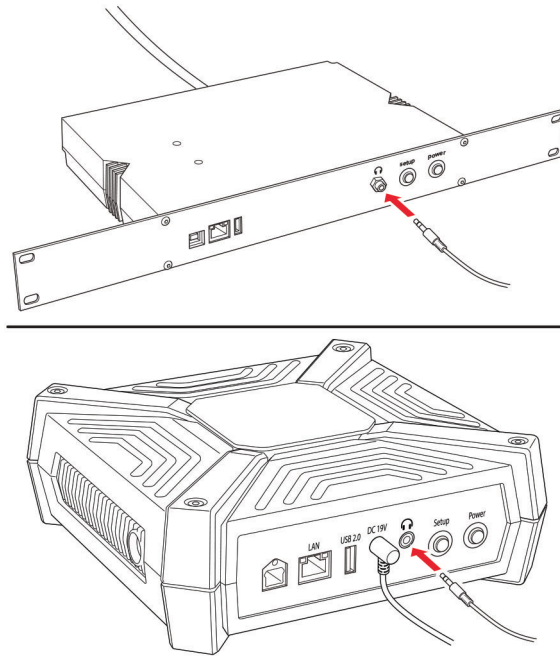
**1** Connect the power cord to the device, and then to the electrical outlet.

**⚠ CAUTION—POTENTIAL INJURY:** To avoid the risk of fire or electrical shock, connect the power adapter and/or power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.

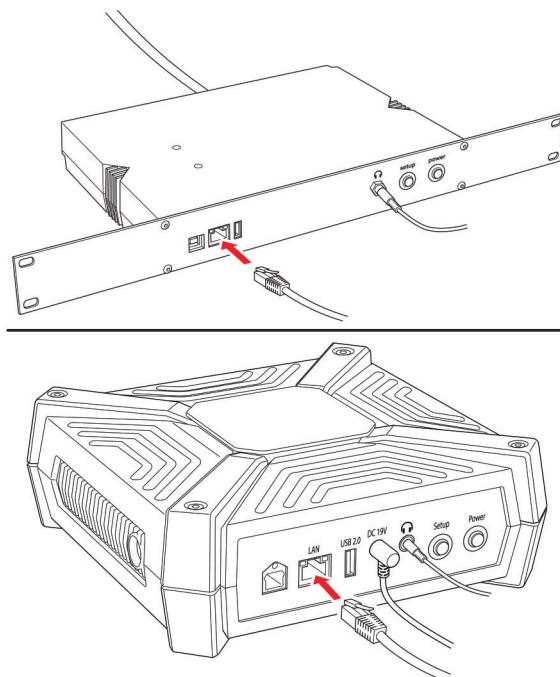
**⚠ CAUTION—POTENTIAL INJURY:** To avoid the risk of fire or electrical shock, make sure that the power cord is completely seated in the appliance inlet of the power adapter or in the device itself.



**2** If necessary, insert headphones or a speaker into the headphone jack.



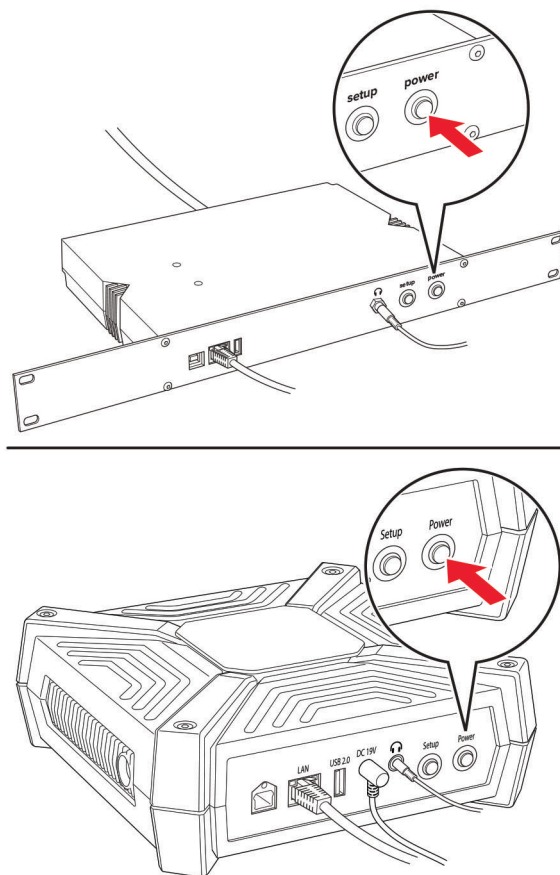
**3** Connect the device to the local network.



**Notes:**

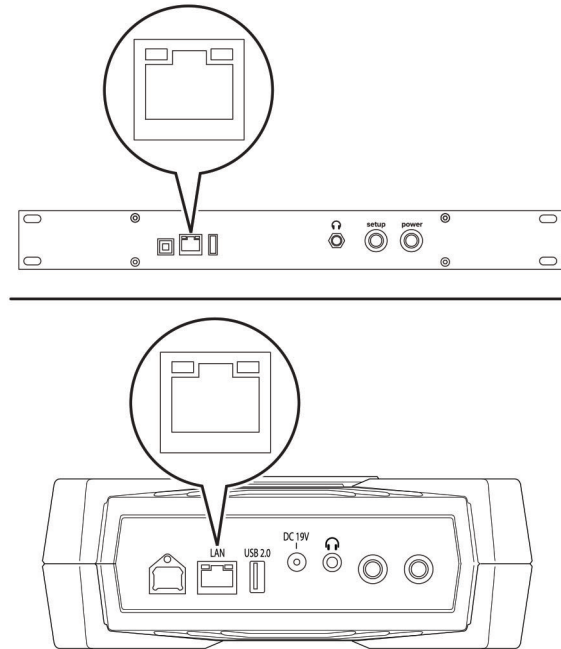
- For Optra Compute 500/550, if the only available connection is a Wi-Fi network, then purchase a MarkNet network adapter and insert it into the USB port.
- Optra Compute CX1000 has built-in Wi-Fi.

**4** Turn on the device.



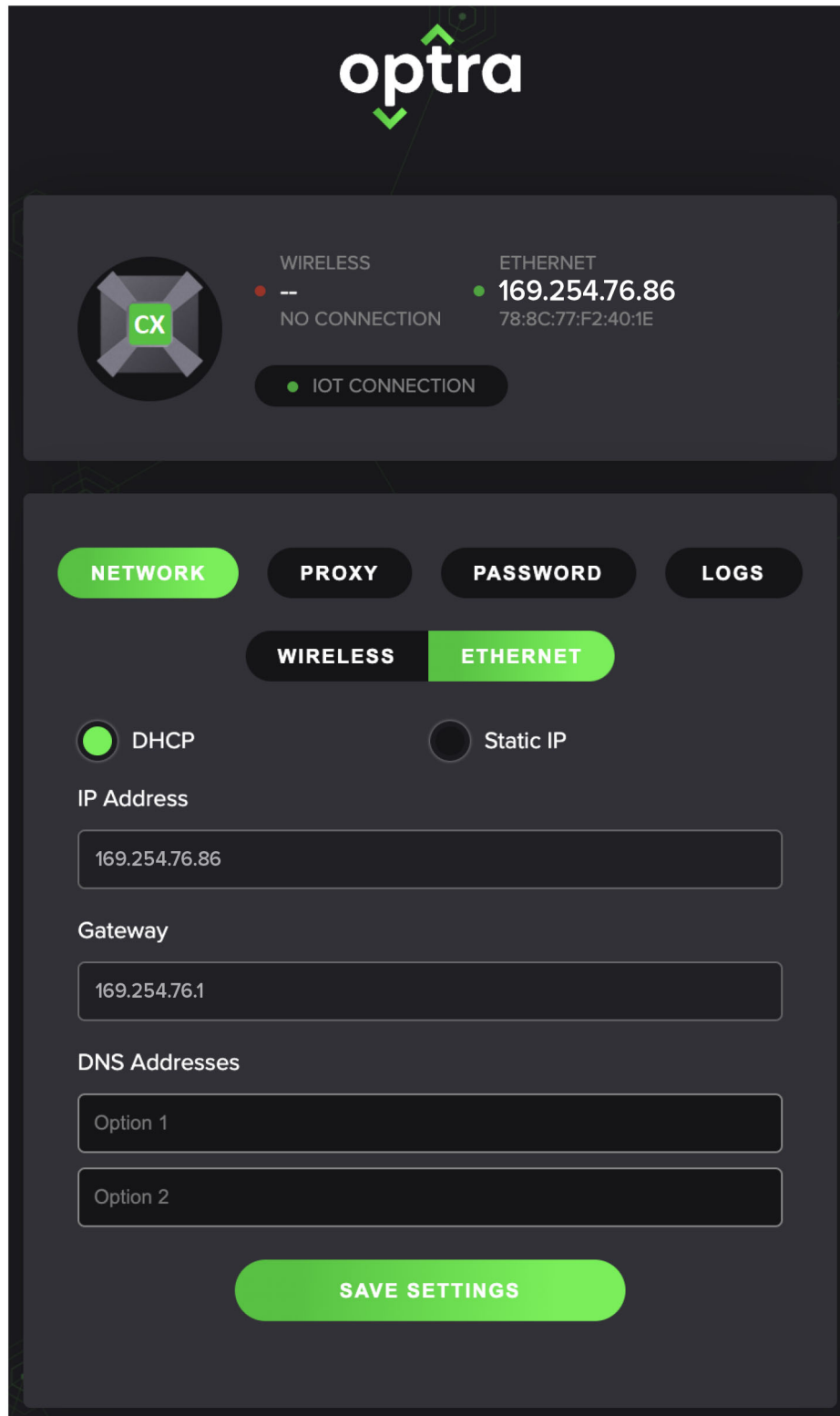
**Note:** The power button light starts blinking, and the indicator lights in the Ethernet port blink, go off, and then come on again.

