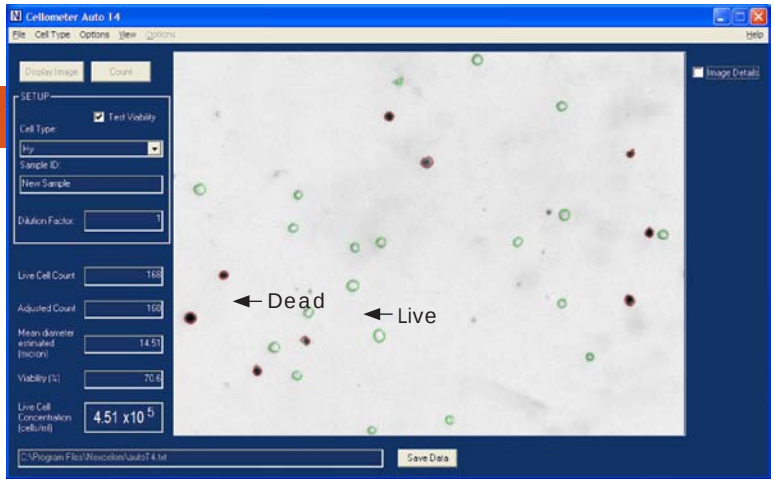
Cellometer® Auto

Automatic Cell Counters

Auto M10 **AutoT4 Plus** **Auto T4**

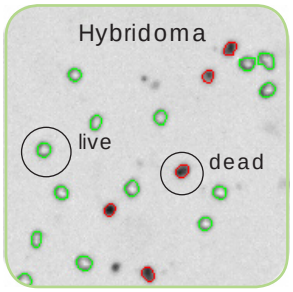
The Cellometer Auto line of image-based Cell Counters automates the tedious task of manual cell counting for improved accuracy and consistency, as well as offering dramatic increases in throughput. Unlike other automated cell counters, Cellometer provides fast results with simple-to-use software, easy setup, minimal sample volume and no on-board liquid handling or complex reagents.



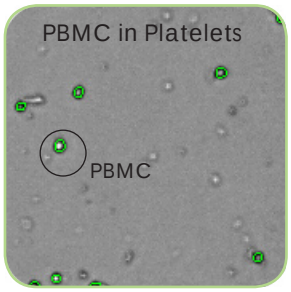
Product Highlights

Powerful, yet intuitive software: Cellometer software is intuitive, yet powerful enough to instantly provide cell counts, cell sizes, concentration, and viability percentage. It can even identify and count cells in clusters, irregular shaped cells, and exclude cellular debris. Images of counted cells are displayed on screen and can be manually adjusted. Cellometer comes pre-configured for hundreds of cell types, and be customized for almost any type by the user or with Nexcelom's complimentary support.

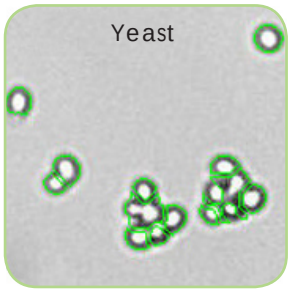
Easy to use:
Utilizing advanced disposable counting chambers, only 20µL of sample is required and can be loaded with a standard pipette in seconds. No other liquid handling, special reagents, cleaning, or maintenance is required.



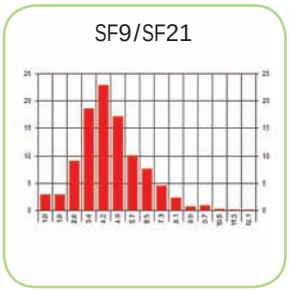
Trypan Blue Viability:
In just 30 seconds, Cellometer not only determines cell count, sizes, & cell concentration, but also determines viability when cells are pretreated with Trypan blue. In this example, live vs. dead Hybridoma cells are identified on-screen and viability percentage is automatically calculated.



Primary Cell Counting:
Cellometer's automatic measurement of cell sizes, makes it ideal for identifying cells of interest in a heterogeneous sample, such as quantifying PBMC's in platelets. Counted cells are also indicated on-screen for manual adjustment of counts if necessary, and irregularly shaped cells can be counted as well.



Declustering:
Cellometer can be used to count cells as small as 2 microns, such as Yeast, while the declustering feature automatically distinguishes individual cells amongst clumps for more accurate results.



