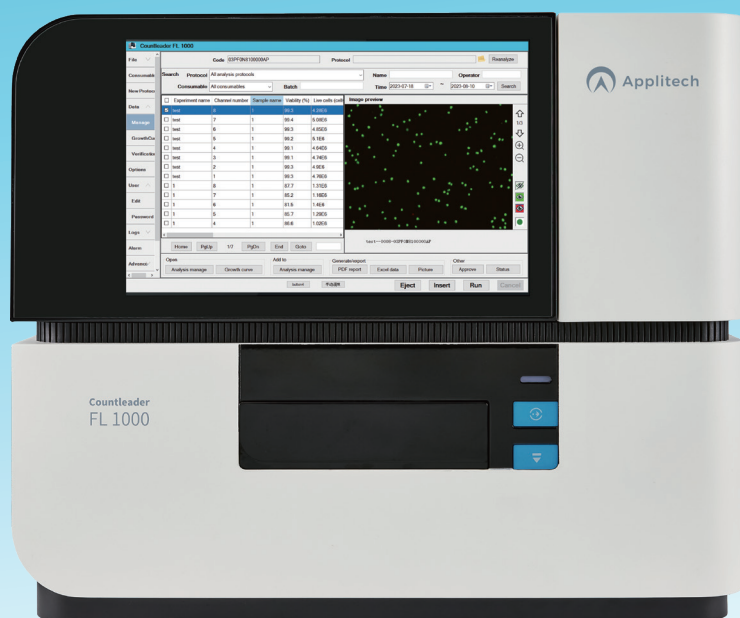


Countleader FL 1000

Dual Fluorescent Cell Counter



- ◆ AO/PI dual-fluorescence staining mode for high-precision analysis
- ◆ Rapid analysis: 8 samples in less than 2 minutes!
- ◆ Minimal sample volume required: only 15 μ L
- ◆ No cleaning, calibration, or maintenance required
- ◆ 12-inch high-definition touch display
- ◆ Compliant with 21 CFR Part 11

Countleader FL 1000

Dual Fluorescent Cell Counter

The **Countleader FL 1000** is an image-based cell counter equipped with two fluorescence channels, integrating advanced optical and image recognition systems. It operates in both classic brightfield (trypan blue staining) and fluorescence (Acridine Orange (AO)/Propidium Iodide (PI)) analysis modes. The instrument precisely analyzes up to 8 samples, combining statistical analysis and fluorescence imaging technology to deliver accurate information on cell concentration, viability, and morphology.

Easy operation

Sample Staining

Simply mix 10 μ l of cell sample with 10 μ l of the staining solution (AO/PI or Trypan Blue.)



Loading

Only 15 μ l of stained samples is required per well. The advanced FL8 slides are compatible with multichannel pipettes for efficient loading.



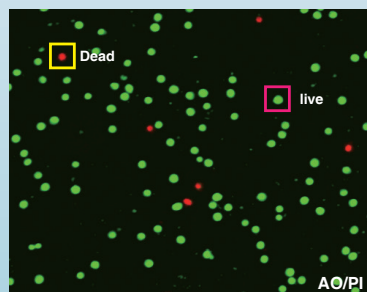
Chamber selection and Press RUN

Insert the FL8 slides into the Countleader FL1000 slot, select the counting chamber, and press RUN to initiate the counting process.



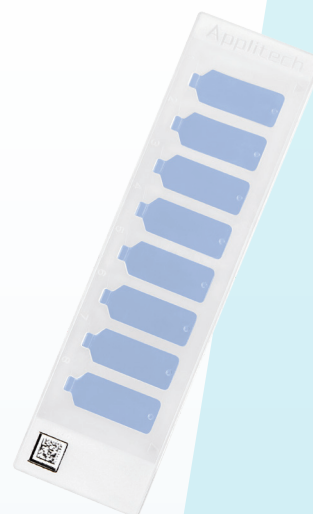
Fast and Automated Analysis

The FL1000 performs rapid cell counting with automatic focus and advanced analysis technology. It can count 8 samples in under 2 minutes, with the fastest mode achieving 15 seconds per sample in Trypan Blue mode.

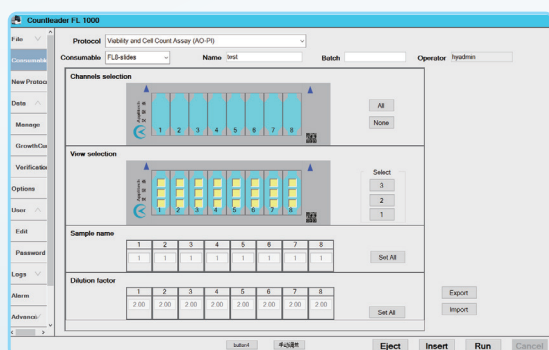


Multi-Chamber FL8-Slides with Unique Code

Each FL8-Slide is equipped with a unique QR code to accurately record and calibrate the analysis volume of each well, ensuring more precise results. With minimal sample volume, high-precision rapid cell counting for 8 samples can be completed in just 2 minutes.



