

EASY... FAST... RELIABLE

VI-CELL XR CELL VIABILITY ANALYZER



IT'S AS EASY AS 1 - 2 - 3

- 1 Load your sample
- 2 Login your sample
- 3 Run and view your results

CHARACTERIZED
by ingenuity.

 **BECKMAN
COULTER**
Life Sciences

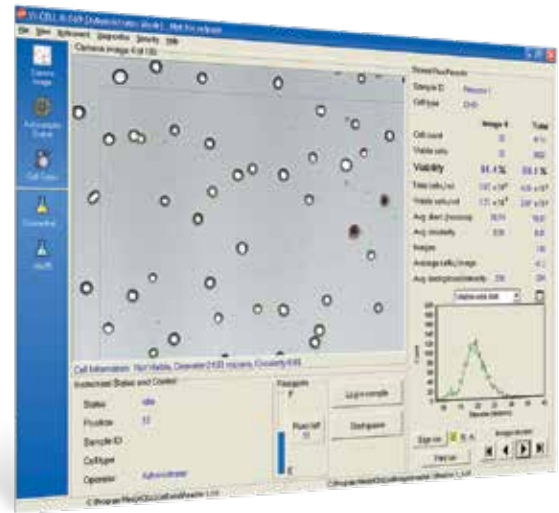
Vi-CELL XR

Software with power,
flexibility and simplicity

R&D, QC and Manufacturing Applications

The Vi-CELL XR software interface has been designed for simplicity; yet offers numerous innovative features for those users demanding maximum flexibility. For many users the main screen may be the only one they need. Everything the user requires to log in samples and view results is right there.

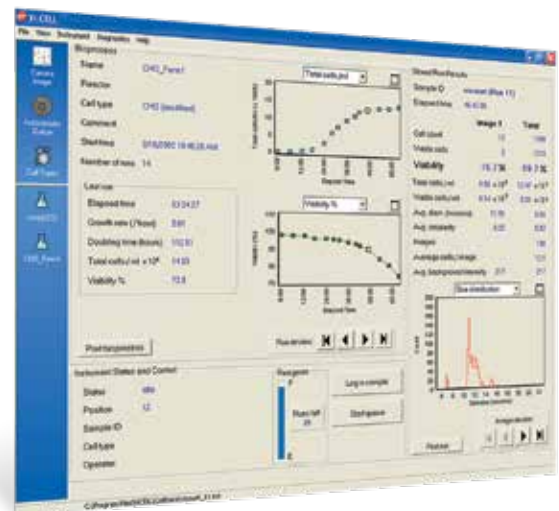
- All of the available graphs, including viability %, viable size distribution, and total cells /mL are easily selectable via the drop-down menu.
- The bioprocess tracking, auto-sampler queue and control monitoring features are easily accessed via the novel navigation bar on the left side of the screen.
- Real-time cellular imaging provides additional information not available using standard aperture cell counting methods. This image combines cellular detail with viability, size and concentration.



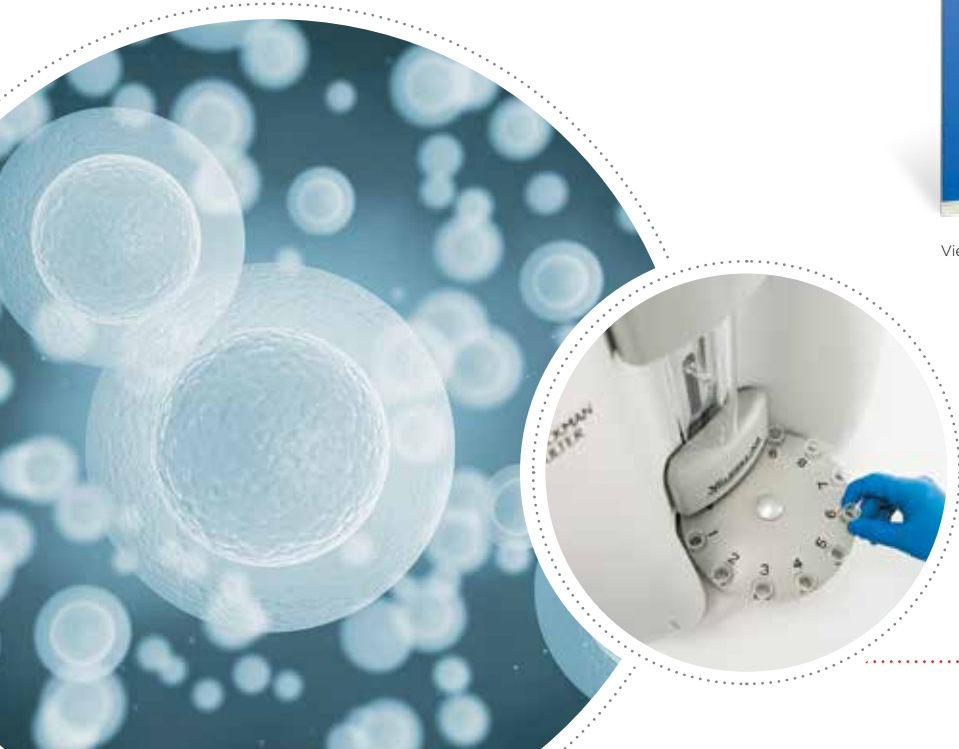
Real-time cellular imaging

Design

- The Vi-CELL XR bioprocess tracking feature allows convenient, automated tracking of your cell culture parameters, essential for bioreactor productivity.
- Data points of total cell counts and viability percent are electronically recorded and stored, reducing potential errors in manual recording.



