

SOL Meeting unmet needs in the diagnostics field

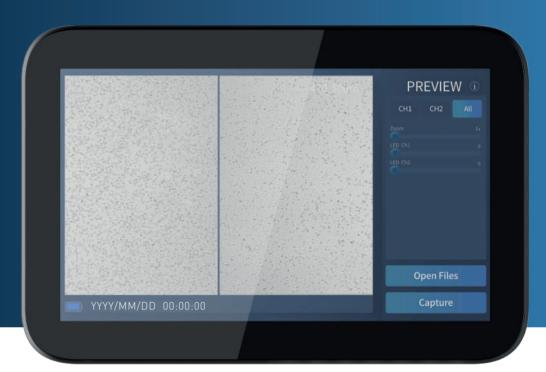




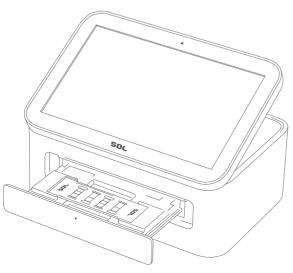
SOL Inc. is a disruptive bio-tech company with semiconductors for lens-free sensors.

Most laboratories and research centers continue to be challenged to provide high-quality services in the face of increasing demand for and escalating costs of advanced study.

SOL COUNT
CAN HELP
ADDRESS
THESE
CHALLENGES.



# SOL COUNT



SOL COUNT Automated Cell Counter is a new technology that can automatically count multiple cell types simultaneously. SOL, the company name, also means cell. SOL COUNT Automated Cell Counter utilizes lens–free LED optics and CMOS sensing technology to quickly and accurately measure the total number of cells, live and dead cells, and easily store and transfer the data. Furthermore, two kinds of cells can be measured at the same time.

The disposable four-channel cartridge makes it easy to use and more cost-effective than any competitor. In addition, SOL COUNT Automated Cell Counter is a compact, portable device that can be installed in a mobile lab.

# SOL COUNT IS DESIGNED FOR:







#### **FAST RESULTS**

From loading to cell count results, 10 seconds a channel



### **EASE of USE**

Prepare sample ▶ load ▶ get results



### **MULTI-CELL COUNTING**

2 sample/1 shot ▶ 2 results at the same time



#### **ACCURACY**

 $R^2 = 0.99$  (Compared Manual)



### CONNECTIVITY

Wi-Fi, ethernet



#### **PORTABLE**

Light weight, chargeable

## The Testing Process in 4 Easy Steps





Load 10ul of cells in a cartridge with a pipette (45° is the optimal angle)

STEP 2



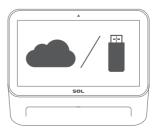
Push and open cartridge tray, then place the cartridge

