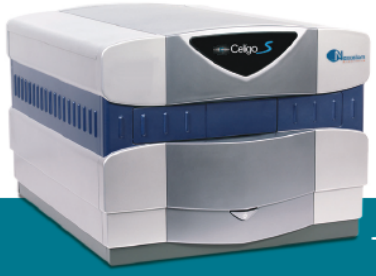
# Celigo S

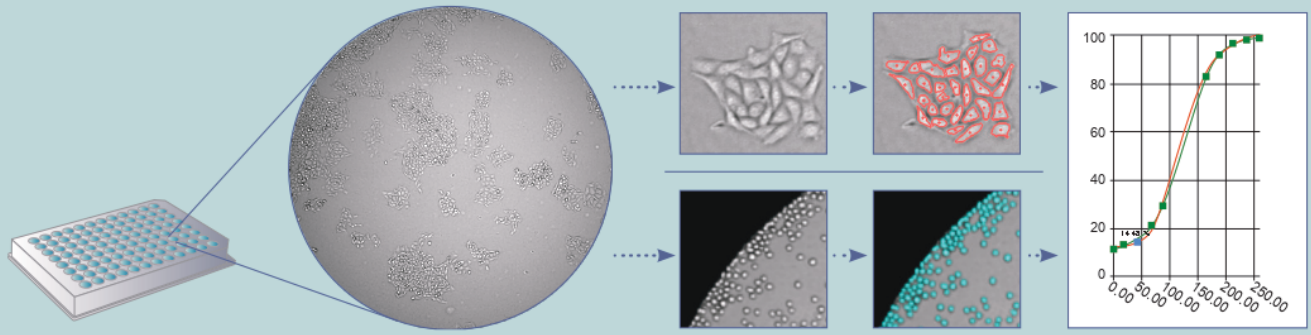
# Image Cytometer for Adherent & Suspension Cells



## Adherent cells

- Brightfield imaging and cell counting without trypsinization
- Non destructive, label free cytotoxicity assay
- Growth curve from the same well over multiple days

**1. IMAGE** entire plate → **2. ANALYZE** cell images → **3. RESULTS** data curves & cell images




**Cell Culture** Cell Counting, Confluence, Growth Tracking, Cell Line Generation, Single Cell Detection, Colony Counting, Transfection Efficiency

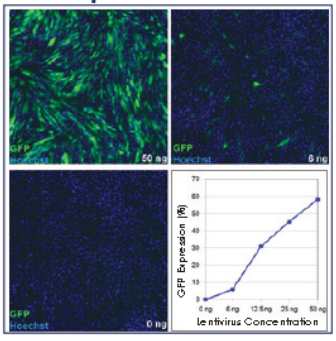
**Example Assays** Apoptosis, Cell Cycle, Cell Health, Cell Viability, Cytotoxcity, DNA Synthesis, Cell Morphology, Spheroid Analysis, Migration / Invasion Assay, Wound Healing, Expression Analysis, Cell Proliferation, Killing Assays

**High Throughput Screening** Robotic Integration, Cell Health, Proliferation, Fluorescent Assays, Tumorspheres

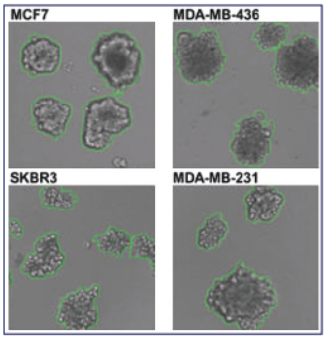
**Stem Cell Research** iPS Cell Line Generation, Embryoid Body Morphology, Stem Cell Marker, Primary Cell Monitoring, Colony Counting

