

Welcome to the Next Generation!

Congratulations on the purchase of your new PhotonMaster luminometer from LuminUltra! The PhotonMaster is a highly sensitive USB-powered and operated luminometer that is extremely user-friendly. It truly is as simple as plugging the luminometer into your computer (i.e. PC laptop, MacBook, or desktop) and installing LumiCalc to begin using the PhotonMaster.



Minimum System Requirements

The following system specifications are recommended for operation of the PhotonMaster and LumiCalc:

- **PhotonMaster Hardware Requirements:** Requires a standard USB-port plugged on a Windows PC (netbook, laptop, or desktop) or Mac OS product running Microsoft Windows on BootCamp.
- **LumiCalc Operating Requirements:** Microsoft® Windows® XP, Windows Server® 2003, Windows Server 2008, Windows Vista® Home Premium, Business, Ultimate, or Enterprise (32 or 64 bit editions) with Service Pack 2, Windows 7, or Windows 8. 2.33GHz or faster x86-compatible processor, or Intel Atom™ 1.6GHz or faster processor for netbook class devices. 512MB of RAM (1GB recommended). LumiCalc also requires Adobe Flash® and Oracle Java to be installed on the operating device.

Getting Started – Installing LumiCalc

To begin using your PhotonMaster immediately, follow these 3 basic steps:

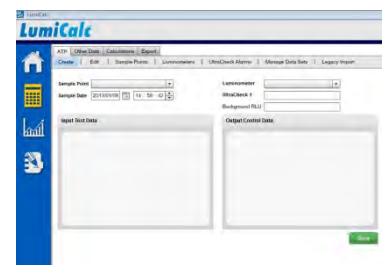
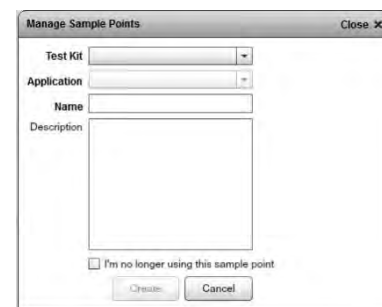
1. **Sign Up for a LumiCalc Account:** Navigate to <http://www.lumicalc.com> using an internet browser on the computer with which you intend to operate your PhotonMaster (e.g. Internet Explorer, Firefox, Chrome, etc.). Fill out the pertinent details that are requested and supply a valid email address. A verification email will be sent to the specified email address. ***If you do not receive the email in your inbox, check your Junk Mail filter! Place the sending email address on your safe list (as a trusted email address) to ensure future communications are not impeded.***
2. **Download and Install LumiCalc:** Follow the instructions in the verification email to download and install the LumiCalc software platform on the computer with which you intend to operate your PhotonMaster. Note that the installation application will also install the required PhotonMaster drivers and Adobe Flash if it is not already installed on your computer. ***If you do not have administrative privileges on your computer, please contact your system (IT) administrator to enable the installation.*** Note that one user can have a maximum of two installations (i.e. laptop and desktop), and only one account can be installed per computer.

3. **Run LumiCalc and Install PhotonMaster:** When prompted, plug the PhotonMaster into the computer. Follow the on-screen instructions; once the PhotonMaster is plugged in, the installation process has begun and will prompt you for details to set up your machine. It only takes a few seconds to set up your PhotonMaster! Take note that if you are using a firewall, you may have to add LumiCalc as a 'safe' program for reliable operation.

Using Your PhotonMaster & LumiCalc Together

You are now ready to begin using the PhotonMaster to collect ATP data. Follow the guidelines below to get started:

1. **Set up Sample Points:** Simply choose the LuminUltra test kit you will be using from the drop down menu, choose the applicable application to set your control guidelines, and finally name the sample point. Add as many sample points as you desire.
 - a. Select a sample point from the drop down menu.
 - b. Select the date/time (default is current).
 - c. Select your luminometer.
 - d. Perform the UltraCheck 1 assay as instructed in the Test Kit Instructions and record the RLU by inserting the appropriate assay tube into the PhotonMaster and clicking the respective input box. A pop-up window will display the reading progress and output.
 - e. If desired, take a background RLU measurement with a tube containing only Luminase by clicking in the Background RLU box. This becomes more important in very sensitive applications such as ultra-pure water but can be omitted in higher-biomass situations.
 - f. For sample measurements, once the tube is placed in the PhotonMaster, insert the cursor in the appropriate ATP box and let the PhotonMaster do all the hard work! The RLU value will be displayed and automatically converted into the appropriate concentration for your sample type.
 - g. **IMPORTANT:** Once your test is complete, save your data by clicking the **SAVE** button and then proceed to the next sample points via the drop-down list. Note the action '**traffic light**', which can be clicked to reveal recommended action.
2. **Take Readings:**



That's it! You are now collecting and storing ATP data. For more training, view the built-in, interactive video training available through LumiCalc. Please note that you will receive a 30-day free trial of the full LumiCalc software upon installation. To continue using the full version after this period, purchase a license from LuminUltra.

More Information

- Your PhotonMaster comes with a 1-year warranty from date of purchase. To be eligible for this warranty, ensure that you fill out and return the warranty registration card contained with your PhotonMaster.
- The PhotonMaster is compliant with various global standards; declaration of conformity is available on request.
- It is recommended to keep your PhotonMaster in its carrying case at all times, especially during transportation.
- For more information, view our Product Fact Sheets for the PhotonMaster and LumiCalc!