STEP 3



View results within seconds per channel

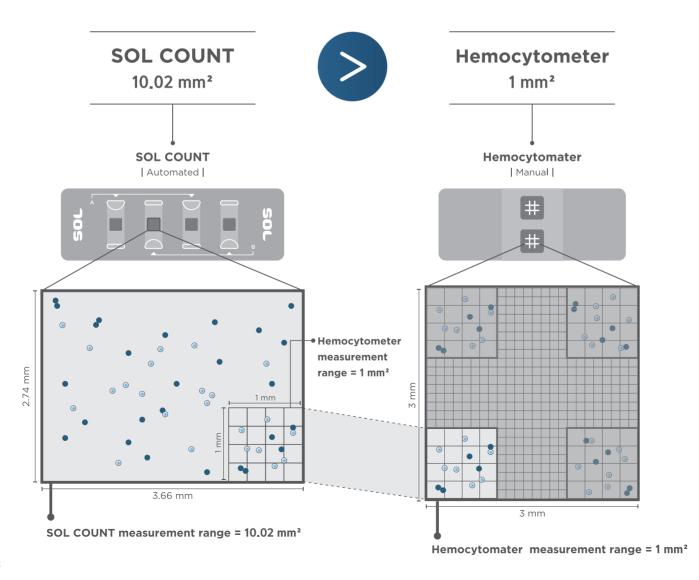
STEP 4



Transmit results to Cloud server and USB

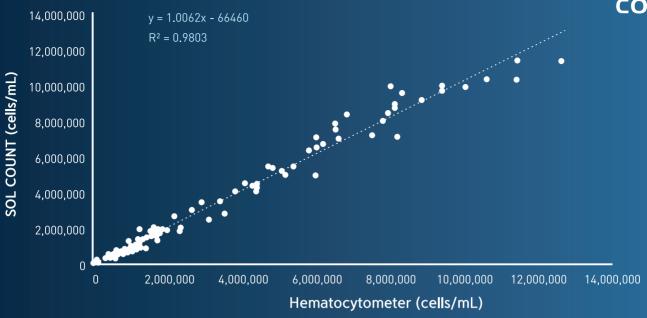


## **Comparison of Cell Counting Measurement Range**



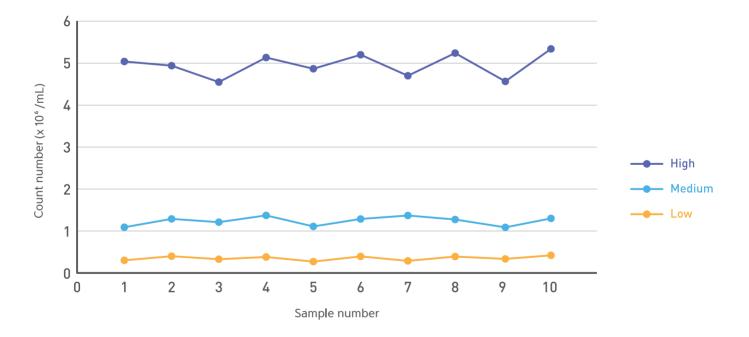
## Accuracy: SOL COUNT vs Hematocytometer





The total number of K562 cells counts by the hematocytometer, which is a manual method, correlates well with that SOL COUNT

## Repeatability

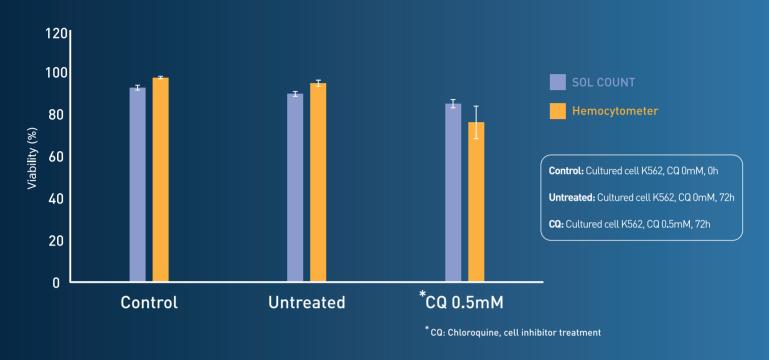


	High	Medium	Low
	n=10	n=10	n=10
MEAN	4.925 x 10°	1.232 x 10°	0.347 x 10°
SD	0.28013	0.1082	0.05238
CV	0.056879	0.1082	0.150782

SOL conducted an experiment with 10 K562 cells lines each of low, medium, and high concentration to confirm reproducibility through the SD and CV.

# **SOL**

# Viability Comparison



SOL COUNT measures viability through the live and dead cells in trypan blue staining conditions.

