# **SPARK LX Air Datalogger**

### PS-3620

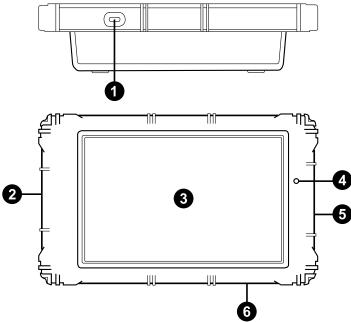
# Introduction

The SPARK LX Air Datalogger is a combination datalogging device and interface with a ruggedized cover. The device provides a portable option to use PASCO wireless sensors with appropriate data collection and analysis software.

### Included equipment

- SPARK LX Air Datalogger
- USB-C charging cable

### Features



### **1** Power button

Press and hold to turn the device on or off.

### **2** USB-C charging port

Connect the included USB-C cable here when charging the battery.

### **3** Display

### **4** Battery Status LED

Indicates the charging status of the battery. The light is yellow when the SPARK LX Air Datalogger is charging, turns green when the device is fully charged, and blinks red when the device is low on power.

### **6** Headphone jacks

6 Volume control

# Charge the battery

Charge the battery overnight to ensure power for a full day's use. To charge the battery, connect the USB-C port to any standard USB charger. Fully power off the SPARK LX Air Datalogger to minimize power loss between use, as the device will still lose some power while in sleep mode.

## **Connect sensors**

You can connect any PASCO wireless sensor to the SPARK LX Air Datalogger using one of the preinstalled data collection software apps. For instructions on doing so, see the manual for the chosen sensor and the online help for the chosen software.

# SPARK LX Air Datalogger apps

The SPARK LX Air Datalogger comes with the following preinstalled apps:

• SPARKvue

Use SPARKvue to collect and analyze data from any wireless sensor connected to the SPARK LX Air Datalogger.

• Chemvue

Use Chemvue to collect chemistry data from connected sensors and display the data in a variety of formats.

MatchGraph

Use a motion sensor or a Smart Cart (ME-1240 or ME-1241) to engage students by making a game out of interpreting position and velocity graphs.

Spectrometry

Use Spectrometry with PASCO spectrometers to measure absorbance, transmittance, intensity, and fluorescence.

Periodic Table

A periodic table that can be used for quick reference.

• Calculator

A standard scientific calculator.

• Files

Access the files contained on the SPARK LX Air Datalogger.

• Set Up

Use this app to access various settings, including WiFi, Bluetooth, display, and sound.

### SPARK LX Datalogger Help

Use this help guide to learn more about the features and applications contained on the SPARK LX Air Datalogger.

### **Technical support**

Need more help? Our knowledgeable and friendly Technical Support staff is ready to answer your questions or walk you through any issues.

$\Box$ Chat	pasco.com
Se Phone	1-800-772-8700 x1004 (USA) +1 916 462 8384 (outside USA)
🖾 Email	support@pasco.com

### Limited warranty

For a description of the product warranty, see the Warranty and Returns page at <u>www.pasco.com/legal</u>.

### Copyright

This document is copyrighted with all rights reserved. Permission is granted to nonprofit educational institutions for reproduction of any part of this manual, providing the reproductions are used only in their laboratories and classrooms, and are not sold for profit. Reproduction under any other circumstances, without the written consent of PASCO scientific, is prohibited.

#### Trademarks

PASCO and PASCO scientific are trademarks or registered trademarks of PASCO scientific, in the United States and in other countries. All other brands, products, or service names are or may be trademarks or service marks of, and are used to identify, products or services of, their respective owners. For more information visit <u>www.pasco.com/legal</u>.

#### Product end-of-life disposal



This electronic product is subject to disposal and recycling regulations that vary by country and region. It is your responsibility to recycle your electronic equipment per your local environmental laws and regulations to ensure that it will be recycled in a manner that protects human health and the environment. To find out where you can drop off your waste equipment for recycling, please contact your local waste recycle or disposal service, or the place where you purchased the product. The European Union WEEE (Waste Electronic and Electrical Equipment) symbol on the product or its packaging indicates that this product must not be disposed of in a standard waste container.

### **Battery disposal**

Batteries contain chemicals that, if released, may affect the environment and human health. Batteries should be collected separately for recycling and recycled at a local hazardous material disposal location adhering to your country and local government regulations. To find out where you can drop off your waste battery for recycling, please contact your local waste disposal service, or the product representative. The battery used in this product is marked with the European Union symbol for waste batteries to indicate the need for the separate collection and recycling of batteries.

### **CE statement**

This device has been tested and found to comply with the essential requirements and other relevant provisions of the applicable EU Directives.

### **FCC** statement

This device complies with 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.

Note 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference 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 the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. NOTE 3: Operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems. RF exposure information and statement . this device meets government requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. The SAR limit of USA(FCC) is 1.6W/Kg averaged. Has also been tested against this SAR limit. SAR information on this and other pad can be viewed on-line at www.fcc.gov/oet/ea/fccid/. Please use the device FCC ID number for search. This device was tested simulation typical 0 mm to body. To maintain compliance with FCC RF exposure requirements, the use of belt clips, holsters and similar accessories should not contain metallic components in its assembly, the use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

#### **ISED Canada compliance statement**

This device complies with ISED Canada license-exempt RSS standard(s). 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. Operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems. RF exposure information and statement . this equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. The SAR limit of IC is 1.6W/Kg averaged. Device types: Has also been tested against this SAR limit. This device was tested simulation typical 0 mm to body. To maintain compliance with FCC RF exposure requirements, the use of belt clips, holsters and similar accessories should not contain metallic components in its assembly, the use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided. The highest reported SAR value for body conditions is 1.201W/Kg respectively.

Le présent appareil est conforme aux CNR d'ISDE Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. La bande 5150-5250 MHz est réservée uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux. Cet équipement est conforme aux limites d'exposition au rayonnement du CNR102 de l'IC établies pour un environnement non contrôlé. Les lignes directrices sont fondées sur des normes qui ont été élaborées par des organisations scientifiques indépendantes au moyen d'une évaluation périodique et approfondie des études scientifiques. Les normes comprennent une marge de sécurité substantielle conçue pour assurer la sécurité de toutes les personnes, indépendamment de leur âge ou de leur état de santé. La limite SAR de CI est de 1.6 W/Kg en moyenne. a également été testé par rapport à cette limite SAR. Cet appareil a été testé simulation typique 0 mm au corps Pour maintenir la conformité aux exigences d'exposition aux RF de la FCC, l'utilisation de pinces à courroie, d'étuis et d'accessoires similaires ne devrait pas contenir de composants métalliques dans son assemblage, l'utilisation d'accessoires qui ne satisfont pas à ces exigences peut ne pas être conforme aux exigences d'exposition aux RF de la FCC et devrait être évitée. La valeur SAR déclarée la plus élevée pour les conditions corporelles est de 1,201 W / Kg respectivement.

