

Automated Cell Counter

The LUNA-II™ automated cell counter

is the most advanced cell counter today with unmatched

speed, accuracy, and consistency of measurement.

It is a stand-alone instrument integrating

precision microscopy optics, onboard computer,

image analysis software, autofocus system, and built-in printer.

The LUNA-II™ automated cell counter accurately detects

total/live/dead cells at concentrations ranging

from 5 x 10^4 to 1 x 10^7 cells/ml and cell sizes between 3 and $60\mu m$.

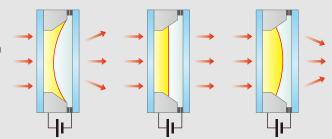


New Autofocusing Technology

The LUNA-II™ automated cell counter has integrated a novel focusing mechanism based on liquid lens technology.

The liquid lens does not use any mechanical moving parts to change the Z stage.

Instead, the Z position of the sample is rapidly obtained by the application of a small voltage to the liquid lens. The elimination of moving parts removes noise and significantly reduces the need for servicing. Even after multi-million cycles of focusing, the liquid lens does not require repair or service. In combination with this novel focusing mechanism, the LUNA-II™ has integrated a new autofocusing algorithm optimized for cell counting.



Reduced Counting Costs, Increased Convenience

Cost efficient: Designed for cost-efficient and accurate cell counting, the LUNA™ Reusable Slide has the affordability of manual cell counting without the associated subjectivity and time.



Convenient: LUNA™ Cell Counting Slides offer the ultimate counting experience. With no mess or cleanup, these disposable precision slides maintain the highest standard of cell counting accuracy.



Built-In Printer

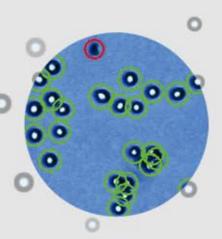
A thermal printer is integrated in the LUNA-II™ automated cell counter, and the counting results can be printed immediately for record keeping purposes. Because the printer is already integrated in the LUNA-II™ automated cell counter, an additional cable connection is not required.



- Fully automated cell counting and cell viability analysis
- Autofocus technology for fast and reliable cell counting
- Dye exclusion-based or unstained cell counting methods
- Various histograms and cell-size gating
- Unmatched counting accuracy and speed
- Built-in computer and printer
- The most affordable running cost currently on the market

Cell Counting Accuracy: De-clustering

The LUNA™ cell counting algorithm has been recognized to have the best-in-class cell counting accuracy. The LUNA™ software has exceptional accuracy in cell de-clustering and can successfully count clumpy cells. The LUNA-II™ automated cell counter has inherited this well-known performance aspect of the LUNA™ software. Clumpy cells are de-clustered quickly, as well as automatically and counted as individual cells.



Interactive Software









► Options for staining methods

The LUNA- II^{TM} automated cell counter can count samples with or without staining. Users may select to stain cells with trypan blue or Erythrosin B for cell viability data.

► Cell cluster map

Counted cells are identified using the cell cluster map, which displays the percentage of single cells, doublets, or triplets. The cell cluster map can be used to monitor changes in culture conditions or cell isolation/preparation protocols.

► Cell size histogram and cell size based gating

After counting, cells can be gated based on their size information provided by the LUNA-II™. The specific size of cell populations can be easily included or excluded on histograms.

▶ Review and Re-analysis option

The LUNA-II™ automated cell counter provides a powerful review and re-analysis option. To open and review the saved image, a separate PC is not necessary. Users can open the cell images directly on the LUNA-II™ automated cell counter, and can count cells again using the different parameters.

▶ Various file save options

The LUNA-II™ has an on-board memory to store up to 1,000 counts. After counting, the result is automatically saved in the memory, and the previous count results can be exported via the USB port as a .CSV file for further analysis. The results and image data can be saved as three different file formats such as a TIF, an annotated TIF, or a PDF report file. The PDF report file contains all the data generated during/after the cell counting, i.e., the protocol used, cell counting results, date, raw/analyzed cell image(s), and histograms are included in the PDF report file.



Specifications

| Cell Counting Time | Less than 10 s (manual focusing), less than 15 s (autofocusing) | | |
|--------------------------|---|--|--|
| Cell Concentration Range | 5x10 ⁴ - 1x10 ⁷ cells/ml | | |
| Cell Size Range | 3-60 μm (optimal : 8-30 μm) | | |
| Cell Viability Range | 0-100 % | | |
| Image Resolution | 5 MP | | |
| Image Type | TIF, annotated TIF | | |
| Report | PDF format | | |
| Dimensions (W×D×H) | 16 × 18 × 28 cm (6.3×7.0×11.0 in) | | |
| Weight | 1.6 kg (3.5 lb) *without the AC adapter and power cord | | |
| Operating Power | 100~240 VAC, 1.2 A | | |
| Frequency | 50/60 Hz | | |
| Electrical Input | 12 VDC, 3.3 A | | |

Ordering Information

| Cat# | Product | Size |
|--------|---|-------------|
| L40001 | LUNA-II™ Automated Cell Counter (with printer) | 1 unit |
| L40002 | LUNA-II™ Automated Cell Counter (without printer) | 1 unit |
| L12001 | LUNA™ Cell Counting Slides, 50 slides (100 counts) | 1 box |
| L12002 | LUNA™ Cell Counting Slides, 500 slides (1,000 counts) | 10 boxes |
| L12003 | LUNA™ Cell Counting Slides, 1,000 slides (2,000 counts) | 20 boxes |
| L12011 | LUNA™ Reusable Slide | 1 unit |
| L12012 | LUNA™ Reusable Slides | 2 units |
| L12014 | LUNA™ Reusable Slide Coverslips | 10 units |
| T13001 | Trypan Blue Stain, 0.4% | 2 x 1 mL |
| L13002 | Erythrosin B Stain | 2 x 1 mL |
| B13101 | LUNA™ Standard Beads | 2 x 1 mL |
| U10005 | USB Drive, 16 GB | 1 unit |
| P12002 | LUNA-II™ Printer Paper - thermal, 700 prints | 2 x 5 rolls |

Cell Line Validated

| Cell Type | Animal | Organ |
|------------|-----------------|----------|
| A375-c5 | Human | Skin |
| A431 | Human | Skin |
| A549 | Monkey | Lung |
| CHO | Chinese Hamster | Ovary |
| CHSE | Fish | Embryo |
| COLO-205 | Human | Colon |
| Cos-7 | Human | Kidney |
| DAUDI | Human | Blood |
| ESC | Mouse | Embryo |
| HEK-293 | Human | Kidney |
| HeLa | Human | Cervix |
| HepG2 | Human | Liver |
| HESC | Human | Embryo |
| HL-60 | Human | Blood |
| HS578T | Human | Breast |
| Jurkat | Human | Blood |
| MCF7 | Human | Breast |
| MDA-MB-231 | Human | Breast |
| MIA PaCa-2 | Human | Pancreas |
| MOLT-4 | Human | Blood |
| MRC-5 | Human | Lung |
| Neuro 2A | Mouse | Brain |
| NIH/3T3 | Mouse | Embryo |
| NSC | Rat | Brain |
| PLC/PRF/5 | Human | Liver |
| RKO | Human | Colon |
| SUM149PT | Human | Breast |
| THP-1 | Human | Blood |
| UWB1-289 | Human | Ovary |
| U-2 OS | Human | Bone |
| | | |





Wolf Laboratories Limited

www.wolflabs.co.uk

Tel: 01759 301142

Fax:01759 301143

sales@wolflabs.co.uk







Use the above details to contact us if this literature doesn't answer all your questions.

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.





