

**Advance the potential of your cell culture**  
*Cedex HiRes Analyzer*





## High resolution that counts

### *Cedex HiRes Analyzer*

#### *Maximize performance with scanner-based imaging*

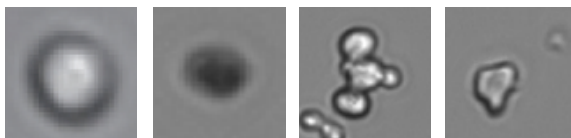
Whether working in the pharmaceutical or biotech industry, you always value the safety and confidence of monitoring and analyzing cell culture with state-of-the-art solutions. Reliable and efficient monitoring is crucial for optimizing yield and product quality since even small changes in bioprocess parameters can influence the performance of your cell culture. Some critical indicators of the cell culture inside the bioreactor are cell density, viability, aggregation rate, morphology, and the amount of cell debris. Therefore, monitoring of these parameters allows you to maximize the performance of your fermentation. To enable high reproducibility, precision, and comparability over the entire growth cycle, you need to ensure that the conditions of your cells are within the required range of concentration and quality.

The Cedex HiRes Analyzer features high-resolution, scanner-based imaging that enables deeper insights into even subtle changes in your cell culture. The Cedex HiRes Analyzer offers precise measurements and state-of-the-art automation by combining the Trypan Blue exclusion method and CCD scanner capturing high-resolution digital images across the sample in the whole flow chamber. The analyzer not only measures cell concentration, but also morphological parameters such as cell diameter and compactness, and provides quantitative information about cell aggregation in cell containing samples.

#### *Obtain accurate results with image-based high resolution*

The Cedex HiRes Analyzer provides information about your cells immediately and precisely, leading to time savings and increased reliability of results.

- Objects less than 2 $\mu$ m apart can be distinguished
- Cell diameter can range from 2-40 $\mu$ m
- Each pixel on an image represents 0.8 $\mu$ m



**Living Cell**

**Dead Cell**

**Aggregate**

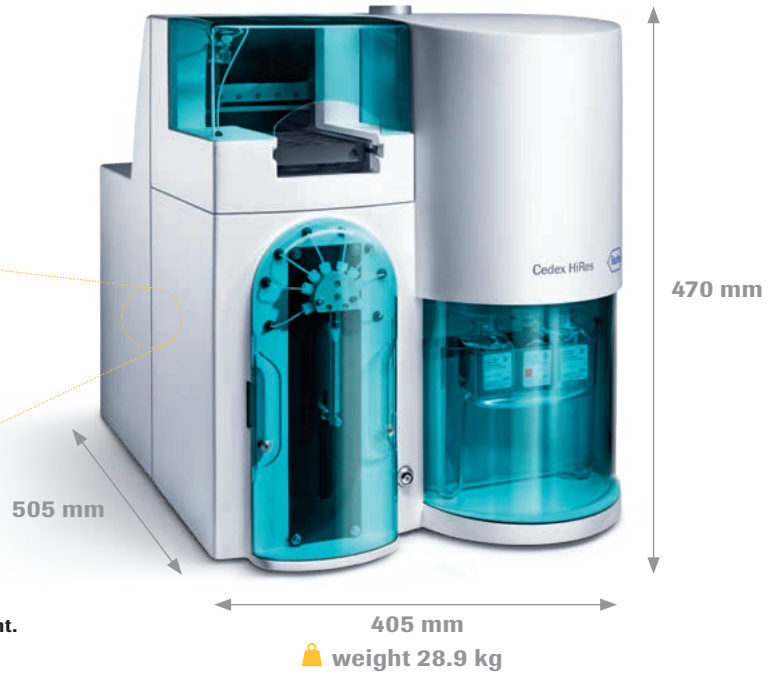
**Particle  
(Artefact)**

#### *Tighter control allows Quality by Design*

Utilize Control Beads, Calibration Beads, Viability Beads, and Density Reference Standard Beads for tighter control of your results. These will help you save time through minimizing daily quality assurance and risk assessment tasks required for validated processes and GMP compliance (e.g. 21 CFR part 11). These consumables and reagents enable maximum efficiency and precision (+/- 5% standard deviation) with a wide measuring range.

For use in quality control/manufacturing process only.

Online integration with various automated systems is possible with the *Cedex HiRes Analyzer's* remote port

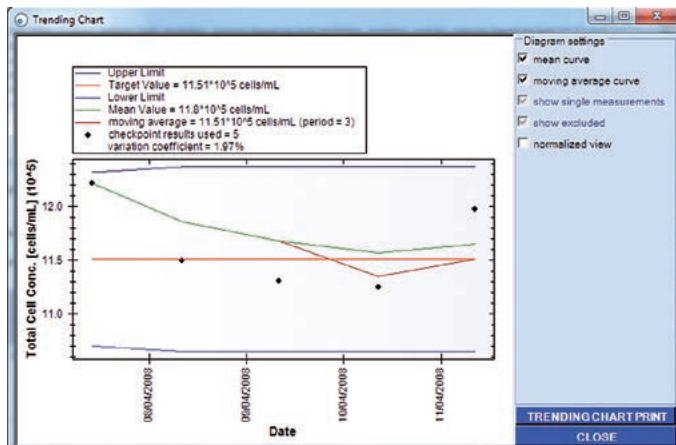


The moving CCD scanner is the heart of the instrument.

*Save resources with high traceability and reliability*

The Cedex HiRes Analyzer is a reliable instrument with a high mean time between repair visits. To further improve your process security, transparency, and reproducibility, the Cedex HiRes Analyzer also includes the System Suitability Test (SST). This action can be set up as soon as the instrument qualification phase of the validation process is completed. SST uses experimental results to verify that the instrument is reporting accurate results. Verification can be easily and regularly performed using obtained measurements.

As a consequence, the System Suitability Test (SST) can reduce costs by minimizing instrument downtime and ease your audit compliance.



SST-Trending Chart

The System Suitability Test enables the user to monitor system performance via a trending chart using measurements of Density Reference Standard Beads, Control Beads and Viability Beads.

## Ordering information

Product	Catalog number	Pack size
Cedex HiRes System	05 650 216 001	
Cedex Calibration Beads	05 650 470 001	20 ml
Density Reference Standard Beads Batch A	06 422 659 001	10 ml
Density Reference Standard Beads Batch B	06 422 667 001	10 ml
Cedex HiRes Control Beads 5 x 10 <sup>6</sup>	05 650 763 001	30 ml
Cedex HiRes Control Beads 1 x 10 <sup>6</sup>	05 650 771 001	30 ml
Cedex HiRes Control Beads 5 x 10 <sup>5</sup>	05 650 780 001	30 ml
Cedex HiRes Reagent Kit	05 650 798 001	
Cedex Detergent Solution	05 650 496 001	1,000 ml
Cedex Trypan Blue Solution Refill	05 650 640 001	4 x 60 ml
Cedex Detergent Solution Refill	05 650 658 001	4 x 60 ml
Cedex Cleaning Solution Refill	05 650 666 001	4 x 60 ml
Cedex MS 20 Sample Tray	05 650 569 001	1 sample tray
Cedex Sample Cups	05 650 623 001	1 box (500 cups)
Cedex Viability Beads 30 percent	05 650 704 001	30 ml
Cedex Viability Beads 60 percent	05 650 712 001	30 ml
Cedex Viability Beads 80 percent	05 650 739 001	30 ml
Cedex Viability Beads 100 percent	05 650 747 001	30 ml

## Regulatory disclaimer

For use in quality control/manufacturing process only.

## Trademark

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