

FB12 Single Tube Luminometer

Compact and Flexible



The sample compartment is easily cleaned in case of spillage

Insert sample – View result
Sample loading is very convenient



Versatile sample formats

Concept

The FB12 system is ideal for measurement of glow type luminescence from single samples. Due to the unique design, a variety of sample formats can be accommodated. FB12 Luminometer combines a very small footprint with excellent sensitivity and outstanding ease of use. In stand-alone mode, FB12 is ready for standard measurements. Samples are readily loaded into the retractable drawer. Closing the sample drawer automatically initiates the measurement. An external printer is optional and PC Software is available for extended tasks (Dual, Kinetics).

Applications

FB12 is the instrument of choice for all luminescent glow type applications performed in single sample format, for example:

- ATP assays
- Cell proliferation, cytotoxicity and biomass assays, apoptosis assays
- Detection of mycoplasma contamination in cell culture
- Cellular luminescence/reactive oxygen species
- Environmental toxicity and mutagenicity assays

Detector

The FB12 Luminometer features advanced photon counting electronics coupled with a highly sensitive detector, providing the lowest signal background and highest linearity spanning 6 decades. No cumbersome internal calibration is required and no gain switch is needed.

Light collection is maximized through the proximity of the sample to the detector and the use of optimized light reflectors surrounding the sample vial. As a result, reporter gene assays using firefly luciferase can now detect less than 1000 molecules of the enzyme with the FB12 Luminometer.

Stand-alone Operation

FB12 offers basic raw data, extended raw data and Cut-off measurement protocols. The interface supports the addition of an external serial printer. Three softkeys allow easy and intuitive operation. Both delay and measurement time can be set in steps of 0.1s.

FB12 Technical Data

Luminometer

Sample Format	12 mm diameter, tubes, microfuge tubes, 35 mm culture dishes, liquid scintillation vials up to 20 ml
Detector	Photon counting PMT, spectral range: 300–600 nm
Measurement Chamber	Retractable drawer with interchangeable reflectors and sample adapters
Sensitivity	Better than 1000 molecules firefly luciferase
Dynamic Range	More than 6 decades without gain switch ensuring best linearity over the entire range
Operating Software (Microprocessor)	Operation via three softkeys · Measuring and delay time settings in increments of 0.1 s · Data output in RLU/s Additional data evaluation modes (external printer required): · Extended raw data protocol · Cut-off protocol
Interface	USB and RS-232 (serial interface)
Power Requirements	100–240 V AC, 12 V/0.6 A DC
Dimensions (H x W x D)	22 x 22 x 20 cm / 9 x 9 x 8 inch
Weight	2.5 kg / 5.5 lb

PC Software (optional)

Platform/Required Hardware	Windows® compatible PC, Pentium like processor, one available serial or USB port
Operating System	Windows® 7, 8, 10
Additional Software	Microsoft Excel™
Basic Configuration	Protocol Manager, Quick Measurement
Additionally Available	Single Assay, Dual Assay, Single Kinetics, Multiple Kinetics, Cut-off Assay

External Printer (optional)

Serial (RS-232) Printer	Thermal matrix printer with 40 characters per line
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Ordering Info

110 101 02	FB12 Single Tube Luminometer
110 491 30	Sample incubation for FB12
155 200 11	Licence for PC software, Microsoft Windows, includes all protocols
140 001 30	Luminescence TestTube for validation
135 001 00	IQ/OQ/PQ Qualification Package
132 005 00	5 ml vials, 75 x 12 mm, 500 pieces
153 001 00	External printer

Specifications subject to change without prior written notice.
For research use only. Please inquire for IVD versions.

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