- 5** For Ethernet connection, wait for the indicator light on the right in the Ethernet port to blink rapidly.



- 6** Depending on your network arrangement, you may need to configure the network before the device can connect to the portal.
- Connect the device to a computer through the USB device port to access the Embedded Web Server (EWS).
- Note:** We recommend using a computer running the Windows 10 operating system.
- Open a web browser, and then type **169.254.76.86** in the address field.
  - Click **Password**, and then enter the device serial number.
- Note:** The 13-digit serial number is at the front of Optra Compute 500/550 or on the bottom of Optra Compute CX1000. The number starts with 8080.

### For Ethernet connection





### For Wi-Fi connection

The screenshot shows the Optra network configuration interface. At the top, the 'optra' logo is displayed. Below it, a status bar shows connection information: 'WIRELESS' is currently 'NO CONNECTION' (indicated by a red dot), while 'ETHERNET' is connected with IP address '169.254.76.86' and MAC address '78:8C:77:F2:40:1E' (indicated by a green dot). An 'IOT CONNECTION' indicator is also present. A central navigation menu includes buttons for 'NETWORK', 'PROXY', 'PASSWORD', 'LOGS', 'WIRELESS', and 'ETHERNET'. The 'WIRELESS' button is selected. Under 'Available Networks', a list shows 'LexmarkGuest', 'LexmarkNSTD', and '\_VelopSetupA5B'. Below this are input fields for 'Network Name' and 'Network Password'. At the bottom, there are fields for 'IP Address' and 'Gateway', both currently showing '--'. A large green 'SAVE SETTINGS' button is located at the bottom center.

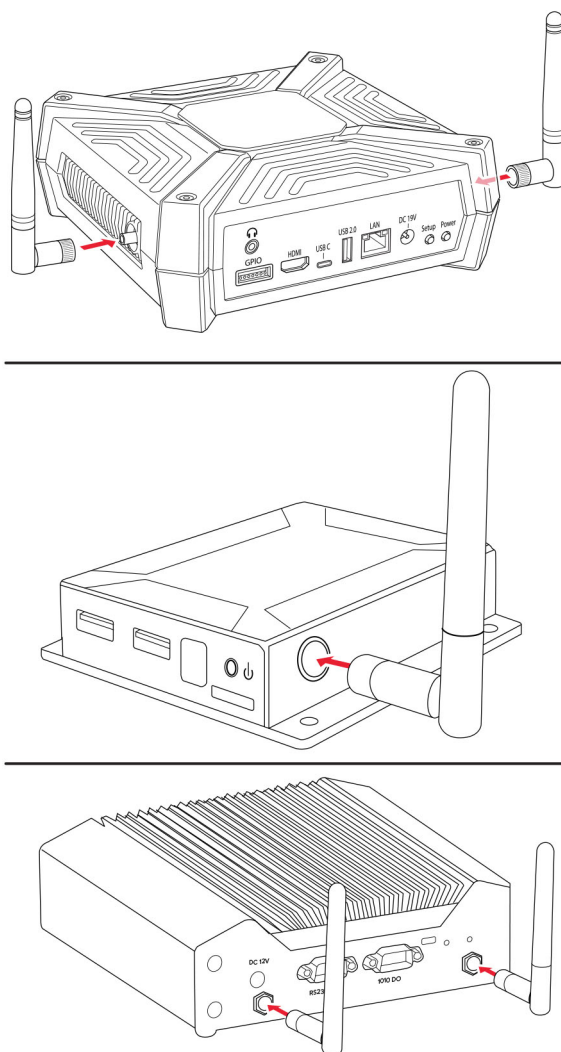
**Note:** The wireless settings appear only if the MarkNet network adapter is attached to the device or if the device has built-in Wi-Fi.

## Optra Compute CX2000, Optra VZ1000/VZ5000/VZ5100/ VZ6100

### Notes:

- This device supports wall mounting. For more information, see [“Mounting the device on a wall” on page 35](#) before proceeding with setting up the device.
- If the device is mounted with the ports facedown, then hold the device in place when making cable connections to keep it from being dislodged.

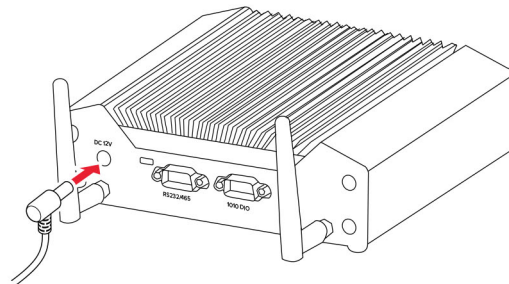
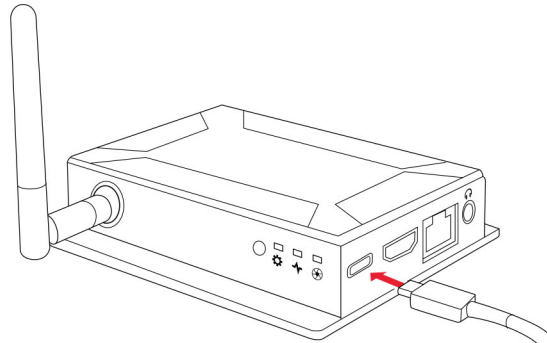
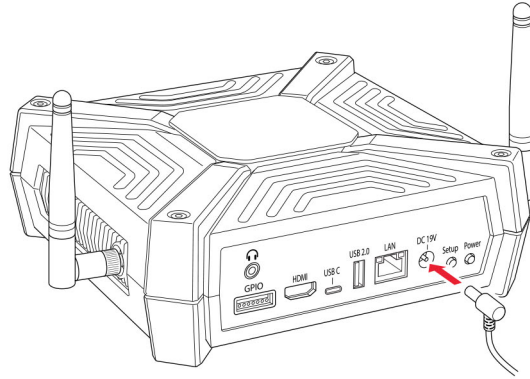
**1** Connect the antennas to the sides of the device.



**2** Connect the power cord to the device, and then to the electrical outlet.

**⚠ CAUTION—POTENTIAL INJURY:** To avoid the risk of fire or electrical shock, connect the power adapter and/or power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.

**⚠ CAUTION—POTENTIAL INJURY:** To avoid the risk of fire or electrical shock, make sure that the power cord is completely seated in the appliance inlet of the power adapter or in the device itself.



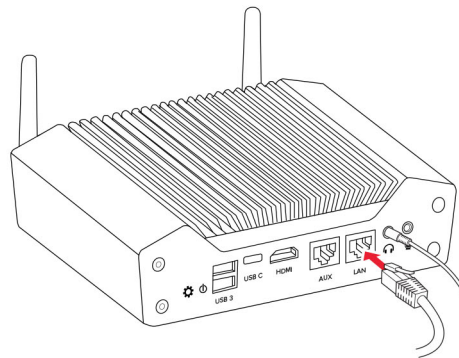
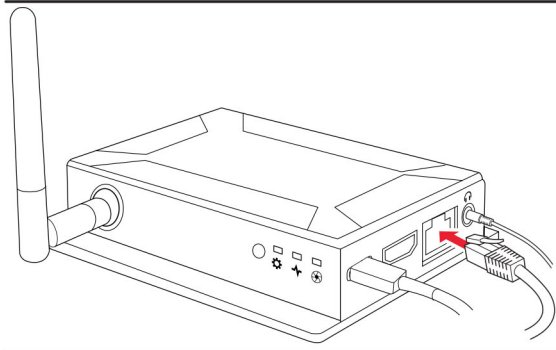
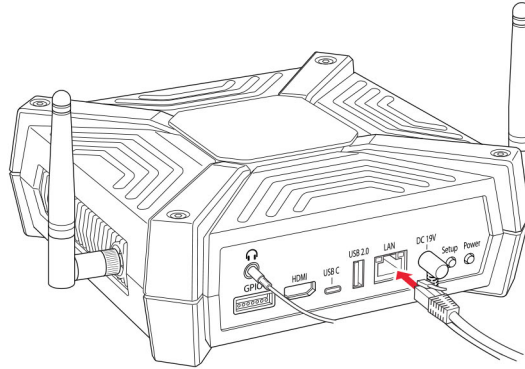
#### Notes:

- Optra VZ1000 and Optra VZ5000 support Power over Ethernet, which allows the device to be powered using the Ethernet cable instead of the power supply. To use this mode, make sure that your network can supply Power over Ethernet 30-watt mode (PoE+) to the device. Connect the device to the local network using an Ethernet cable, and then skip step 3. Store the supplied power adapter in a safe place if you want to use it later.
- If your network does not support at least PoE+, or if you are not sure, then connect the supplied power adapter.