Powerful and Flexible Software

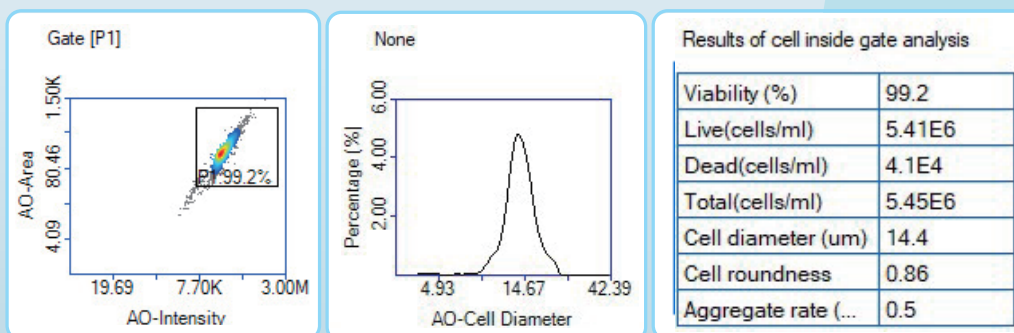


The software is flexible, parameters setting is easy and detection channels can be selected accordingly.

- ✓ Larger analysis volume reduces statistical errors
- ✓ 1 ~ 3 visual fields can be selected for analysis.
- ✓ Search data by experiment name, time, and sample ID
- ✓ Individual sample IDs make browsing and searching results easy
- ✓ Automatically compensates for cell dilution factors
- ✓ Growth curves aid in understanding and optimizing cell culture conditions

Comprehensive Data & Results Presentation

- ✓ View intuitive data, including total cell concentration, viable and dead cell concentration, cell viability, cell diameter, and aggregated cell ratio.
- ✓ Data can be displayed in histograms, scatter plots, and result boxes within the Analysis Manager Plot.

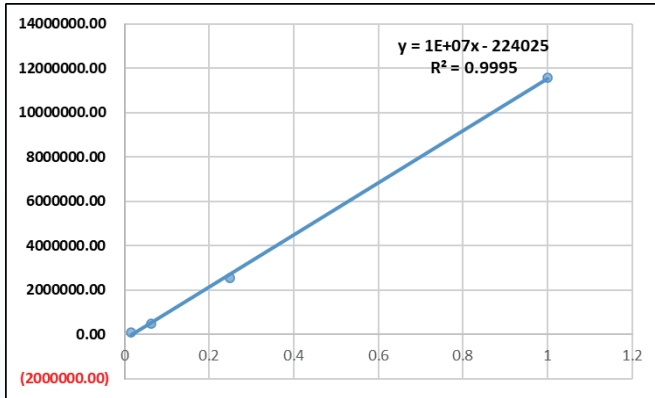


Extensive Data Storage & Export Options

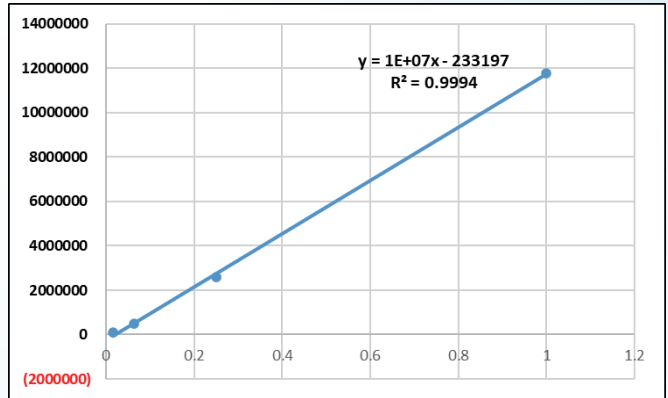
- ✓ Integrated computer with 2TB of storage, capable of holding over 25,000 sample data sets.
- ✓ Export data easily in PDF, Excel, or TIFF formats.
- ✓ Quickly export results using USB 3.0 for enhanced efficiency.

Accurate Results

Outstanding linearization achieves exceptional accuracy across dilution ranges in both AO/PI and Trypan Blue modes with the FL1000 cell counter.

