

QüadCount™

Automated Cell Counter

dot scientific inc

ACCURIS
INSTRUMENTS

Eliminate human error and count with confidence...



- **Fast, accurate and reproducible results**
- **Intuitive software with auto-focus and touch-screen interface**
- **Cost-effective QuadSlides™ - disposable slides with four individual chambers**
- **Increased counting accuracy, with counting volumes up to 3.6µl**

The Accuris QuadCount™ improves on the simple technique of brightfield microscopy by utilizing an LED light source, precision optics and a high resolution CMOS detector. A finely tuned, motorized XYZ positioning stage provides for extra fine focusing and the ability to capture multiple images.

It's never been easier to perform FAST, ACCURATE cell counts:



Prepare cell suspension with trypan blue



Pipette 20µl of sample into a QuadSlide™ chamber



Insert slide into QuadCount™ and press START

Automated Cell Counting

With count speeds as fast as 20 seconds per sample, the Accuris QuadCount provides many advantages over the tedious and time consuming manual hemocytometry method. The advanced software eliminates human bias in dead/live determinations, reduces counting errors, saves time, and improves efficiency.



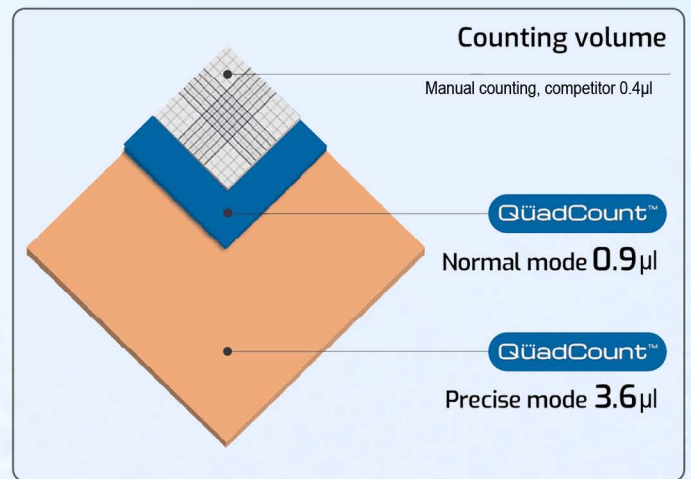
The QuadCount utilizes a unique 4-chambered disposable QuadSlide™. Four samples can be processed in one slide (twice the capacity of standard 2-chambered slides), decreasing consumable costs. Each chamber has a hydrophilic inner surface with an engraved grid pattern. High precision production and molding ensure that each QuadSlide meets the rigorous standards and dimensional tolerances required for optimal counting performance.



3 count modes available to analyze different sample volumes:

- Quick Mode: 0.15uL / 20 seconds (1 image frame)
- Normal Mode: 0.9uL / 30 seconds (6 image frames)
- Precise Mode: 3.6uL / 100 seconds (24 image frames)

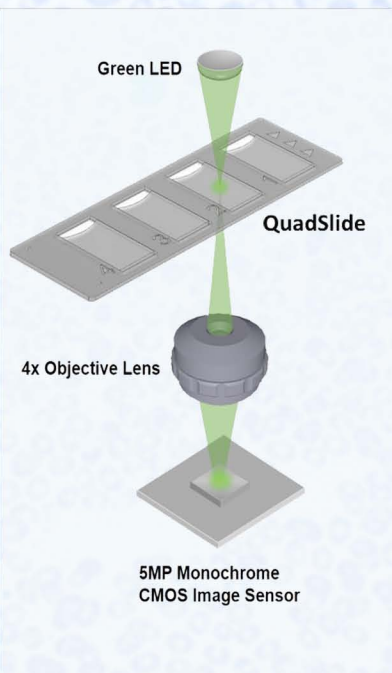
The QuadCount's ability to analyze larger sample volumes/multiple images, provides significantly better accuracy.



Advanced optics and imaging technology

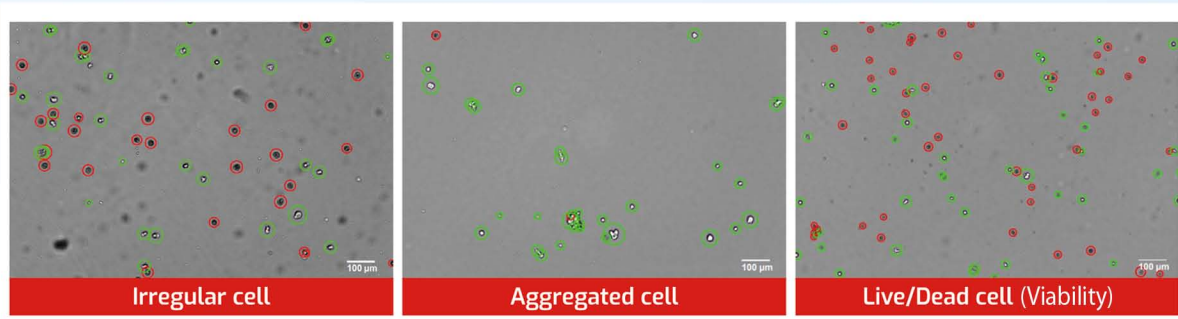
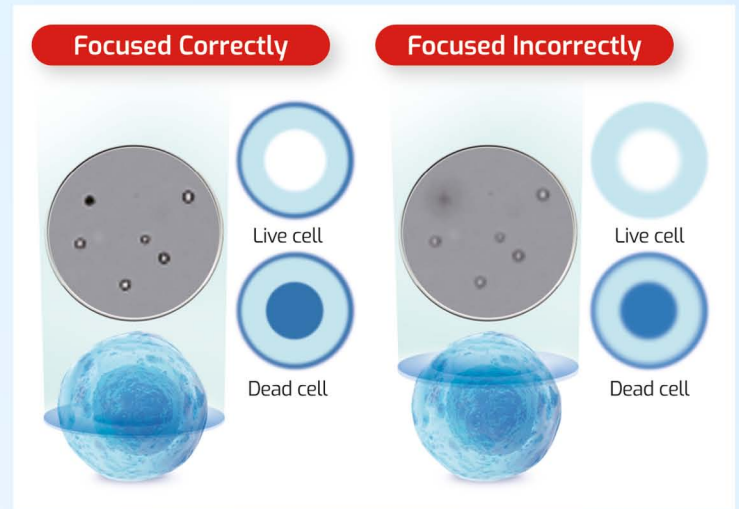
The Accuris QuadCount incorporates the highest quality optical and electronic components, such as a 4X objective lens and 5MP CMOS detector, to ensure reliable performance and consistent results.

