



BLOG

Cell Viability Measurement

Top 10 Reasons to Invest in Automated Cell Counters for Accurate and Efficient Research



biosystems

by ALIGNED GENETICS

Introduction

In modern times, scientists and researchers are increasingly reliant on automated cell counters to carry out their experiments. The accuracy and precision provided by these machines are unparalleled, and they help to eliminate the human errors that are common with manual counting techniques. If you are still on the fence about whether or not to invest in an automated cell counter, here are the top 10 reasons why you should.

1. Saves Time and Effort

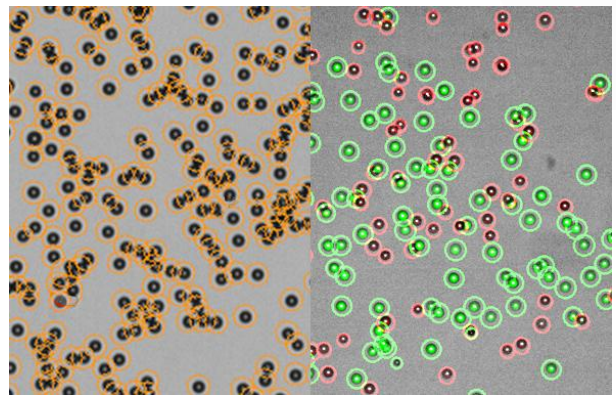
Manual cell counting is a tedious and time-consuming task. It requires a great deal of focus and concentration, which can lead to mental fatigue and errors. Automated cell counters, on the other hand, can count cells in a fraction of the time it takes a human, freeing up valuable resources for other important tasks.



LUNA-FX7™ Automated Cell Counter

2. Increased Accuracy

Automated cell counters are incredibly precise, providing accurate cell counts that are not possible with manual counting techniques. The use of artificial intelligence and machine learning algorithms ensures that results are not only precise but also reliable and consistent, giving researchers more confidence in their experiments.



Cell Counting Both Brightfield And Fluorescence

3. Cost-Effective

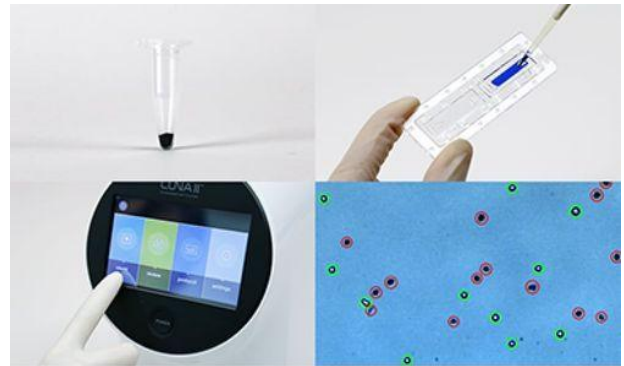
Investing in an automated cell counter may seem like a significant expense at first, but in the long run, it can actually save money. Automated cell counters reduce the need for expensive lab equipment and supplies, as well as the need for trained personnel to carry out manual cell counting tasks.

4. Reduces Human Error

Manual cell counting is prone to errors, including miscounts, undercounts, and overcounts. These errors can be costly and time-consuming to correct, and they can also lead to inaccurate experimental results. Automated cell counters eliminate these errors, ensuring that results are reliable and consistent.

5. User-Friendly

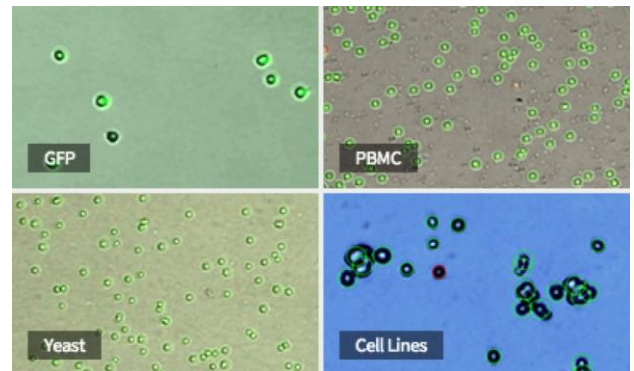
Automated cell counters are designed with ease of use in mind. They are intuitive and straightforward, making them accessible to researchers of all levels of experience. They also come with detailed user manuals and customer support, ensuring that users can get the most out of their machines.



Convenient workflow

6. Versatility

Automated cell counters are capable of counting a wide range of cells, including mammalian cells, yeast cells, and bacterial cells. They can also count cells from a variety of sources, including blood, tissue, and cultures, making them incredibly versatile and useful for a wide range of experiments.



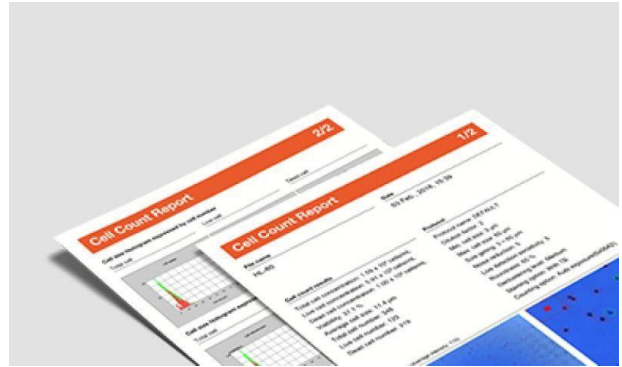
From PBMCs to bacteria

7. High Throughput

Automated cell counters are capable of counting large numbers of cells quickly and accurately, making them ideal for high-throughput experiments. They can also be programmed to count cells in specific regions of interest, allowing researchers to focus on specific areas of their experiments.

8. Data Storage and Analysis

Automated cell counters come with software that allows for the storage and analysis of experimental data. This makes it easy for researchers to keep track of their experiments and to analyze their results quickly and efficiently.



Data can be printed directly or exported via USB drive

9. Improved Reproducibility

Automated cell counters provide consistent and reliable results, ensuring that experiments can be reproduced with accuracy and precision. This is particularly important in research settings, where reproducibility is essential to the scientific process.

10. Improved Safety

Automated cell counters reduce the risk of injury and exposure to hazardous materials that can be present during manual cell counting such as trypan blue stain. This makes them a safer and healthier option for researchers and laboratory personnel.

In conclusion, there are many reasons why researchers should invest in automated cell counters. From increased accuracy and precision to improved safety and versatility, these machines offer numerous advantages over traditional manual counting techniques. If you are still using manual counting techniques, it's time to consider making the switch to automated cell counters.