Histogram Data:
Cell size vs. counts are visually graphed with the click of a button, making it easy to monitor size change in infected SF9/SF21 cells at various time points. Previous data can be overlaid on one histogram enabling rapid monitoring and reducing time required to culture cells.

Additional Applications and Cell Images available on www.nexcelom.com

To schedule a demo or to learn more about how Cellometer improves cell counting, contact us or visit www.nexcelom.com

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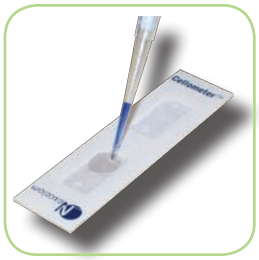
Cellometer Auto Technical Specifications and Applications

Model	Optics	Magnification	Cell size range:	Concentration Range:
Auto T4	Locked Focus	Standard	10-50 microns	$1.5x10^5$ - $1.5x10^7$/mL*
Auto T4 Plus	Adjustable	Standard	6-50 microns	$1.5x10^5$ - $1.5x10^7$/mL*
Auto M10	Adjustable	High	2-12 microns	$5x10^5$ - $2x10^7$/mL**

*tested using 25µm beads **tested using 5µm beads

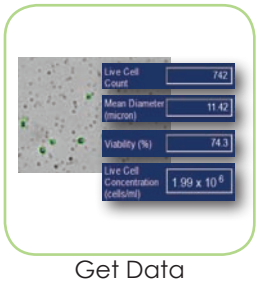
Instrument	Weight: 9.0 lbs Dimensions: 3.5"x4.0"x12.0" Voltage: 100-240V AC 50-60Hz
PC (Not included)	2.4 GHz or Higher Windows XP Desktop or Laptop. 512 MB of RAM and USB 2.0 (Required)

Read Time	<30 seconds
Output Data	Cell Images Live Cell Count Adjusted Count Mean Diameter (micron) Viability % (Trypan blue treated cells) Live Cell Concentration (cells/ml) Histograms (Frequency vs. Cell size) Histograms (multiple time point overlay)
Imaging Features	Saves Data & Images View Live Images Decluster Clumpy Cells Manual Adjustment of Cell count
Sample volume required	20µL, loaded into Disposable Counting Chambers
Performance (CV%)	2-5% Typical (vs. 8-20%+ Hemacytometer) Examples: Jurkat: 2.27% YAC-1: 3.17% H460: 5.57% SW620: 2.79%



Pipette 20µL

Insert Slide



Get Data

Summary of Benefits:

Simple to use: Enables fast setup, and is easily shared amongst several users

Small Sample Volume: Only 20µL of sample required

Flexible: Cell size and morphology parameters for 250 cells are preloaded, custom data can be loaded

More data: Generates cell size histograms, viability percentage, and concentration

Improved Accuracy: Eliminates user-to-user variability & reduces chance of errors

Increased Throughput: Obtain complete count of cells in under 30 seconds

Safety: Eye strain is eliminated and there's no risk of broken glass

Example Cell Lines:

REGULAR CELLS:
- PBMC
- CD4
- CD8
- Lymphocytes
- Macrophages
- Mouse Spleen
- Thymus
- Bone Marrow
- Hela
- MCF7
- MDA
- MNT1
- ARPE-19
- Hybridoma
- Cos7
- Jurkat
- CGN
- U87
- Stem Cells
- Fibroblast
- EL4
- K562
- Vero
- HEK293T
- CHO
- SF9

IRREGULAR CELL SHAPE:
- Lymphoblastoid
- Activated T-Cells
- RD

LARGE CELL SIZE VARIATION
- Dictyoslelium

HETEROGENEOUS POPULATIONS
- Fresh PBMC with platelets
- Fresh PBMC with lysed RBC
- Mouse Lymphocytes with large tissue debris
- Epithelial & Lymphocytes

SMALL CELLS
- Yeast
- Algae
- Platelets

+ 100's OF OTHERS

We are constantly updating and adding cell line parameters to the Cellometer software. For the complete list of cells and images, please visit our website www.nexcelom.com.

Cellometer can be configured for virtually any cell type either by the user, or with complimentary support from Nexcelom.

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