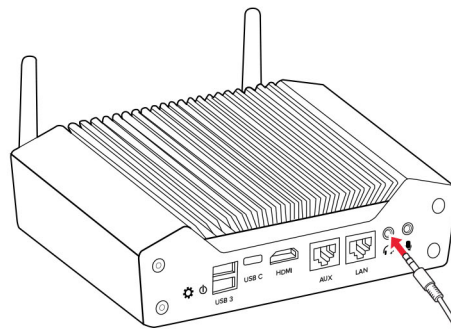
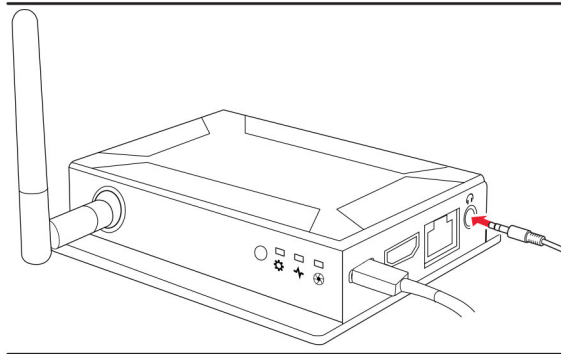
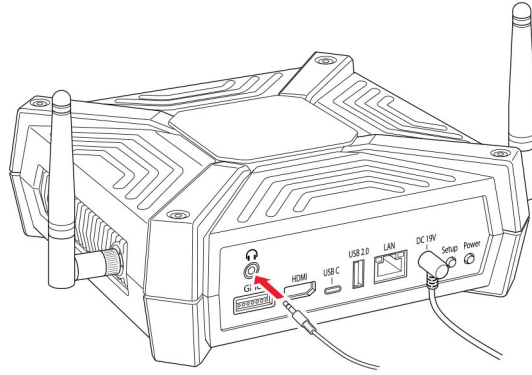
**3** Connect the device to the local network.

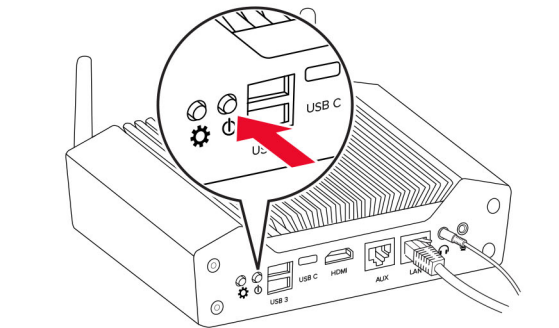
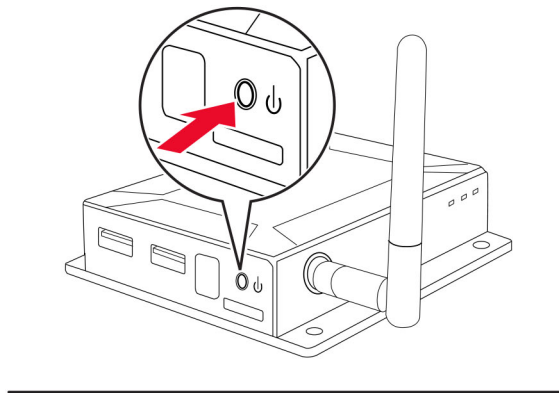
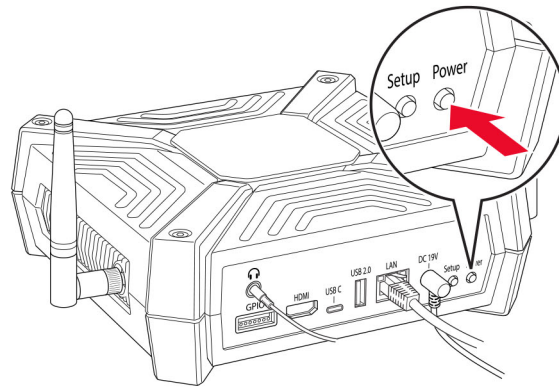
**Notes:**

- This device has built-in Wi-Fi. If the only available connection is wired, then insert the Ethernet cable.
- Skip this step if the device is connected using Power over Ethernet.



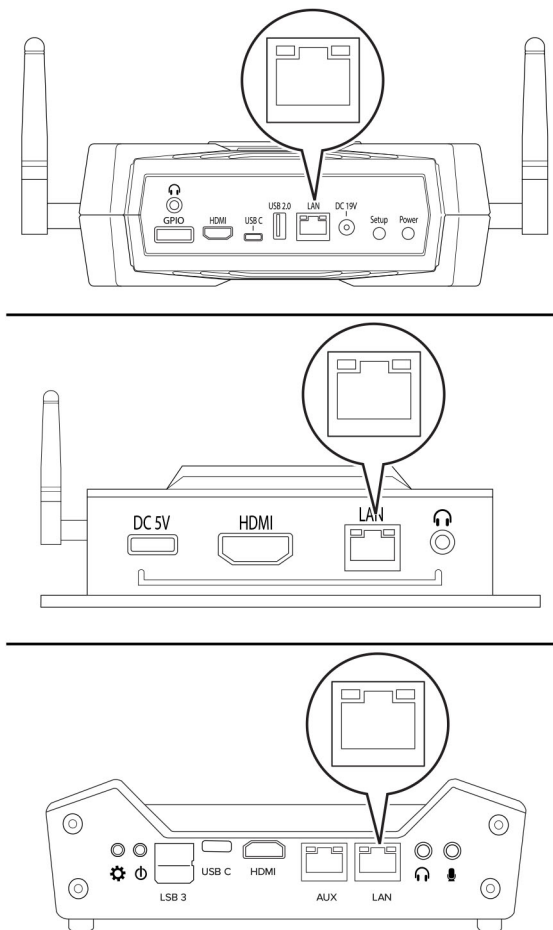
**4** If necessary, insert headphones or a speaker into the headphone jack.



**5** Turn on the device.

**Note:** The power button light comes on or starts blinking, and the indicator lights in the Ethernet port blink, go off, and then come on again.

- 6** For Ethernet connection, wait for the indicator light on the right in the Ethernet port to blink rapidly.



- 7** Depending on your network arrangement, you may need to configure the network before the device can connect to the portal.
- a** Connect the device to a computer through the USB-C device port to access the Embedded Web Server.  
**Note:** We recommend using a computer running the Windows 10 operating system.
  - b** Open a web browser, and then type **169.254.76.86** in the address field.
  - c** Click **Password**, and then enter the device serial number.  
**Note:** The 13-digit serial number can be found on the bottom of the device. The number begins with 8080.

### For Ethernet connection

The screenshot displays the Optra network configuration interface. At the top, the 'optra' logo is centered. Below it, a status bar shows connection information: 'WIRELESS' with a red dot and 'NO CONNECTION', 'ETHERNET' with a green dot and IP address '169.254.76.86' and MAC address '78:8C:77:F2:40:1E', and 'IOT CONNECTION' with a green dot. A 'VZ' logo is visible on the left. Below the status bar, there are four tabs: 'NETWORK' (highlighted in green), 'PROXY', 'PASSWORD', and 'LOGS'. Under the 'NETWORK' tab, there are two sub-tabs: 'WIRELESS' and 'ETHERNET' (highlighted in green). Below these, there are two radio buttons: 'DHCP' (selected) and 'Static IP'. The 'DHCP' section includes three input fields: 'IP Address' with the value '169.254.76.86', 'Gateway' with the value '169.254.76.1', and 'DNS Addresses' with two fields labeled 'Option 1' and 'Option 2'. At the bottom, there is a large green button labeled 'SAVE SETTINGS'.



### For Wi-Fi connection

The image shows the Optra network configuration interface. At the top, the 'optra' logo is displayed with green checkmarks. Below the logo, there is a status section with a 'VZ' icon. The status section includes: 'WIRELESS' with a red dot and 'NO CONNECTION'; 'ETHERNET' with a green dot, IP address '169.254.76.86', and MAC address '78:8C:77:F2:40:1E'; and 'IOT CONNECTION' with a green dot. Below the status section are four tabs: 'NETWORK' (highlighted in green), 'PROXY', 'PASSWORD', and 'LOGS'. Under the 'NETWORK' tab, there are two sub-tabs: 'WIRELESS' (highlighted in green) and 'ETHERNET'. The 'Available Networks' section lists three networks: 'LexmarkGuest', 'LexmarkNSTD', and '\_VelopSetupA5B'. Below this are input fields for 'Network Name' and 'Network Password'. At the bottom, there are fields for 'IP Address' and 'Gateway', both showing '--'. A large green 'SAVE SETTINGS' button is at the very bottom.