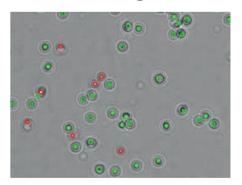
#### **Microscopy Image**

#### **Matching Image**



Comparison of viability image between microscopy and Solcount

**SOL Result Image** 



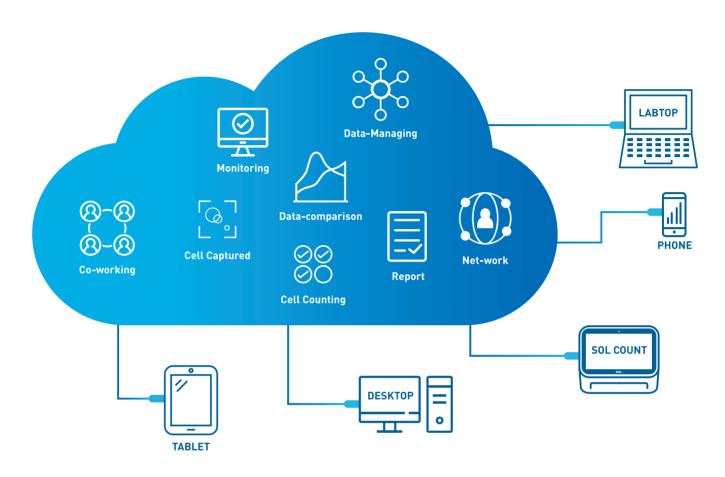
Live cell

Dead cell

It verified that the Viability result image of microscopy and SOL COUNT's one look like same.

# SOL COUNT CLOUD SERVER SOLOUD

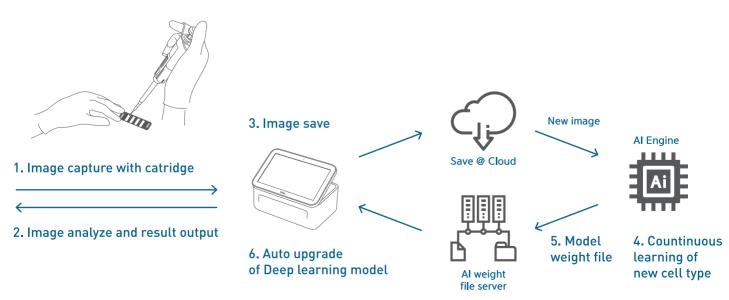




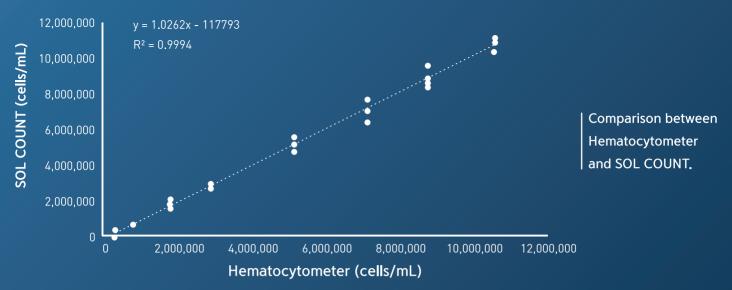
Access regardless of time and place Increase User's productivity

Build platform for rapid customer response & trust

## Improved accuracy & shortened analysis time for new cells via Al



## Linearity: SOL COUNT vs Hematocytometer



SOL COUNT could use to measure or count Mammalian cells. If there are clumped cells, it would be recommended to measure or count the cells after resuspension by pipetting or vortexing a few times.

## **Specifications**

Cell Counting Time	≤ 10 s/channel	
Cell Concentration Range	0.1 X 10°∼ 8 X 10°cells/ml	
Cell Size Range	5–50 μm	
Cell Viability Range	0~100%	
Sample volume	10 μ2	
Sample Method	Trypan blue stain	
Image Resolution	8MP	
Exporter formats	jpg (image), PDF (report)	
Data export	USB drive, Cloud Server(SOLOUD)	
Display	6.95" Touch LCD	
Connectivity	Ethernet, Wi-Fi (2.4G, 802.11 b/g/n), HDMI	
Dimensions (WxDxH)	180 x 120 x 78 mm	
Weight	1.8kg	
Electrical Input	5V, 2A USB C Type charging	
Battery	4400mAh	

## **Ordering Information**

Product Code	Product Name	Composition / Unit
SOL COU 1	SOL COUNT	SOL COUNT Autumated Cell Counter device 1ea, SOL Cartridge 1box, C-type cable, USB drive
SOL COU 2	SOL Cartridge 1 box	50 ea / 1 box
SOL COU 3	SOL Cartridge 2 box	50 ea / 1 box
SOL COU 4	SOL Cartridge 10 box	50 ea / 1 box
SOL COU 5	SOL Cartridge 20 box	50 ea / 1 box
SOL COU 6	SOL Cartridge 30 box	50 ea / 1 box
SOL COU 7	SOL Cartridge 60 box	50 ea / 1 box