The precision motorized stage adjusts the position of the lens and sensor assembly in micron increments for automatic focus. Multiple image frames (up to 24) can be captured to increase the volume of sample counted, providing a higher level of accuracy.



Correct focus is crucial for accurate counts of viable cells. The QuadCount's proprietary autofocus system and image analysis software work in conjunction with the motorized stage to analyze and capture images in the proper focal plane.

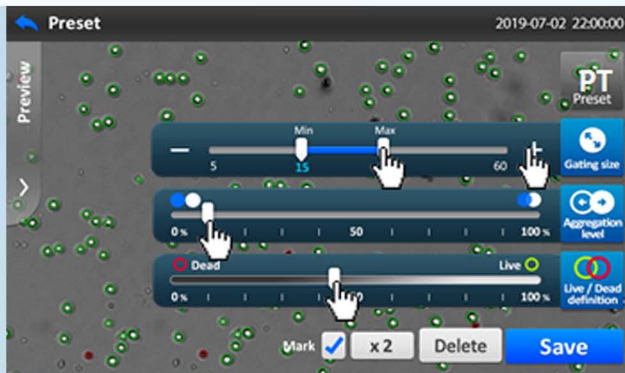
Advanced detection algorithms easily manage irregularly shaped and aggregated cells. Often misinterpreted by visual counting, correct analysis of these cells is performed by QuadCount's software, resulting in more accurate counts. User to user variation is eliminated.



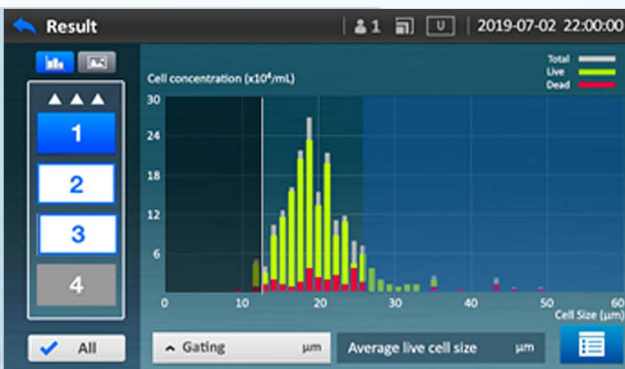
Intuitive user interface

After images are captured, the cell count parameters are easily adjusted.

- 1) Gating size range
- 2) Aggregation level
- 3) Live/dead definition

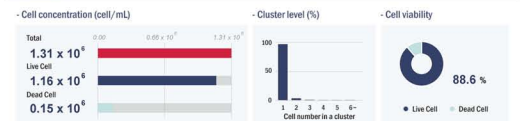


Cell population statistics are viewed as a histogram and cell size gating can be adjusted. Choose to view the histogram data for individual or multiple chambers in each QuadSlide.

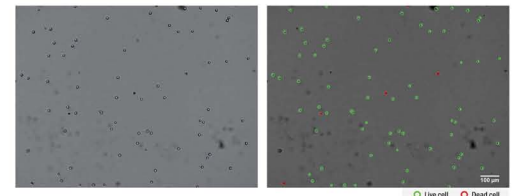


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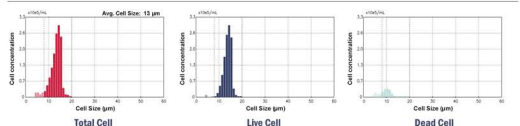
Results



Cell Image



Histogram of cell size distribution



Memo

PDF Data Result Output

Specifications

Optics:	High quality 4x objective lens
Image Detection:	5 mega pixel CMOS sensor
Illumination:	Green LED (50,000 hrs.)
Sample Volume:	20µl (4 samples per QuadSlide)
Max Counting Volume:	3.6µl (24 image captures)
Consumable Slide:	QuadSlide™, 4 chamber
Counting Modes:	Quick (20 sec.), Normal (30 sec.) & Precise (100 sec.)
Dynamic Range:	1x10 ⁴ to 1x10 ⁷ cells/ml
Cell Size Range:	5 - 60µm
Dimensions: (LxWxH)	6.4x11.5x8.5in. 16.3x29.3x21.6cm
Weight:	11 lbs (5kg)
Electrical:	100VAC-240VAC, 50/60Hz

Ordering Information

Item No.	Description
E7500	QuadCount Automated Cell Counter, 115V *includes USB flash drive
E7500-E	QuadCount Automated Cell Counter, 230V *includes USB flash drive
E7500-S1	QuadSlides, four chamber slides, 50/pk



Also available from Accuris and Benchmark:



CO₂ Incubators



QuickSilver™ PBS Buffer



Aspire™ Aspirator