## Outbound network requirements

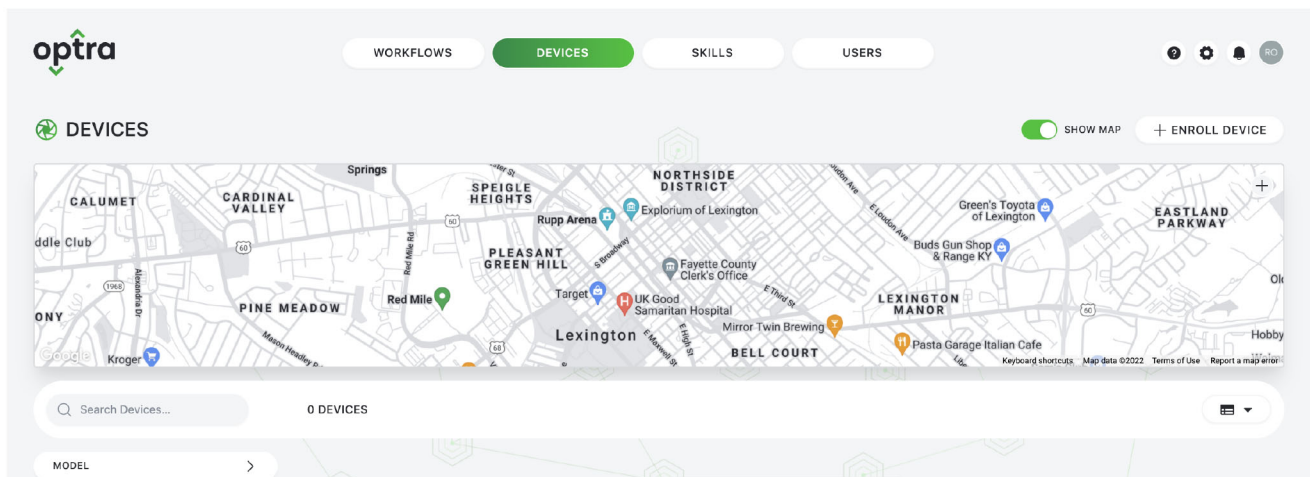
The device needs access to the following URLs and ports for proper operation.

Requirement	URL	Port
Azure IoT Hub	optra-release.azure-devices.net	443
Azure Device Provisioning Service	global.azure-devices-provisioning.net	443
Microsoft Container Registry	mcr.microsoft.com	443
Azure Container Registry	optrarelease.azurecr.io	443
Download Azure Container Registry image deltas from blob storage	*.blob.core.windows.net	443
Download firmware on update	bucket.optra.com	443
Application log upload service for remote diagnostics	logsene-journald-receiver.sematext.com	443
Network Time Protocol	time1.google.com	443
Network Time Protocol	time2.google.com	443
Network Time Protocol	time3.google.com	443
Network Time Protocol	time4.google.com	443
Optra Skills Web UI	*.optra.io	443

# Using Optra Portal

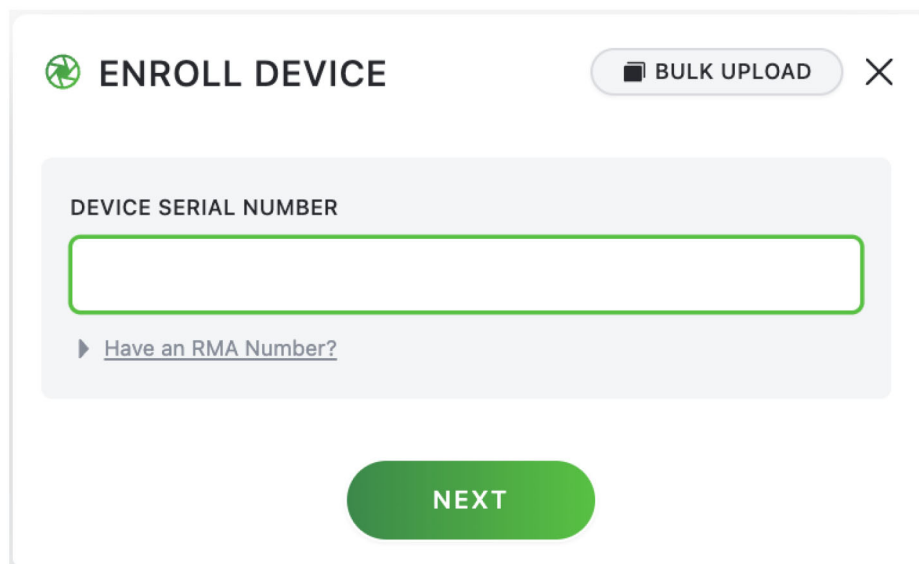
## Enrolling the device in Optra Portal

- 1 Open a web browser, and then go to <https://portal.optra.com>.
- 2 Create an account or log in.
- 3 Click the **DEVICES** tab, and then click **ENROLL DEVICE**.



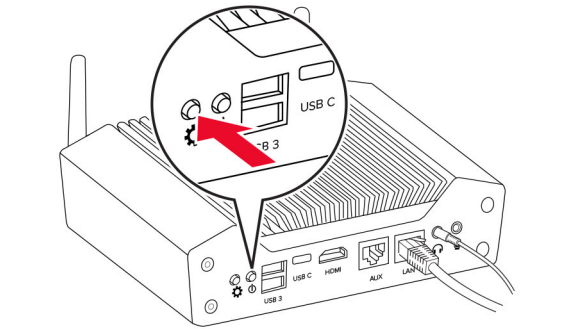
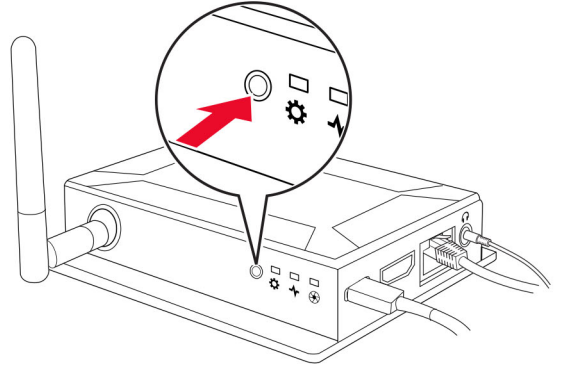
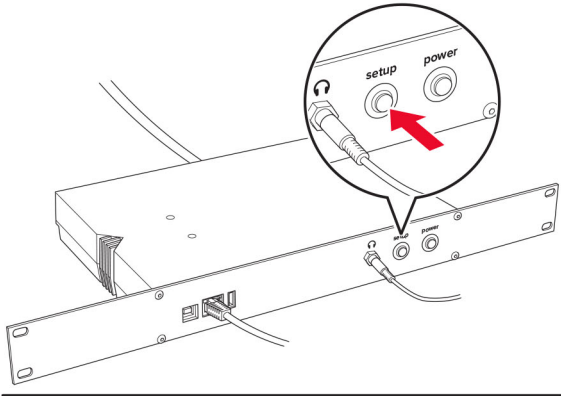
- 4 Enter the device serial number.

**Note:** The 13-digit serial number can be found at the front or on the bottom of the device. It begins with 8080.




- 5 On the device, press and hold the setup button.

**Note:** While the device is being enrolled, the setup button or its indicator light blinks.



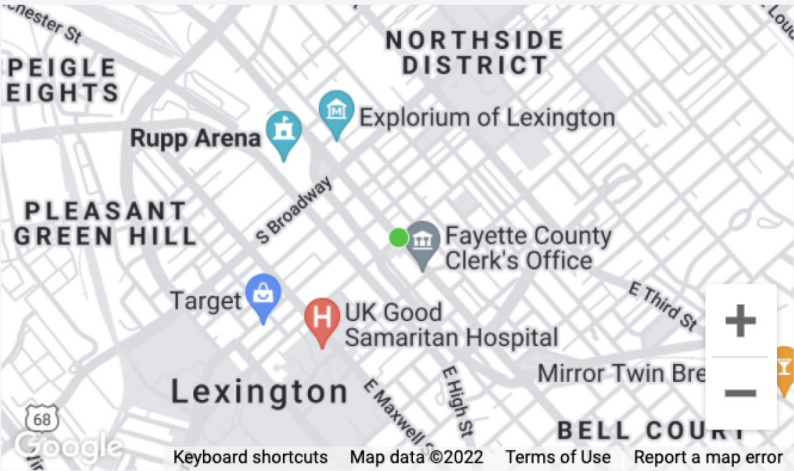
6 Assign a name to the device, and then type the location so that the device appears on the map.

