

QUICK START GUIDE

APS-FPD Airborne Particle Sensor

Caution: CyberOptics Corporation has made every effort to clean the Airborne Particle Sensor (APS-FPD) and Charging Case. Removing it from its protective bag outside of a clean room will expose it to the surrounding air. If you plan to use the APS-FPD in an ultra clean environment, you may have to clean the device after removing it from its clean case.

Suitcase Contents



APS-FPD Unit x2



Charging Case with charging cable x2



SENA Link, Extended Range Antenna, 3 meter USB cable for PC to SENA Link x1



ParticleSpectrum™ Software



USB Link cable for APS-FPD to External Battery pack x2



External Battery Pack with micro USB charging cable x4



Universal Plugs for USB Plug Adapter - 4 sets



USB Plug Adapter x2
(Used with External Battery Pack with micro USB charging cable)

Particle Counting Unit

The APS-FPD PanelSense™ unit, is vacuum compatible and designed for use in operating pressures of 0.4 to 1.6 atmospheres, with the ability to go to 0 atmosphere.

Charging Case

The Charging Case with charging cable provides a convenient place to store and protect the unit when not in use, and provides wireless charging and hands free operation.

SENA Link

The link is a Bluetooth® wireless transmitter/receiver that attaches to a laptop or personal computer with a USB cable and communicates with the device. Extended range antenna is also included.

Installation CD

CD contains the ParticleSpectrum™ Application and User Manual. For full detail on APS-FPD operation, please refer to the User Manual which installs during installation.

USB Link Cable - APS-FPD to External Battery

The link cable is designed to be used specifically for connection between the APS-FPD device and the External Battery Pack.

External Battery Packs and USB Plugs

External battery packs provide >10 hours of additional operation. A USB plug adapter with universal plugs are included for charging the external battery packs.

USB Link Cable Caution:

- Using any other cable not specified may cause damage to the APS-FPD Device

Warning:

- Use Only Supplied Battery Charger to charge the Unit
- Do Not Attempt to Charge the Unit at Temperatures Above 45C
- Do Not Connect Other Equipment Than the Supplied Battery Charger

1. Charge the Battery

The Li-Ion battery must be fully charged before first use. A discharged battery can take several hours to charge. Connect the battery charger to the charging case. Plug the charger into a 100-240VAC outlet. The “Charger On” and “Charging” status lights will remain on while the unit is charging. When the “Charging” light goes off, the battery is fully charged.

- Charging the External Battery Packs

The Battery Pack comes partially charged, but should be charged completely before using. Use the included USB charging cable, and connect the micro USB end to the battery pack. Connect the USB end to the USB Plug Adapter with appropriate Universal Plug. Active charging is indicated by a flashing LED. The number of lit LEDs show the current charge level of the battery pack during charging. When fully charged, all LED’s are on.

2. Install ParticleSpectrum™ Software

To run the ParticleSpectrum software, your computer must have Windows 7, 8, or 10 operating system.

To Install the software:

1. Insert the ParticleSpectrum Installation CD into the CD Drive and run Setup. **Note: DO NOT install the SENA Link hardware.**
2. Follow the instructions provided by Setup to install the software.

By default, the Setup program installs the ParticleSpectrum application in a new program group called CyberOptics. Additional information can be found on the User’s Guide installed at the same time.

3. Install SENA Link Hardware

The ParticleSpectrum software must be installed prior to connecting and installing the SENA Link. To install the wireless link:

1. Connect the SENA Link module to a high power USB port directly to your PC. If remote positioning of the SENA link is desired, use the included 3 meter USB cable. If extended radio range is desired, use the extended range antenna on the end of the SENA Link module.
2. Windows recognizes the link module hardware and the “Found New Hardware” wizard will appear. Select “Install the software automatically (Recommended)”, if prompted.

4. Turn ON and OFF

To turn on the APS-FPD unit, insert the device in the charger and apply power to the charger. The “Unit On” LED will come on along with other indicator LEDs. Once the unit is in communication with the Link, the Pair Status and Connection Status LEDs on the link will be on without blinking. The “Connect/Pair” LED on the unit will be on without blinking. This may take a few seconds after the unit is turned on. To turn the APS-FPD unit off, run ParticleSpectrum, and select “Shutdown” on the main screen. Use the manual reset switches if the unit must be turned on or off manually, or if the pairing function needs to be activated. See the User’s Guide for details.

5. Using the External Battery Pack

Ensure the External Battery Pack is fully charged prior to use. Use the USB Link Cable to connect the External Battery Pack to the APS-FPD device. See User’s Guide for additional details.

6. Connect/Pair

Run the ParticleSpectrum application by navigating to Start menu > Programs > CyberOptics > ParticleSpectrum. To connect/pair the APS-FPD unit, locate the “C” button on the unit and press with a key to initiate pairing mode. Select the ‘Pair New WaferSense’ button in ParticleSpectrum, and select ‘Yes’ in the following menu to continue pairing. ParticleSpectrum will recognize the APS-FPD unit and will confirm that the sensor is paired successfully. If you are unable to pair the device, repeat the Connect/Pair process. See the User’s Guide for additional details.

7. Using ParticleSpectrum™

It will take a few seconds to begin receiving updates from the APS-FPD unit. Note that when the APS-FPD is first turned on it is in a standby state and only counts particles when Start is selected. Full details are contained in the User’s Guide that can be accessed via the ParticleSpectrum About Menu.



Contact CyberOptics Support:

+1 800.366.9131 or +1 763.542.5000 | CSsupport@cyberoptics.com | www.cyberoptics.com

Copyright © 2018. CyberOptics Corporation. All rights reserved. 8026137 Rev B