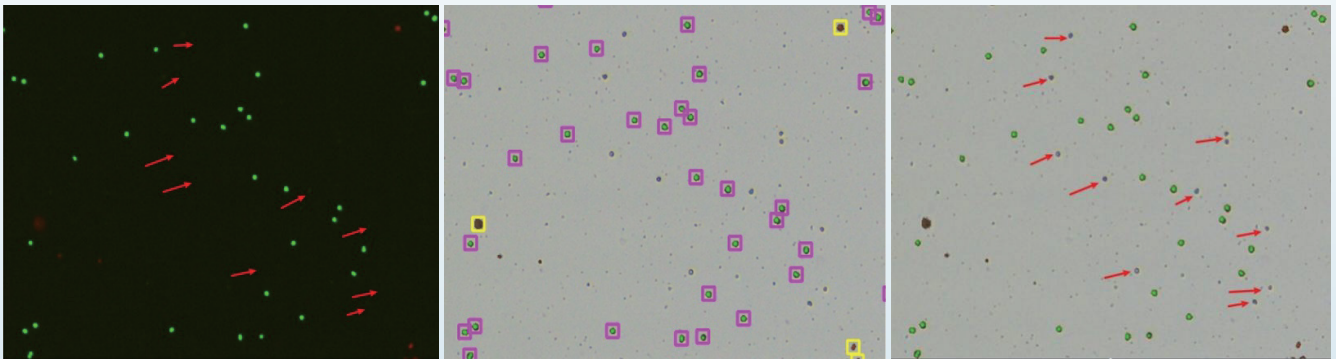


AO/PI



Trypan Blue

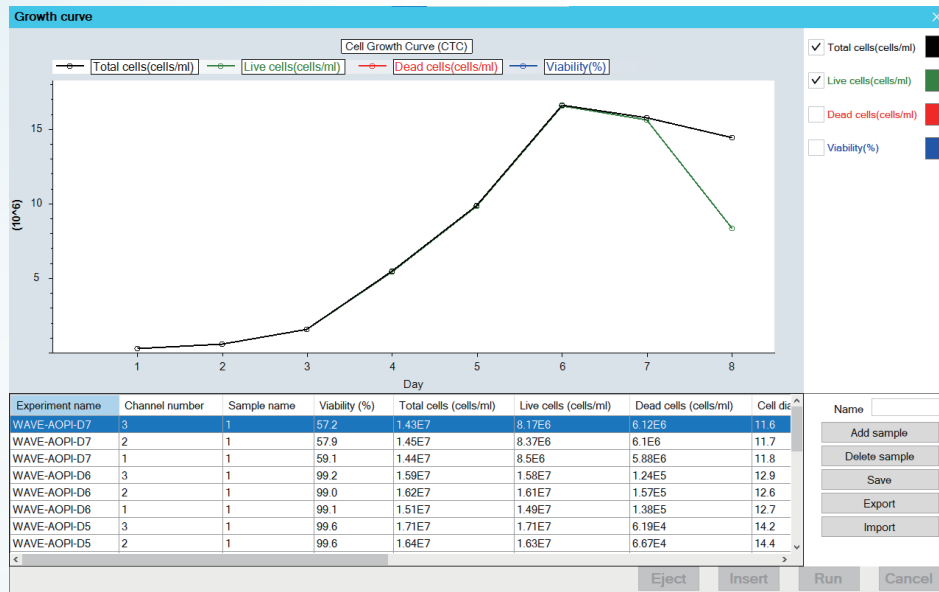
Count messy samples more accurately with AO/PI fluorescence! With AO/PI model, you can eliminate red blood cells, platelets and debris from your counts using fluorescent nuclear stains AO/PI. The AO/PI fluorescence mode allows for precise counting of nucleated cells, effectively eliminating red blood cells, platelets, and debris from your results. This is ideal for counting nucleated cells in challenging samples such as PBMCs, patient samples, tumor digests, and debris-heavy samples.



Red blood cells are indicated in the bright field+ Fluorescent image (right). The red blood cells and debris are not visible and counted in the fluorescent image (left and middle) detecting cells stained with nuclear staining dye.

Growth Curves Aid in Optimizing Cell Culture Conditions

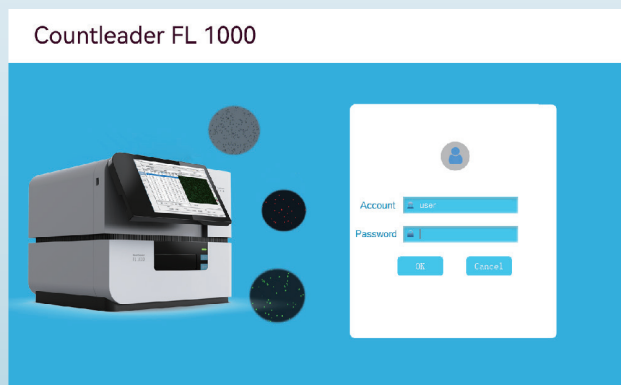
The Countleader FL1000 allows users to track and query cell culture parameters. By generating concentration and viability curves for continuously cultured cells, it provides insights into cell growth status and trends, helping to optimize cell culture processes.



