

High-sensitivity Luminometer

LUMI-COUNTER NU-2600

High-sensitivity detection of short-time luminescence (0.01 sec)

Excellent application and extendibility



- Quantitative analysis of luminol
- Measurement of NAD, NADP-dependent enzymes and matrices
- Calcium ion measurement / ATP (adenosine 3'-phosphate) measurement
- OH radical luminescence measurement under ozone atmosphere
- Isozyme substrate measurement by luciferin-luciferase reaction
- Bacteria killing capacity measurement of the leucocyte by phagocytic luminol chemiluminescence
- Analysis of unsaturated fatty acid in human serum labeled with luminescence reagent, ABEI

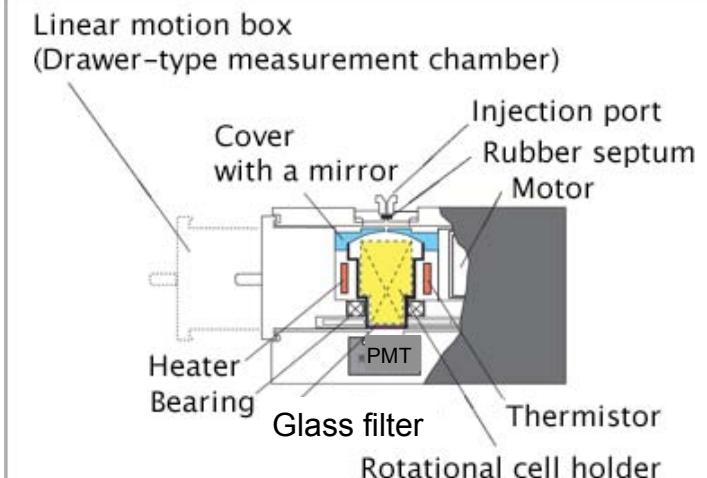


MICROTEC CO.,LTD.

High-sensitive linear motion structure



A wide measurement chamber (30mm Diameter \times 75mmH) is structured as a user-friendly pull-out drawer with high protection against light.



PMT (photomultiplier) is located close to the sample so that the maximum sensitivity can be obtained. A docking station with an injection port is equipped directly above the measurement chamber as standard.

The software flexibly responds to complex protocol.

The analysis of the luminescent phenomenon with high temperature dependence requires strict temperature control of the measurement section. Also, the system with short-time luminescence property (flash luminescence) requires the measurement which is simultaneously performed with precise reagent (reactive substrate) injection.

The LUMI-COUNTER NU-2600 software precisely controls the injection protocols of various reagents for the weak extremely-short-time luminescence or complex chemical reaction. In addition, to increase the data reproducibility, the software can operate the measurement which is simultaneously performed with the external devices such as solution sending pump and temperature regulator (option).

Setup menu for simplified measurement

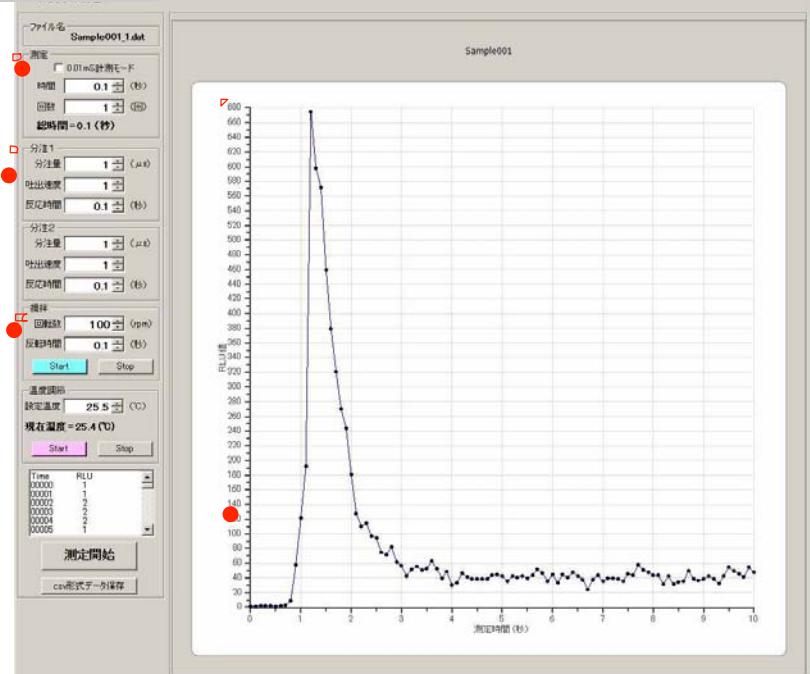
Setting for the measurement time、
and number of times