<  **ENROLL DEVICE** ×

**ENTER DEVICE DETAILS**

**NAME**

**LOCATION** 🔍 Search Address...



Keyboard shortcuts Map data ©2022 Terms of Use Report a map error

**LATITUDE**

**LONGITUDE**

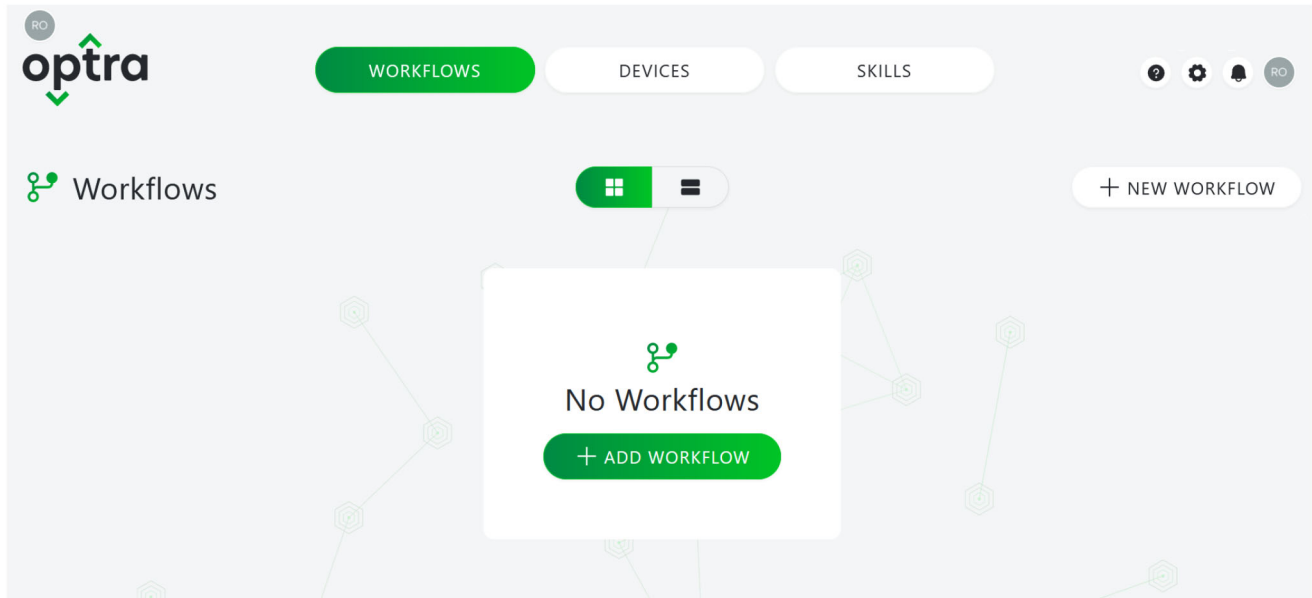
● Drag pin to set precise location

SAVE

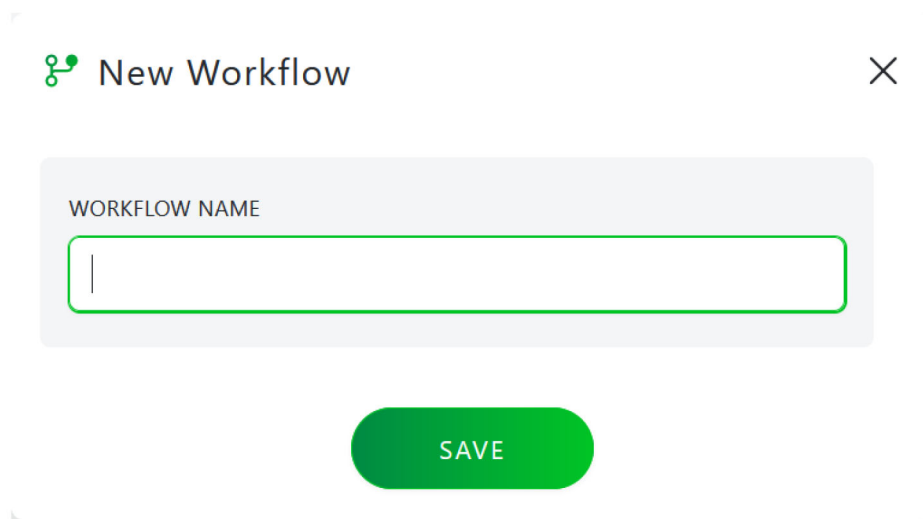
7 Click **SAVE**.

## Adding workflows and deploying skills

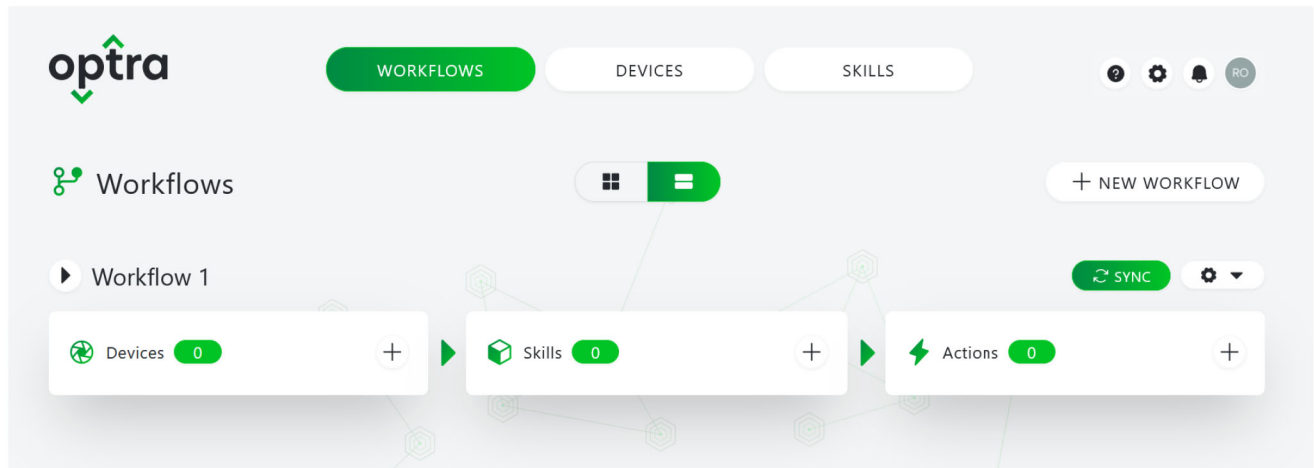
- 1 From Optra Portal, click the **WORKFLOWS** tab, and then click **NEW WORKFLOW**.



- 2 Type a workflow name, and then click **SAVE**.

A screenshot of the 'New Workflow' form. The form has a title 'New Workflow' with a workflow icon and a close button (X). Below the title is a text input field labeled 'WORKFLOW NAME'. The input field is empty and has a green border. Below the input field is a green 'SAVE' button.

- 3 Add a device, skill, and action to the workflow.



**Note:** You can also upload a skill configuration.

- 4 On the upper-right corner of the screen, click **SYNC** to deploy and run the workflow on your device.

**Note:** You can also copy and delete a workflow. To delete a workflow, click **CONFIGURE** > **Delete**.

# Troubleshooting

## Cannot connect to the portal

Try one or more of the following:

**Check if the network connection is working**

**Make sure that the cable connections are secure**

**Check if you are using a supported browser**

Use the latest version of Apple Safari, Google Chrome™, or Mozilla Firefox.

**Make sure that the user credentials are correct**

**Make sure that the account e-mail address is associated with your Optra Portal organization**

For more information, contact your administrator or the person who created the organization account.

**View the device logs for relevant debug information**

On the DEVICES tab, select the device name, and in the CONFIGURE DEVICE page, click **VIEW LOGS**.

**Go to [www.optra.com](http://www.optra.com) for support contact information**

## Cannot enroll the device

Try one or more of the following:

**Make sure that the device is turned on**

**Make sure that the cable connections are secure**

**Check if the network connection is working**

**Wait for the indicator lights to blink before proceeding to enroll the device**

**Check if you are using a supported browser**

Use the latest version of Apple Safari, Google Chrome, or Mozilla Firefox.



**Make sure that the user credentials are correct****Make sure to enter the correct device serial number****Make sure that the device is not previously enrolled**

The device reenrolls itself and connects to the previous user account when you reset and reconnect it to the network. To make it available for a different user, remove the device from the original account in the portal.

**Make sure that the device is in the Enrolling state**

Press and hold the setup button for five seconds after starting the device.

**Go to [www.optra.com](http://www.optra.com) for support contact information**

## Cannot deploy a skill

Try one or more of the following:

**Make sure that the cable connections are secure****Check if the network connection is working****Make sure that the device is online and responding to network requests**

On the DEVICES tab, select the check box beside the device name, and then click **PING**. Then select the device name, and in the CONFIGURE DEVICE page, click **VIEW LOGS**.

**Make sure to add at least one device and one skill to the workflow****Make sure that the workflow is synced**

On the WORKFLOWS tab, click **SYNC**.

**Make sure that the device storage is not full**

On the DEVICES tab, view the disk usage level of the device under the Disk column.

