

# CASY® Model DT

The electronic cell counter  
for fast determination of cell  
count and viability.



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QUALITY THAT COUNTS

## CASY® Cell Counter Model DT

### **Determines the number of cells and viability of the cell culture simply, quickly and reliably**

Cell counting is a must for every lab working with cells. Across the world, CASY®-Technology analyzers from innovatis AG are increasingly becoming the devices of choice.

The CASY® Cell Counter Model DT has proven to be reliable, exact and fast for the determination of cell number and viability.

### **Factory-certified calibration**

All CASY®-Technology analyzers are equipped with a permanent calibration that is stable long-term for biological media – certified by innovatis AG. No modifications or interventions are possible. The calibration is the same for all devices and is stable for the entire service life. This guarantees that the measurement results are reproducible as well as comparable across all systems. Thus, CASY®-Technology not only secures the measurement results, it also provides stable and dependable data.

### **Electronic pulse area analysis**

The CASY® Model DT works via electronic pulse area analysis. It records minimal changes in cell diameter and has a measurement dynamic of over 1:40 with regard to particles diameter. In addition to the total concentration of the sample, the cell concentration is analyzed simultaneously in three different size ranges.

### **Measurement results**

With the CASY® Model DT, the amount of cell debris, dead cells and live cells in a sample can be determined simultaneously in one measurement. Since each measurement takes only 10 seconds, multiple measurements can be easily run in a short amount of time to ensure statistical reliability of results. Cell concentrations of less than 100 cells/ml are reliably detected.

### **Two freely adjustable cursors = three evaluation ranges**

The three evaluation ranges are determined using two freely adjustable cursors, which can be set in increments of 0.1  $\mu\text{m}$  and adjusted once the measurement is complete. Systematic shifting of the coupled cursors means that the size of the cells in the sample can also be fully analyzed.

### **20 cell-specific protocols per measuring capillary tube**

Cells can be very different and, therefore, require different device settings. The CASY® Model DT provides 20 individual protocols per measuring capillary tube. Once measurement volumes, cursor positions, dilution factors, etc., are defined for a specific cell type, these measurement and evaluation parameters can be saved as a cell-specific setup.

### **Measurement log conforms to GLP/GMP standards**

The CASY® Model DT works using measurement logs that conform to GLP/GMP. In addition to measurement results, all device settings are logged. The measurement logs can be printed out directly or exported to a connected PC.

### **Integrated quality control**

CASY®-Technology has a “self-control device” that securely protects against incorrect measurements due to hardware-related issues via warning and error messages. All important system functions are checked before each measurement. Integrated service functions can be used to determine and correct errors quickly.



## Menu-based operation – clear, simple and fast

The user-friendly operation of the CASY® Model DT is clear, simple and fast. All measurement and evaluation parameters are entered in a single protocol. This means that even first-time users can adjust settings and perform measurement series within the shortest possible time.

## User-friendly design

The CASY® Model DT was designed to meet the highest demands for lab technology, user-friendliness and design. The compact design unites the different technical elements within the smallest possible space. The CASY® control panel can be freely positioned – another benefit for labs with limited space options.

Any queries? Talk to one of our expert advisors, or call to schedule a demo.

SETUP NUMBER: 01	NAME: L929
Capillary :	150 µm
Sample Volume :	2 x 400 µl
Dilution :	1.000e+02
Left Cursor :	6.80 µm
Right Cursor :	11.20 µm
Display Mode :	%Viability
Total Counts/ml :	On
Interface :	Parallel
Print-Mode :	Manual/PF On
USE MENU AND NEXT TO STEP. USE +/- TO EDIT. USE CANCEL TO LEAVE SCREEN OR ENTER TO CONFIRM CHANGES.	

SET :	TUMOR-03	SN :	DT-2AB-9999	CAP :	150 µm
DATE:	15.04.2002	SVOL:	3 x 400 µl	L.CURSOR:	7.6 µm
TIME:	10:15	DIL :	5.000E+01	R.CURSOR:	12.8 µm
Conc Range :	Ok				
Counts :	2911				
Counts/ml	3.3- 7.6 µm:	7.483e+04 (Debris)			
Counts/ml	7.6- 12.8 µm:	3.441e+04 (Dead) 16.96 %			
Counts/ml:	12.8-100.0 µm:	1.684e+05 (Viable) 83.04 %			
Total/ml:	7.6-100.0 µm:	2.028e+05			

## Measurement results delivered

- Particle concentration in three measurement ranges → adjustable for specific cells in 0.1 µm increments
- Debris/ml
- Viable cells/ml → absolute and as a percentage
- Dead cells/ml → absolute and as a percentage
- Total number of cells/ml
- Viability

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### Technical data

Measurement principle	electronic pulse area analysis
Dynamics of the measurement*	in diameter > 1:40
Resolution	0.1 µm
Typical analysis time	10 seconds
Typical sample volume	5–100 µl
Interfaces	RS232 (DB9), parallel (DB25)
Printer output	PCL
Data export	ASCII format, MS Excel™ compatible
Dimensions (H x W x D)	39 cm x 31 cm x 39 cm – excluding operating element
Weight	approx. 13.7 kg – including operating element

\* Ratio between the smallest and the largest particle analyzed simultaneously.

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Windows™ is a registered trademark of the Microsoft Corporation.

## Quality that counts

innovatis AG, headquartered in Bielefeld, Germany, specializes in integrating lab processes and automating cell culture analysis.

Based on proven technology, we offer the best range of product solutions for research, pharmaceutical and biotechnology industry – all over the world. Individual service packages complete the product portfolio dedicated to customers' needs.

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