**Bio-Production** Cell Secretion, Cell Line Monitoring, Routine Quality Controls

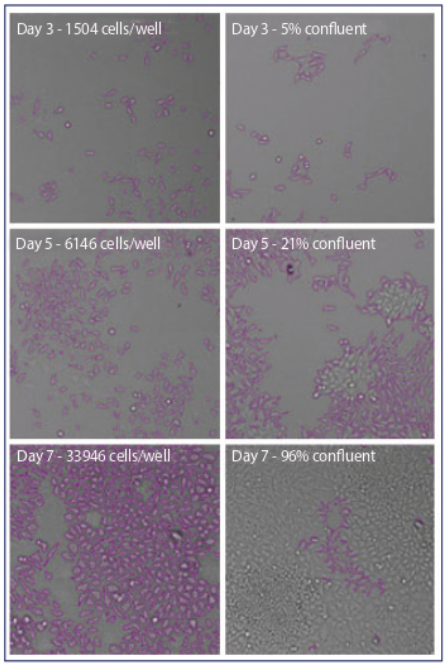
### GFP Expression



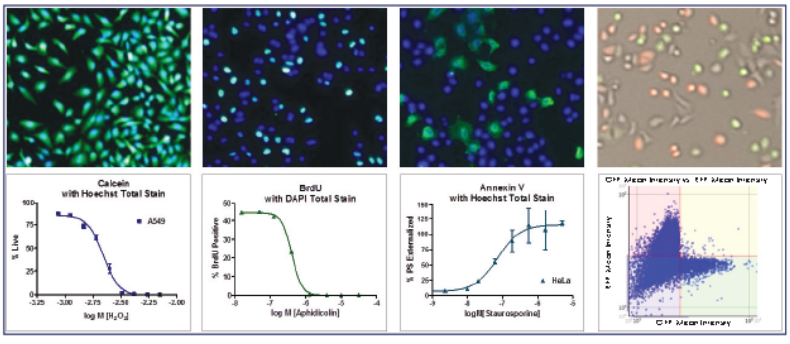

### Spheroid Analysis




### Cell Growth




### Fluorescent Assays (Viability, Apoptosis, Cell Cycle, GFP/RFP)

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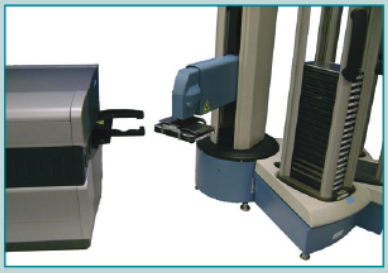


## Features and Benefits

- Increased speed for image acquisition and data processing
- Uniform high contrast and even illumination allows identification of "every cell in every well" with no edge effects
- Best-in-class brightfield mode permits label-free live cell assays
- 4 fluorescent channels allow multiplexed assays
- Proprietary optics provide high resolution images (1 µm / pixel) with minimum plate movement ensuring minimal sample disturbance
- Multiple focus modes to support many plate types
- Powerful, easy-to-use software reduces need for specialized users
- Automation interface for robotic integration enables 24/7 Celigo use
- Simultaneous data acquisition and analysis for high throughput applications
- Rapid image capture and processing allowing imaging and analysis of over 150,000 wells per day
- Proven performance with a wide range of adherent and non-adherent cell types

Celigo S advanced optics, sophisticated software and improved performance provide:

**Plate Compatibility**

6, 12, 24, 48, 96, 384, 1536 well plates (black, white and clear well plates) / T-25 and T-75 fl asks. Slides and cell array plate profiles available upon request

| Plate | Typical Time |
|---|---|
| 1536-well plate | <6min |
| 384-well plate | <2min |
| 96-well plate | <3.5min |

2 um / pixel resolution results. Faster times available at other resolutions

**Software**

Powerful analysis software running under Windows 7

**Illumitaion / Optics**

- 1 LED-based enhanced brightfield imaging channel with uniform well illumination
- 4 LED-based fluorescent channels
- Proprietary F-theta lens with superior well edge-to-edge contrast
- Large chip CCD camera (2024 x 2024 pixels)
- 1 µm/pixel resolution (choice of 1, 2, 4, 8 µm/pixel)

**Fluorescent Channels**

| Channel | Excitation | Dichroic | Emission | Example Dyes |
|---|---|---|---|---|
| Blue | 377/50 | 409 | 470/22 | Hoechst, DAPI |
| Green | 483/32 | 506 | 536/40 | FITC, Calcein, GFP, Alexa Fluor® 488 |
| Red | 531/40 | 593 | 629/53 | R-PE, PI, Texas Red, Alexa Fluor® 568 |
| Far-Red | 628/40 | 660 | 688/31 | DRAQ5®, Alexa Fluor® 647 |

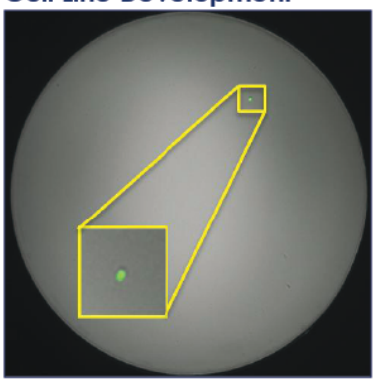
**Dimensions**

19" x 25" x 20" (48 cm x 64 cm x 51 cm), 117 lb. (53 kg)

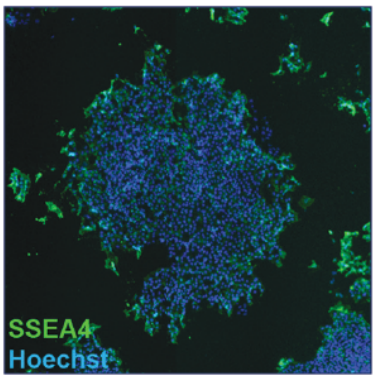
**Facilities**

110-220 VAC 50-60 Hz

### Cell Line Development



### Stem Cell Surface Marker




Cellometer® Simply Counted

Celigo® S Image Cytometer

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