



## HIGH-PERFORMANCE LUMINESCENCE AT YOUR FINGERTIPS

The Sirius 2 Single Tube Luminometer



# MORE BENCHTOP SPACE. RESULTS YOU CAN TRUST. INTUITIVE OPERATION.

High-performance single tube luminometer

As your trusted partner for sensitive luminescence measurements we have developed the Sirius 2 Single Tube Luminometer. This highperformance benchtop system is available in two distinct configurations, the Sirius 2 Touch (stand-alone configuration) and the Sirius 2 PC (PC-controlled configuration).

The system is the perfect choice for all luminescent flash and glow applications performed in single sample format, for example reporter gene assays, dual-reporter assays, ATP assays, cell proliferation, cytotoxicity and biomass assays, or environmental toxicity and mutagenicity assays.

#### Sirius 2 benefits at a glance

- Results you can trust: The Sirius 2 is equipped with a high-sensitivity detector that can detect less than 0.5 zmol firefly luciferase.
- Maximise your benchtop space: PC-free operation (Sirius 2 Touch) and ultra-compact 15 cm wide footprint that fits any laboratory setting.
- Quick-start functions: Closing the sample drawer automatically initiates the measurement with no need to press any key. An automated light shutter protects the detector from ambient light, making the instrument ready to measure from the moment the door is closed.
- Advanced touchscreen operation: The intuitive touch-screen interface of the Sirius 2 Touch allows easy editing of experimental conditions, handling of replicates, dual assay calculations, and display of graphics.



Figure 1: The Sirius 2 requires only minimal bench space. Sirius 2 in Touch-configuration (at centre) and PC-configuration (right). The touchscreen can be positioned in different ways to maximise your convenience.

## OUTSTANDING FLEXIBILITY

Full compatibility with a wide range of applications



Figure 2: Unmatched sample format flexibility – from 35 mm Petri dishes to microcentrifuge tubes or standard luminescence tubes (picture includes optional accessories).

No matter if you want to perform flash or glow luminescent assays, the Sirius 2 will be able to meet your experimental requirements.

- Provides a seamless switch between all major sample formats: The sample chamber supports a wide range of sample formats – standard luminescence tubes, various sizes of microcentrifuge tubes and even 35 mm Petri dishes.
- Reagent dispensing option: Up to two syringe-type automatic reagent dispensers with an injection volume range of 20 – 500 µl provide you with total freedom in selecting your luminescence assay type.

# INTUITIVE. FAST. EASY TO USE.

The Sirius 2 software





The intuitive Sirius 2 software offers advanced features like dual assay calculations, handling of replicates and display of graphics. Data can be downloaded easily onto a USB flash stick or printed via network printers.

Figure 3: The Sirius 2 software enables intuitive and flexible operation by presenting protocols and results in a clear graphical form.

#### Transforming science into solutions



### **TECHNICAL SPECIFICATIONS**

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Luminometer	Sample Format	12 x 75 mm or 55 mm tubes, 1.5 and 2 ml microfuge tubes, 35 mm culture dishes, liquid scintillation vials up to 20 ml. Injection operation with 12 x 55 and 12 x 75 mm tubes and 1.5 and 2.0 ml Microfuge® tubes
	Detector	Photon counting PMT, spectral range: 300 – 600 nm
	Measurement Chamber	Retractable drawer with interchangeable reflectors and sample adapter
	Sensitivity	Better than 0.5 zmol firefly luciferase, 1 amol ATP in a HS ATP assay
	Dynamic Range	6 decades
	Interfaces	USB port for PC connection
	Injector	0, 1, 2 (upgrade possible)
	Injection Volume	20 – 500 μl adjustable in steps of 1 μl
	Tubing	Chemically inert PTFE tubing and connections (PTFE or KEL-F)
	Dimensions ( $H \times W \times D$ )	Sirius 2 Touch: 45.6 × 34.9 × 15 cm / 18 × 13.7 × 5.9 inch Sirius 2 PC: 24.1 × 34.9 × 15 cm / 9.5 × 13.7 × 5.9 inch (without injector tubings)
	Weight	Sirius 2 Touch: 5.3 kg / 11.7 lb (without injectors) Sirius 2 PC: 3.6 kg / 7.9 lb (without injectors)
	Power Requirements	Desktop power supply and power cord. 100 – 240 V AC, 24 V / 2.5 A DC
	Environment	Storage 0 – 40 °C up to 80 % humidity (@30 °C), non-condensing Operation 10 – 35 °C up to 70 % humidity
Integrated Computer (Sirius 2 Touch)	Stand-alone Operation	Integrated computer with built-in software
	Display	7" capacitive touch, gesture control, 480 × 800 pixels
	Assay Protocols	Quick Measurement, Single Assay, Dual Assay and Wash & Prime protocol
	External Interfaces	2 × USB 2.0, 1 × Ethernet
	Printer Interface	Network or USB printing (PCL6 or Postscript 3)
	Data Export	By USB memory stick; CSV (Excel), PDF, HTML formats
PC Software (Sirius 2 Touch & Sirius 2 PC)	PC Software	Microsoft Windows <sup>®</sup> application for control, measurement and analysis
	Required Hardware	Microsoft Windows <sup>®</sup> compatible PC, Pentium-like processor, USB port
	Operating System	Windows® 10
	Additional Software	Microsoft Excel <sup>™</sup> (optional)
	Standard Configuration	Protocol Manager, Quick Measurement
	Additional Applications Available	Single Assay, Dual Assay, Single Kinetics, Multiple Kinetics, Cut-Off Assay

### **ORDERING INFOS**

Models	84018-01	LB 9526 Sirius 2 Touch-0 Single Tube Luminometer, w/o reagent injector, touchscreen operation
	84018-02	LB 9526 Sirius 2 Touch-1 Single Tube Luminometer for touchscreen operation with one automatic reagent injector
	84018-03	LB 9526 Sirius 2 Touch-2 Single Tube Luminometer for touchscreen operation with two automatic reagent injectors
	84018-04	LB 9526 Sirius 2 PC-0 Single Tube Luminometer
	84018-05	LB 9526 Sirius 2 PC-1 Single Tube Luminometer with one automatic reagent injector
	84018-06	LB 9526 Sirius 2 PC-2 Single Tube Luminometer with two automatic reagent injectors
Accessories	84142	Sirius 2 Injection sample holder / reflector for microfuge vials
	84144	Sirius 2 sample holder / reflector for Microfuge® vials
Consumables	26152	Lumi vials, 3.5 ml, 12 mm × 55 mm (2,000 pcs./box)
	9777	Lumi vials, 3 ml, 12 mm × 47 mm (1,000 pcs./box)
	9778	Lumi vials, 5 ml, 12 mm × 75 mm (3,000 pcs./box)
Software	84113	Sirius 2 licence for FB12 / Sirius PC software for Microsoft Windows®: includes all protocols (Single Assay, Dual Assay, Single Kinetics, Multiple Kinetics and Cut-off)
Validation Tools	55658-03	LB 9517 luminescence test tube for QC of Sirius 2 luminometers, incl. storage box and charging device with external power supply

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