**Make sure that all required skill configuration information is provided, and that the skill is enabled****View the device logs for relevant debug information**

On the DEVICES tab, select the device name, and in the CONFIGURE DEVICE page, click **View Logs**.

**Go to [www.optra.com](http://www.optra.com) for support contact information**

## Additional setup

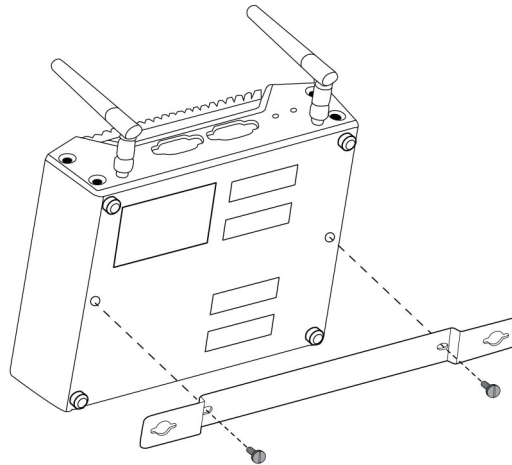
### Mounting the device on a wall

**Note:** These instructions apply only to Optra Compute CX1000/CX2000 and Optra VZ1000/VZ5000/VZ5100/VZ6100.

- 1 Select a location on a wall inside a building on which to mount the device.

**Note:** Make sure that there is adequate clearance around the device.

- 2 For Optra VZ5100/VZ6100, install the mounting bracket to the device.
  - a Using a T-10 Torx screwdriver, remove the two center screws at the bottom of the device.
  - b Align the slots on the mounting bracket with the holes on the device, and then install the screws.

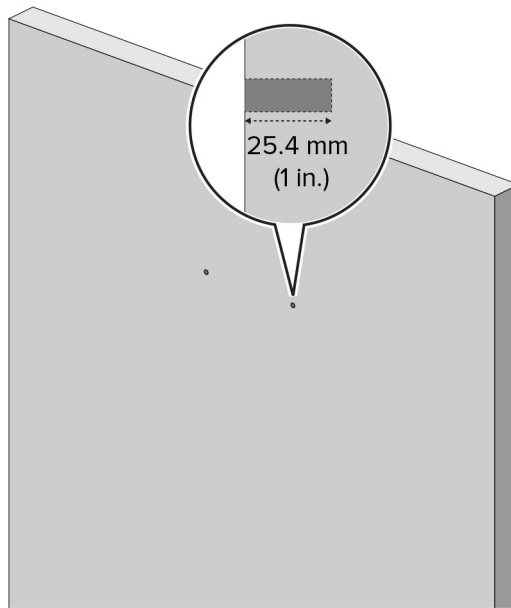


**Note:** The bracket must be oriented correctly to allow clearance for rubber pads on the bottom of the device.

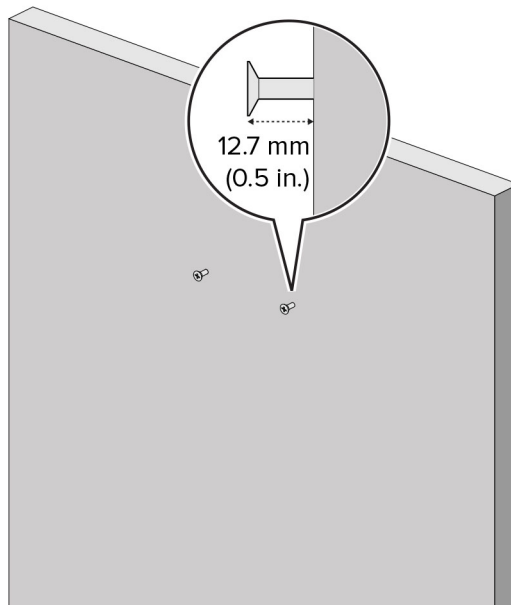
- 3 Hold the device against the wall temporarily, and then mark two holes on the wall corresponding to the holes on the device.

**Note:** For Optra Compute CX2000, you can also mount the device using the four corner holes. These holes require #4 or M4 screws.

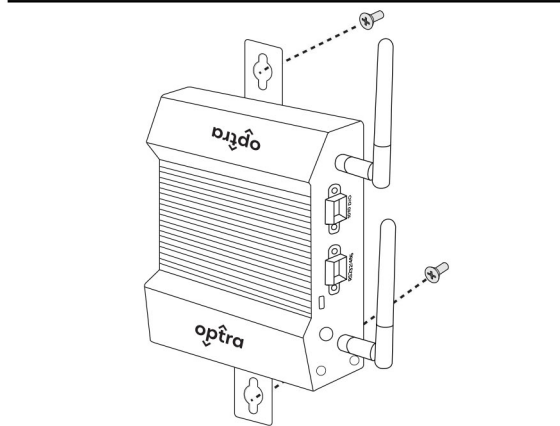
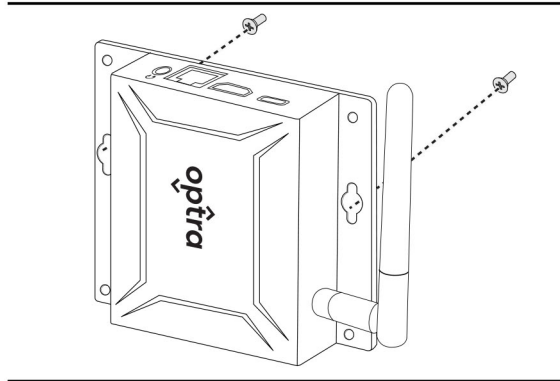
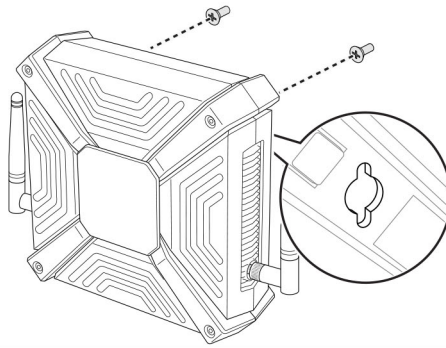
- 4** Drill holes about an inch deep into the markings on the wall.



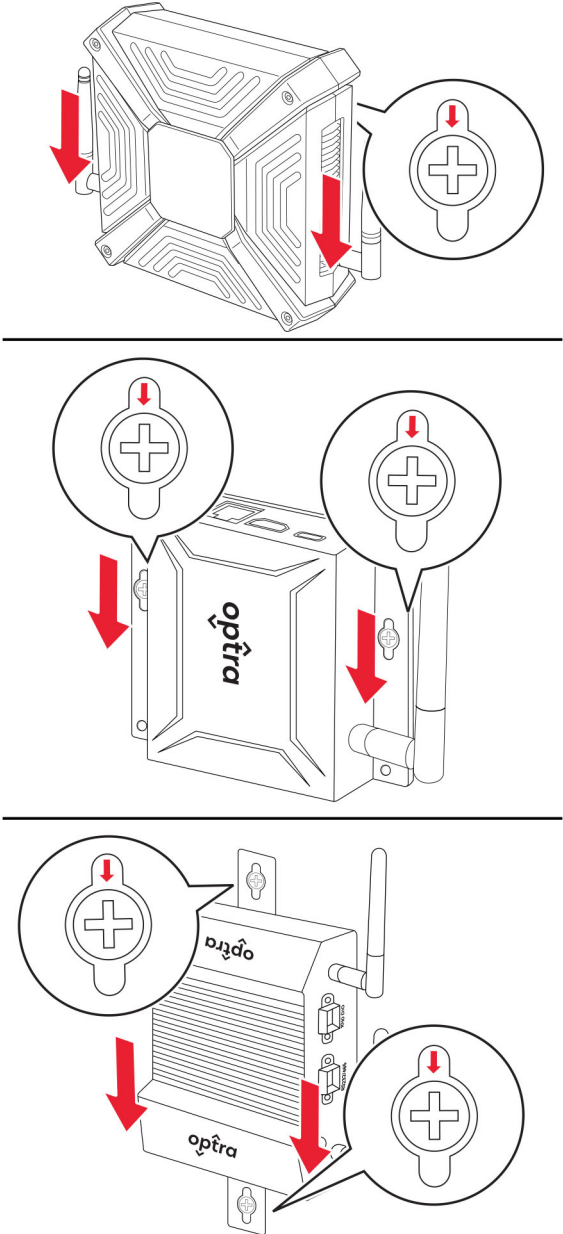
- 5** Install 1.5-inch-long #6 standard wood screws into the holes, leaving about half an inch of the screws protruding. For Optra Compute CX2000, use #4 standard wood screws.



- 6** Align the holes at the base of the device with the screw heads. Push the device until the rubber pads touch the wall.



