

# 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

<b>Sample Format</b>	12 mm diameter, tubes, microfuge tubes, 35 mm culture dishes, liquid scintillation vials up to 20 ml
<b>Detector</b>	Photon counting PMT, spectral range: 300–600 nm
<b>Measurement Chamber</b>	Retractable drawer with interchangeable reflectors and sample adapters
<b>Sensitivity</b>	Better than 1000 molecules firefly luciferase
<b>Dynamic Range</b>	More than 6 decades without gain switch ensuring best linearity over the entire range
<b>Operating Software (Microprocessor)</b>	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
<b>Interface</b>	USB and RS-232 (serial interface)
<b>Power Requirements</b>	100–240 V AC, 12 V/0.6 A DC
<b>Dimensions (H x W x D)</b>	22 x 22 x 20 cm / 9 x 9 x 8 inch
<b>Weight</b>	2.5 kg / 5.5 lb

## PC Software (optional)

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

## External Printer (optional)

<b>Serial (RS-232) Printer</b>	Thermal matrix printer with 40 characters per line
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## Ordering Info

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

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

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