



*LuBj*™



## 01 Smart to measure

### Precise Measurement

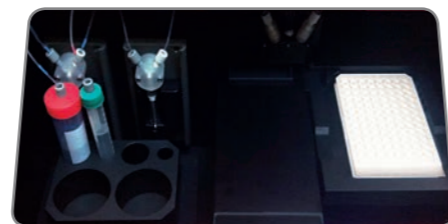
- The high-performance luminometer that can not only capture data that other instruments cannot detect, but also collect data quickly, reliably, and accurately.

### Detector Assembly

- The detector assembly of luminometer includes photomultiplier (PMT), power supply, signal processor, measuring optics, and injector housing. The interior design ensures that all functions work together reliably without any adjustments
- The photon counting electronics provide the lowest signal background and highest linearity. The built-in safety circuit protects the detector automatically from potential damage resulted from the exposure to high levels of light.

### Superior Sensitivity

- With advanced photomultiplier tube(PMT) technology and noise reduction circuitry, LuBi can distinguish infinitesimal amount of lights and detect microscopic difference between the lights.
- Read and display perfect result without additional manipulation, such as diluting samples, adjusting settings, and changing filters.



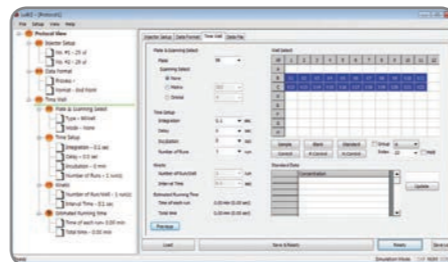
## 02 Simple to use

### Minimal Maintenance and Simple Operation

- Find and address any problems quickly with accessible and visible injectors.
- It is easy to maintain its cleanliness of rigid metal surface inside of LuBi; reagent lines are the only components requiring regular maintenance and they can also be changed without using any tools.

### Intuitive and Flexible interface

- Customizable measurement protocols allow flexibility.
- Analyze data easily with Excel®-based data recording and hassle-free & direct file exporting.



## 03 Superb to extend

### All the plates you want to use

- LuBi's applicable plate format is not limited to 96 well plate. You can select any commercially available well plates among 6, 12, 24, 48 and 96 well plates.
- LuBi also can meet your special well plate format or other sample containment upon request.

### All the scan and detection modes you want to manipulate

- LuBi offers kinetic detection and end-point detection for your specific application.
- For each well, single center-point scanning, various formats of matrix scanning, and orbital scanning with varying diameters are provided when you choose Multi-plate option.

# LuBi™

Luminescent unit with Bejeweled instrument

### Smart to measure

Detector assembly ensures that all functions work together reliably without any adjustments.

### Simple to use

Simplicity offers a variety of evaluation options for analysis of data.

### Superb to extend

Variety in scan and reading modes, and multi-plate options can maximize your performance in the lab.

### Sensible to apply

LuBi is the perfect choice for all luminescent flash and glow applications performed in microplate format.

### Applications

Reporter gene assays  
Cell proliferation & cytotoxicity  
Apoptosis assays  
ATP assays  
Aequorin-based assays  
Cellular luminescence  
Environmental toxicity



## 04 Sensible to apply

### System integration with Luminescent Assays

- For the efficient delivery of reagents without any wastes, the bottle holder is designed to hold all the reagent bottles in different shapes and sizes firmly in place close to the pump.
- Use right out of the box : All protocols are user-designed.
- Reagent rack is designed to fit 10ml and 100ml reagent bottles and common sized labwares.

### Internal auto-injection system integration (Optional)

- LuBi utilizes high quality, syringe-type injector pumps, which have a proven track record of excellent reliability for any levels of throughput. The unique design of injection tip assembly ensures accurate and dependable delivery of reagents to the micro-well.
- Connections, priming and flushing are greatly simplified because the optional injectors are designed to fit right next to the plate detection module. This arrangement minimizes dispensing problems, and makes maintenance convenient.
- The dispensing design also provides great features that help users save time and reagents.

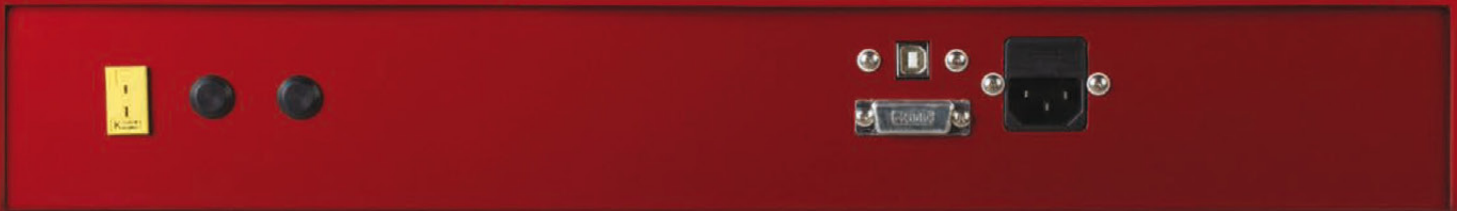


## 05 Microplate Incubator

- Need a microplate incubator before or after a measurement?
- What about the temperature control of your samples and reagents?
- We have a state-of-the-art solution for your needs!

- LuBi's optional microplate incubator stores up to four plates. Operating independently, microplate incubator precisely controls the temperature of the microplate.
- Using a set 'quick connect', microplate incubator can be connected to your LuBi. Once the connection has been made, you will gain precise temperature control over the reagents and samples ranging from 15 to 40 degrees in Celsius.





## Specifications

### LuBi Microplate Luminometer

Limit of Detection (in moles of luciferase)	$3 \times 10^{-21}$ moles
Linear Dynamic Range	$> 1.0 \times 10^7$
Crosstalk (with white plate)	$< 3.0 \times 10^{-5}$
Detector	Photomultiplier Tube (PMT)
Spectral Response Range	350 - 650nm
Peak Wavelength	420nm
Injectors	Up to two (optional)
Injection Volume	25 - 1,000 $\mu$ l
Injector Precision	CV < 1%
Injection Increment	1 $\mu$ l
Computer Interface	USB
Software Requirements	Microsoft Windows®XP, Altavista, or 7 (Program : Microsoft Excel®)
Power	AC85-264V/0.5A/150W
Dimension	544mm x 561mm x 275mm (D x W x H)
Weight	28.6kg
Operating Temperature	15 - 40°C
Warranty	One Year

### Microplate Incubator (Optional)

Temperature Control Range	15 - 40°C
Temperature Precision	< 0.2°C
Capacity	4 plates
Ramp Up Time	< 30 minutes for the sample/control module inside LuBi
Dimension	257mm x 260mm x 317 mm (D x W x H)
Power	110-220V, 350W
Warranty	One year

## Models

Sample Capacity	Cat. No.	No. of Injectors	Incubation (15-40°C)
96 well plate only	MD-3-40-LUBN-101	0	
	MD-3-40-LUBN-111	0	Ready
	MD-3-40-LUBN-201	1	
	MD-3-40-LUBN-211	1	Ready
	MD-3-40-LUBN-301	2	
	MD-3-40-LUBN-311	2	Ready
Multi plate (6, 12, 24, 48, 96)	MD-3-40-LUBM-101	0	
	MD-3-40-LUBM-201	1	
	MD-3-40-LUBM-301	2	
Customer Specified	MD-3-40-LUBC-101		
Incubator (optional)	MD-3-40-LUBI-101		
QC plate	MD-3-40-AMVN-101		



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