測定
測定時間 - 0.1 (秒)
回数 - 1
起始時間 - 0.1 (秒)
分注1
分注量 - 1 (μ l)
吐出速度 - 1
反応時間 - 0.1 (秒)
分注2
分注量 - 1 (μ l)
吐出速度 - 1
反応時間 - 0.1 (秒)
機材
回転数 - 100 (rpm)
反応時間 - 0.1 (秒)
Start Stop
温度調節
設定温度 - 25.5 (℃)
現在温度 - 25.4 (℃)
Start Stop
Time RLU
00000 1
00001 2
00002 3
00003 4
00004 5
00005 6
測定開始
csv形式データ保存

Injection control (up to 2 units) ↗

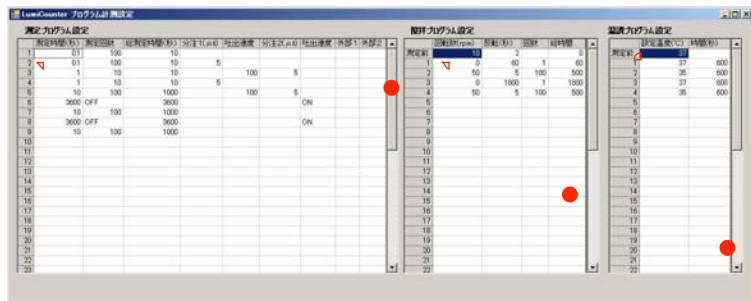
Temperature and agitation control ↗

The graph of emission curve in real time
(measuring every 0.1 second.) ↗



Program measuring mode

Besides injection, isothermal, and agitation, various external equipment such as flow control and ON/OFF of anaerobic gas supply can be combined (option).



Measurement program

Injection program

Isothermal agitation program

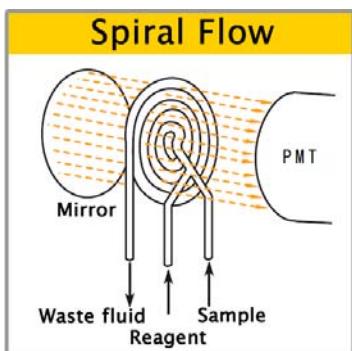
* Injection units and isothermal / agitation functions are optional.

* The actual language of the software is English.

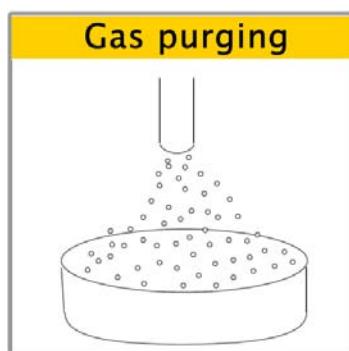
NU-2600 Basic specifications

Product type	High-sensitive luminometer for basic laboratory use
Measurement method	PMT photon counting
Measurement sensitivity	$5 \times 10^{-18} \text{M ATP}$
Detection wavelength range	300 - 650 nm
Detection time resolution	0.01 sec.
Measurement time	0.1 - 97200 sec. (0.01 sec time scale)
Delay time	0 - 6000 sec. (0.01 sec time scale)
Application measurement (option)	Interval, injection, agitation, isothermal, protocol registration, and external equipment control

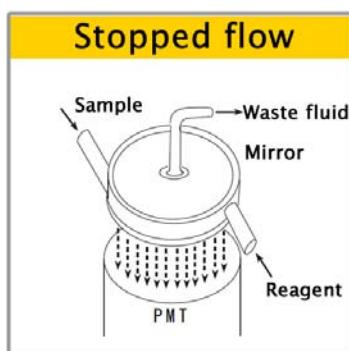
Examples for optional application



For flow injection and HPLC of the sample with fast luminescent reaction



Luminescence measurement under N2 anaerobic environment and CO2 incubation environment.



Extremely fast luminescent reaction is observable by using the syringe pump.



Microtec Co., Ltd.

2-16-5 Takidai, Funabashi-shi, Chiba, 274-0074
TEL:+81-47-466-8186 FAX:+81-47-466-8190
URL: <http://nition.com/en/>
Email: microtec@nition.com