7 Slide the device down until the screws are secured in the vertical slots.



# Notices

## Product information

Product name:

Optra Compute 500, Optra Compute 550, Optra Compute CX1000, Optra Compute CX2000; Optra VZ1000, Optra VZ5000, Optra VZ5100, Optra VZ6100

Machine type:

8080

Models:

001, 002, 003, 004

## Edition notice

May 2024

**The following paragraph does not apply to any country where such provisions are inconsistent with local law:** LEXMARK INTERNATIONAL, INC., PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions; therefore, this statement may not apply to you.

This publication could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in later editions. Improvements or changes in the products or the programs described may be made at any time.

References in this publication to products, programs, or services do not imply that the manufacturer intends to make these available in all countries in which it operates. Any reference to a product, program, or service is not intended to state or imply that only that product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any existing intellectual property right may be used instead. Evaluation and verification of operation in conjunction with other products, programs, or services, except those expressly designated by the manufacturer, are the user's responsibility.

For Lexmark customer support, go to <https://portal.optra.com/help>.

For information on Lexmark's privacy policy governing the use of this product, go to [www.lexmark.com/privacy](http://www.lexmark.com/privacy).

© 2020 Lexmark International, Inc.

All rights reserved.

## GOVERNMENT END USERS

The Software Program and any related documentation are "Commercial Items," as that term is defined in 48 C.F.R. 2.101, "Computer Software" and "Commercial Computer Software Documentation," as such terms are used in 48 C.F.R. 12.212 or 48 C.F.R. 227.7202, as applicable. Consistent with 48 C.F.R. 12.212 or 48 C.F.R. 227.7202-1 through 227.7207-4, as applicable, the Commercial Computer Software and Commercial Software

Documentation are licensed to the U.S. Government end users (a) only as Commercial Items and (b) with only those rights as are granted to all other end users pursuant to the terms and conditions herein.

## Trademarks

Lexmark, the Lexmark logo, Optra, and MarkNet are trademarks or registered trademarks of Lexmark International, Inc. in the United States and/or other countries.

Google Chrome is a trademark of Google LLC.

Microsoft, Windows, and Azure are trademarks of the Microsoft group of companies.

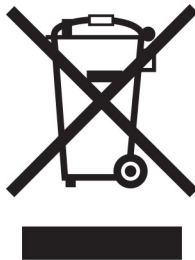
Apple and Safari are trademarks of Apple Inc., registered in the U.S. and other countries.

All other trademarks are the property of their respective owners.

## Applicability of Regulation (EU) 2019/2015 and (EU) 2019/2020

Per Commission Regulation (EU) 2019/2015 and (EU) 2019/2020, the light source contained within this product or its components is intended to be used for indicating the device status only, and is not intended for use in other applications.

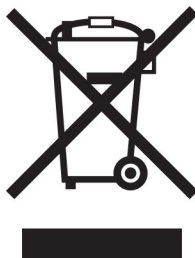
## Waste from Electrical and Electronic Equipment (WEEE) directive



The WEEE logo signifies specific recycling programs and procedures for electronic products in countries of the European Union. We encourage the recycling of our products.

If you have further questions about recycling options, visit the Lexmark Web site at [www.lexmark.com](http://www.lexmark.com) for your local sales office phone number.

## Lithium-ion rechargeable battery





This product may contain a coin-cell, lithium-ion rechargeable battery, which should only be removed by a trained technician. Crossed-out wheellie bin means the product should not be discarded as unsorted waste but must be sent to separate collection facilities for recovery and recycling. In the event the battery is removed, do not dispose of the battery in your household waste. There may be separate collection systems for batteries in your local community, such as a battery-recycling drop-off location. The separate collection of waste batteries assures appropriate treatment of waste including reuse and recycling and prevents any potential negative effects on human health and environment. Please responsibly dispose of the batteries.

## Regulation (EU) 2023/1542

This product may contain a coin-cell lithium rechargeable battery. This battery complies with Regulation (EU) 2023/1542. Compliance is indicated by the CE marking:



This product may contain one of the following coin-cell batteries:

- Battery identification: Seiko Model Number MS621FE  
Manufacturer: Seiko Instruments Inc.  
Manufacturer address: 8, Nakase 1-chome, Mihama-ku, Chiba-shi, Chiba 261-8507, Japan
- Battery identification: Panasonic Model Number ML621  
Manufacturer: Panasonic Energy Co., Ltd.  
Manufacturer address: 1-1 Matsushita-cho, Moriguchi City, Osaka 570-8511, Japan
- Battery identification: FDK Model Number ML621  
Manufacturer: FDK Corporation  
Manufacturer address: Shibaura Crystal Shinagawa, 1-6-41 Konan, Minato-ku, Tokyo 108-8212 Japan

## Regulatory notices for wireless products

This section contains regulatory information that applies only to wireless models.

If in doubt as to whether your model is a wireless model, see the *User's Guide* at <https://portal.optra.com/help>.

## Modular component notice

Wireless models contain the following modular component:

AzureWave Technologies, Inc. Model: AW-CM276NF; FCC ID:TLZ-CM276NF; IC:6100A-CM276NF

To determine which modular components are installed in your particular product, refer to the labeling on your actual product.

## Exposure to radio frequency radiation

The radiated output power of this device is far below the radio frequency exposure limits of the FCC and other regulatory agencies. A minimum separation of 20 cm (8 inches) must be maintained between the antenna and any persons for this device to satisfy the RF exposure requirements of the FCC and other regulatory agencies.

## Innovation, Science and Economic Development Canada

Under Innovation, Science and Economic Development Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Innovation, Science and Economic Development Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that necessary for successful communication.

This device complies with Innovation, Science and Economic Development Canada license-exempt RSS standards. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## Innovation, Sciences et Développement économique Canada

Selon la réglementation d'Innovation, Sciences et Développement économique Canada, l'émetteur radio ne fonctionne qu'avec une antenne dont le type et le gain maximal (ou inférieur) ont été approuvés par Innovation, Sciences et Développement économique Canada. Pour réduire les interférences radio potentielles auprès d'autres utilisateurs, le type d'antenne et son gain doivent être choisis de telle sorte que la puissance isotrope rayonnée équivalente (PIRE) ne soit pas supérieure à ce qui est nécessaire pour assurer la réussite de la communication.

Cet appareil est conforme aux normes RSS exemptes de licence d'Innovation, Sciences et Développement économique Canada. Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférences et (2) il doit accepter toutes les interférences, y compris les celles qui peuvent entraîner un fonctionnement indésirable.

## European Community (EC) directives conformity

This product is in conformity with the protection requirements of EC Council directive 2014/53/EU on the approximation and harmonization of the laws of the Member States relating to radio equipment.

The manufacturer of this product is: Lexmark International, Inc., 740 West New Circle Road, Lexington, KY, 40550 USA. The EEA/EU authorized representative is: Lexmark International Technology Hungária Kft., 8 Lechner Ödön fasor, Millennium Tower III, 1095 Budapest HUNGARY. The EEA/EU Importer is: Lexmark International Technology S.à.r.l. 20, Route de Pré-Bois, ICC Building, Bloc A, CH-1215 Genève, Switzerland. A declaration of conformity to the requirements of the Directives is available upon request from the Authorized Representative or may be obtained at


[www.lexmark.com/en\\_us/about/regulatory-compliance/european-union-declaration-of-conformity.html](http://www.lexmark.com/en_us/about/regulatory-compliance/european-union-declaration-of-conformity.html).

Compliance is indicated by the CE marking:



**Restrictions**

This radio equipment is restricted to indoor use only. Outdoor use is prohibited. This restriction applies to all the countries listed in the table below:

								
AT	BE	BG	CH	CY	CZ	DE	DK	EE
EL	ES	FI	FR	HR	HU	IE	IS	IT
LI	LT	LU	LV	MT	NL	NO	PL	PT
RO	SE	SI	SK	TR	UK (NI)			

**EU and other countries statement of radio transmitter operational frequency bands and maximum RF power**

This radio product transmits in either the 2.4GHz (2.412–2.472 GHz in the EU) or 5GHz (5.15–5.35, 5.47–5.725 in the EU) bands. The maximum transmitter EIRP power output, including antenna gain, is ≤ 20dBm for both bands.

**United Kingdom (UK) conformity**

This product is in conformity with the protection requirements of the Radio Equipment Regulations 2017.

The manufacturer of this product is: Lexmark International, Inc., 740 West New Circle Road, Lexington, KY, 40550 USA. The UK Importer is: Lexmark International Ltd, Quantum House, 60 Norden Road, Maidenhead SL6 4AY, United Kingdom. A declaration of conformity is available upon request from the UK Importer or may be obtained at [www.lexmark.com/en\\_us/about/regulatory-compliance/uk-declaration-of-conformity.html](http://www.lexmark.com/en_us/about/regulatory-compliance/uk-declaration-of-conformity.html).

Compliance is indicated by the UKCA marking:



**Restrictions or requirements in the UK**

This radio equipment is restricted to indoor use only. Outdoor use is prohibited.

**UK statement of radio transmitter operational frequency bands and maximum RF power**

This radio product transmits in either the 2.4GHz (2.412–2.472 GHz in the UK) or 5GHz (5.15–5.35, 5.47–5.725 in the UK) bands. The maximum transmitter EIRP power output, including antenna gain, is ≤ 20dBm for both bands.