View your bioreactor data and monitor culture over time



21 CFR Part 11

The Electronic Records and Electronic Signatures Rule (21 CFR Part 11) was established by the Food and Drug Administration (FDA) to define the requirements for submitting documentation in electronic form and the criteria for approved electronic signatures. Since analytical instrument systems such as the Vi-CELL XR generate electronic records, these systems should facilitate compliance with the Electronic Records Rule. By selecting the 21 CFR Part 11 option in the software, it automatically allows the user to configure the system. The Vi-CELL XR features the following key system components to facilitate 21 CFR 11 compliance:

- Audit trail
- Electronic signature capability
- Secure user sign-on
- User level permissions
- Administrative configuration tools



The Vi-CELL facilitates 21 CFR 11 compliance.



IQ/OQ Program

Beckman Coulter complies with current Good Manufacturing Practices (cGMPs). This gives us an understanding of the strict requirements that users are subjected to in regulated industries. To that end, Beckman Coulter has established a comprehensive program to address all aspects of the instrument validation process.

Our complete Operation Qualification Program includes IQ and OQ certifications. Service is carried out by specially trained engineers following specific protocols.

Installation qualification (IQ) is the documented collection of activities necessary to establish that an instrument is delivered as designed and specified, and is properly installed in the selected environment, and that this environment is suitable for the instrument.

Operational qualification (OQ) is the documented collection of activities necessary to demonstrate that an instrument will function according to its operational specification in the selected environment.



Explore The Many Features of The Vi-CELL XR Cell Viability Analyzer

| Feature | Vi-CELL XR | Benefits |
|---|-----------------------------|---|
| Auto Sampler | Yes | Eliminates need to remove carousel |
| Size Range (µm) | 2-70 | Measuring range for small cells and yeast |
| Sample Volume (µL) | 500 | Reduced reagent consumption |
| Analysis Time (min) | 2.5 | Fast analysis |
| Imaging Technology <ul style="list-style-type: none"> • Camera Focus • Image Collection • Camera | Auto Firewire 1394x1040 CCD | Providing for better analysis of small cells and yeast. Higher resolution improves identification of clustered cells for analysis |
| Image Zoom | Yes | Helps identify cell types and cell clustering |
| Aspiration and Trypan Blue Mixing | Variable | Helps with cell types, such as fragile cell lines. Added mixing helps separate sticky cells before analysis. |
| Out of Range Concentration Flag | Yes | Automatically keeps operator informed |
| Filled Dispense Tray Flag | Yes | Automatically keeps operator informed |
| Bioprocess 3D, Rotateable Plotting | Yes | Visually see trend changes |
| Export Multi-run Files to MS Excel | Yes | Facilitates Data Handling |
| Upgraded Audit Trail Supports 21 CFR Part 11 | Yes | Assists in system validation requirements |
| Non-viable Cell Declustering User-defineable Declustering Options | Yes | Helps in optimizing cell types, such as "sticky cell lines" and helps number cells in clusters |
| Added Preferences for Secured Users | Yes | Assists in system validation requirements |
| Enhanced Circularity Measurement | Yes | Helps in isolating debris from sample |

TECHNICAL SPECIFICATIONS

| Instrument Function: Concentration Range | Operating System | Instrument Type | Power Requirements | Temperature | Weight | Unit Dimensions (H x W x D) |
|---|----------------------------|--|--|---------------------------|--------------------|--|
| 5 x 10 ⁴ to 1 x 10 ⁷ cells/mL Counting Accuracy: ± 6%* | Windows 7 or Windows 10 | Video imaging through a quartz flow cell | Power: 50 watts (65 watts max) Voltages: 100V, 120V, 220V, or 240 V 50/60 Hz | 10° - 40°C 50° - 104°F | 11.3 kg 25.0 lb | 44.5 x 38 x 41 (cm) 17.5 x 15 x 16 (in) |

* Against the COULTER COUNTER reference method.

ORDERING INFORMATION

| Part Number | Description |
|-------------|---|
| 731050 | Vi-CELL XR |
| 383722 | Vi-CELL XR Quad Pak |
| 175478 | Vi-CELL Concentration Control |
| 175474 | Vi-CELL Focus Control |
| B94987 | Vi-CELL Quad Pak for integration systems (No sample cups included) |