Compliant with 21 CFR Part 11

FL 1000 offers three levels of login permissions, meeting GMP requirements under 21 CFR Part 11.

- ✓ Secure user login
- ✓ Multi-level user permissions
- ✓ Audit trails
- ✓ Electronic signatures



User permissions	User	Advance	Admin
Review other users' results	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Self review	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Access event log	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sample renaming prohibited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15min.renaming grace period	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IQ/OQ/PQ Verification Services

IQ, OQ, and PQ (3Q) certified services are available, with a variety of concentration beads and accompanying verification documents for purchase. The 3Q operating manuals ensure consistent procedures, generate standardized PDF reports, fully document sample usage, and meet audit trail requirements.

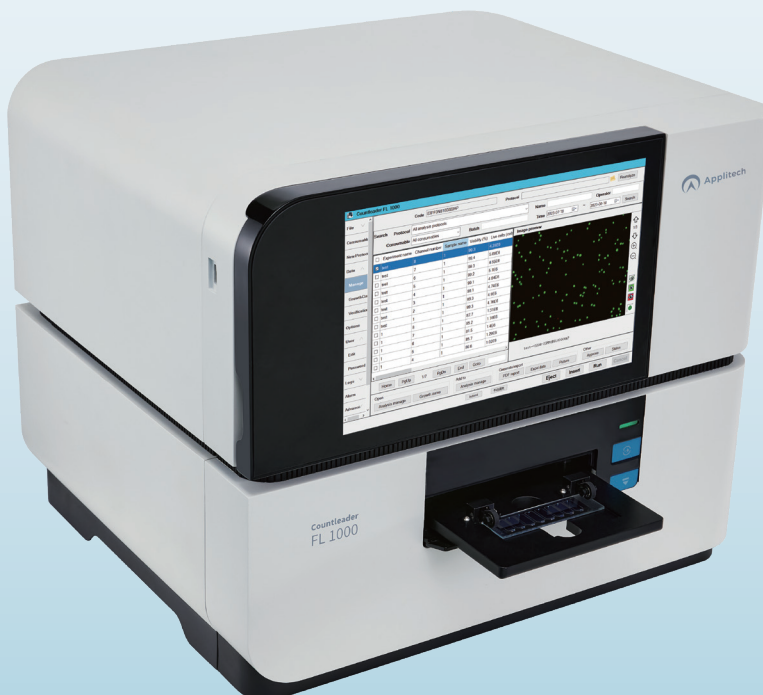


Applications

The Countleader FL1000 has been verified with a wide range of cell samples, such as CHO, HEK293, PBMC, CAR-T, and tumor cells. It is designed to meet the demands of:

- High precision in primary cells and cell therapy field
- High throughput for CLD and PD departments.

The FL1000 is also highly suited for cell counting in antibody and vaccine production. With the ability to detect up to 8 samples in under 2 minutes, it significantly improves cell counting efficiency.



- ✓ Antibody R&D and Production
- ✓ Vaccine Production
- ✓ PBMC, Car-T in Cell Therapy
- ✓ Stem Cells
- ✓ Cancer Cells
- ✓ CEF Cells
- ✓ and more

Technical Specifications

Applitech

Detection Modes	Brightfield (Trypan Blue) Fluorescence (AO/PI)
Fluorescence Channel	Ex/Em: 475 nm/525 nm Ex/Em: 560 nm/610 nm
Cell Viability	0-100 %
Cell Diameter Range	1-80 μ m
Cell Concentration Range	5E4-3E7 Cells/mL
Optimal Cell Concentration Range	5E5-1.5E7 Cells/mL (AO/PI) 5E5-1E7 Cells/mL (Trypan Blue)
Throughput	8
Loading Volume	15 μ l
Analysis Time	AO/PI: 3-4 minutes/8 samples, up to 22 seconds/ sample Trypan Blue: 1-2 minutes /8 samples, up to 15 seconds/ sample
Accuracy	CV \leq 5%
Data Output Format	PDF, Excel, TIFF
Analysis Results	Total/Viable/Dead Cell Concentration Cell Viability Cell Diameter Cell Aggregation Ratio Cell Fluorescence Intensity Scatter Plot of Fluorescence.
Camera Resolution	3072*2084 (600w pixels), CMOS
Dimensions	47.8*40.6*38.9 cm (W*D*H)
Weight	26 kg
Temperature	15-35 $^{\circ}$ C
Humidity	10%-80%
Screen	12.1 "Touch Screen, Can Hover in Mid-air
Focus	Auto Focus
Service	IQ/OQ/PQ Documents and Verification Services
Authority Management	3-Level of Authority, Audit trail
Supply Voltage	100-240V, 50/60Hz
Power, Current	80W, 2A
Storage Capacity	>2T (>25000 pieces of data)



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