## Multiple model information

The following information applies only to the 500, 550, CX1000, VZ1000, VZ5000, VZ5100, and VZ6100 models.

## Federal Communications Commission (FCC) compliance information statement

This product has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The FCC Class A limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

The manufacturer is not responsible for any radio or television interference caused by using other than recommended cables or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate this equipment.

**Note:** To assure compliance with FCC regulations on electromagnetic interference for a Class A computing device, use a properly shielded and grounded cable such as Lexmark part number 1021231 for parallel attach or 1021294 for USB attach. Use of a substitute cable not properly shielded and grounded may result in a violation of FCC regulations.

Any questions regarding this compliance information statement should be directed to:

Director of Lexmark Technology & Services  
Lexmark International, Inc.  
740 West New Circle Road  
Lexington, KY 40550  
Telephone: (859) 232-2000  
E-mail: [regulatory@lexmark.com](mailto:regulatory@lexmark.com)

## Innovation, Science and Economic Development Canada compliance statement

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Standard ICES-003.

## Avis de conformité aux normes de l'Innovation, Sciences et Développement économique Canada

Cet appareil numérique de classe A est conforme aux exigences de la norme canadienne relative aux équipements pouvant causer des interférences NMB-003.

## European Community (EC) directives conformity

This product is in conformity with the protection requirements of EC Council directives 2014/30/EU, 2014/35/EU, and 2011/65/EU as amended by (EU) 2015/863 on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility, safety of electrical equipment designed for use within certain voltage limits, and on the restrictions of use of certain hazardous substances in electrical and electronic equipment.

The manufacturer of this product is: Lexmark International, Inc., 740 West New Circle Road, Lexington, KY, 40550 USA. The EEA/EU authorized representative is: Lexmark International Technology Hungária Kft., 8 Lechner Ödön fasor, Millennium Tower III, 1095 Budapest HUNGARY. The EEA/EU Importer is: Lexmark International Technology S.à.r.l. 20, Route de Pré-Bois, ICC Building, Bloc A, CH-1215 Genève, Switzerland. A declaration of conformity to the requirements of the Directives is available upon request from the Authorized Representative or may be obtained at [www.lexmark.com/en\\_us/about/regulatory-compliance/european-union-declaration-of-conformity.html](http://www.lexmark.com/en_us/about/regulatory-compliance/european-union-declaration-of-conformity.html).

This product satisfies the Class A limits of EN 55032 and safety requirements of EN 62368-1.

## United Kingdom (UK) conformity

This product is in conformity with the protection requirements of the Electromagnetic Compatibility Regulations 2016, the Electrical Equipment (Safety) Regulations 2016, and the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012.

The manufacturer of this product is: Lexmark International, Inc., 740 West New Circle Road, Lexington, KY, 40550 USA. The UK Importer is: Lexmark International Ltd, Quantum House, 60 Norden Road, Maidenhead SL6 4AY, United Kingdom. A declaration of conformity is available upon request from the UK Importer or may be obtained at [www.lexmark.com/en\\_us/about/regulatory-compliance/uk-declaration-of-conformity.html](http://www.lexmark.com/en_us/about/regulatory-compliance/uk-declaration-of-conformity.html).

This product satisfies the Class A limits of BS EN 55032 and safety requirements of BS EN 62368-1.

## Radio interference notice

### Warning

This is a product that complies with the emission requirements of EN 55032 Class A limits and immunity requirements of EN 55035. This product is not intended to be used in residential/domestic environments.

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

## Model-specific information

The following information applies only to the CX2000 model.

## Federal Communications Commission (FCC) compliance information statement

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful

interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The FCC Class B limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your point of purchase or service representative for additional suggestions.

The manufacturer is not responsible for radio or television interference caused by using other than recommended cables or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate this equipment.

**Note:** To assure compliance with FCC regulations on electromagnetic interference for a Class B computing device, use a properly shielded and grounded HDMI cable. A shielded Ethernet cable, such as Lexmark part number 77D1133, must be used. Use of cables not properly shielded and grounded may result in a violation of FCC regulations.

Any questions regarding this compliance information statement should be directed to:

Director of Lexmark Technology & Services  
Lexmark International, Inc.  
740 West New Circle Road  
Lexington, KY 40550  
Telephone: (859) 232-2000  
E-mail: regulatory@lexmark.com

## **Innovation, Science and Economic Development Canada compliance statement**

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Standard ICES-003.

## **Avis de conformité aux normes de l'Innovation, Sciences et Développement économique Canada**

Cet appareil numérique de classe B est conforme aux exigences de la norme canadienne relative aux équipements pouvant causer des interférences NMB-003.

## **European Community (EC) directives conformity**

This product is in conformity with the protection requirements of EC Council directives 2014/30/EU, 2014/35/EU, 2009/125/EC, and 2011/65/EU as amended by (EU) 2015/863 on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility, safety of electrical equipment designed

for use within certain voltage limits, the ecodesign of energy-related products, and on the restrictions of use of certain hazardous substances in electrical and electronic equipment.

The manufacturer of this product is: Lexmark International, Inc., 740 West New Circle Road, Lexington, KY, 40550 USA. The EEA/EU authorized representative is: Lexmark International Technology Hungária Kft., 8 Lechner Ödön fasor, Millennium Tower III, 1095 Budapest HUNGARY. The EEA/EU Importer is: Lexmark International Technology S.à.r.l. 20, Route de Pré-Bois, ICC Building, Bloc A, CH-1215 Genève, Switzerland. A declaration of conformity to the requirements of the Directives is available upon request from the Authorized Representative or may be obtained at [www.lexmark.com/en\\_us/about/regulatory-compliance/european-union-declaration-of-conformity.html](http://www.lexmark.com/en_us/about/regulatory-compliance/european-union-declaration-of-conformity.html).

This product satisfies the Class B limits of EN 55032 and safety requirements of EN 62368-1.

## United Kingdom (UK) conformity

This product is in conformity with the protection requirements of the Electromagnetic Compatibility Regulations 2016, the Electrical Equipment (Safety) Regulations 2016, the Ecodesign for Energy-Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019, and the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012.

The manufacturer of this product is: Lexmark International, Inc., 740 West New Circle Road, Lexington, KY, 40550 USA. The UK Importer is: Lexmark International Ltd, Quantum House, 60 Norden Road, Maidenhead SL6 4AY, United Kingdom. A declaration of conformity is available upon request from the UK Importer or may be obtained at [www.lexmark.com/en\\_us/about/regulatory-compliance/uk-declaration-of-conformity.html](http://www.lexmark.com/en_us/about/regulatory-compliance/uk-declaration-of-conformity.html).

This product satisfies the Class B limits of BS EN 55032 and safety requirements of BS EN 62368-1.

# Index

## A

- adding workflows 30
- attaching cables
  - in Optra Compute 500/550 12
  - in Optra Compute CX1000 12
  - in Optra Compute CX200 18
  - in Optra VZ1000/VZ5000 18
  - in Optra VZ5100/VZ6100 18

## C

- cables, attaching
  - in Optra Compute 500/550 12
  - in Optra Compute CX1000 12
  - in Optra Compute CX2000 18
  - in Optra VZ1000/VZ5000 18
- cannot connect to the portal 32
- cannot deploy a skill 33
- cannot enroll the device 32

## D

- deploying skills 30
- device enrollment 27
- device setup
  - mounting 35
- device status 11

## E

- emission notices 42
- enrolling the device
  - adjusting 27

## F

- FCC notices 42

## I

- indicator lights
  - understanding the status 11

## L

- learning about the device
  - Optra Compute 500/550 5
  - Optra Compute CX1000 6
  - Optra Compute CX2000 7
  - Optra VZ1000/VZ5000 8
  - Optra VZ5100/VZ6100 9

## M

- mounting the device 35

## N

- network requirements 26
- notices 42, 44, 45

## O

- Optra Portal
  - enrolling the device in 27
- outbound network requirements 26
- overview 4

## P

- parts of the device
  - Optra Compute 500/550 5
  - Optra Compute CX1000 6
  - Optra Compute CX2000 7
  - Optra VZ1000/VZ5000 8
  - Optra VZ5100/VZ6100 9
- ports
  - Optra Compute 500/550 5
  - Optra Compute CX1000 6
  - Optra Compute CX2000 7
  - Optra VZ1000/VZ5000 8
  - Optra VZ5100/VZ6100 9

## S

- safety information 3
- setting up the device
  - Optra Compute 500/550 12
  - Optra Compute CX1000 12
  - Optra Compute CX2000 18
  - Optra VZ1000/VZ5000 18
  - Optra VZ5100/VZ6100 18
- skills
  - deploying 30
- status of device 11

## T

- troubleshooting
  - cannot connect to the portal 32
  - cannot deploy a skill 33
  - cannot enroll the device 32

## U

- URLs and ports for network requirements 26

## W

- workflows
  - adding 30