



# 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 high-performance 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



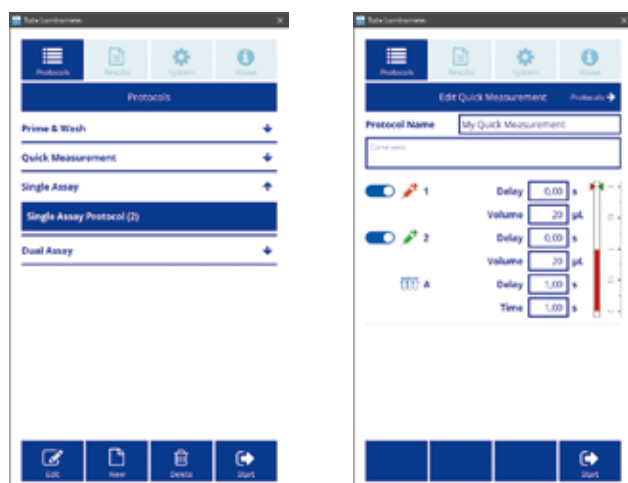
Figure 2: Unmatched sample format flexibility – from microcentrifuge tubes to standard luminescence tubes (picture includes optional accessories).

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 and various sizes of microcentrifuge tubes.
- **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.

## TECHNICAL SPECIFICATIONS

|   |                                   |  |
|---|-----------------------------------|--|
| <b>Luminometer</b>                                    | Sample Format                     | 12 x 75 mm or 55 mm tubes, 1.5 and 2 ml microfuge tubes. 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 x W x D)            | Sirius 2 Touch: 45.6 x 34.9 x 15 cm / 18 x 13.7 x 5.9 inch<br>Sirius 2 PC: 24.1 x 34.9 x 15 cm / 9.5 x 13.7 x 5.9 inch (without injector tubings)  |
|   | Weight                            | Sirius 2 Touch: 5.3 kg / 11.7 lb (without injectors)<br>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<br>Operation 10 – 35 °C up to 70 % humidity   |
| <b>Integrated Computer (Sirius 2 Touch)</b>           | Stand-alone Operation             | Integrated computer with built-in software   |
|   | Display                           | 7" capacitive touch, gesture control, 480 x 800 pixels   |
|   | Assay Protocols                   | Quick Measurement, Single Assay, Dual Assay and Wash & Prime protocol  |
|   | External Interfaces               | 2 x USB 2.0, 1 x Ethernet  |
|   | Printer Interface                 | Network or USB printing (PCL6 or Postscript 3)   |
|   | Data Export                       | By USB memory stick; CSV (Excel), PDF, HTML formats  |
| <b>PC Software (Sirius 2 Touch &amp; Sirius 2 PC)</b> | PC Software                       | Microsoft Windows® application for control, measurement and analysis   |
|   | Required Hardware                 | Microsoft Windows® compatible PC, Pentium-like processor, USB port   |
|   | Operating System                  | Windows® 10  |
|   | Additional Software               | Microsoft Excel™ (optional)  |
|   | Standard Configuration            | Protocol Manager, Quick Measurement  |
|   | Additional Applications Available | Single Assay, Dual Assay, Single Kinetics, Multiple Kinetics, Cut-Off Assay  |

## ORDERING INFOS

|                         |          |  |
|-------------------------|----------|--|
| <b>Models</b>           | 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   |
| <b>Accessories</b>      | 84142    | Sirius 2 Injection sample holder / reflector for microfuge vials   |
|                         | 84144    | Sirius 2 sample holder / reflector for Microfuge® vials  |
| <b>Consumables</b>      | 26152    | Lumi vials, 3.5 ml, 12 mm x 55 mm (2,000 pcs./box)   |
|                         | 9777     | Lumi vials, 3 ml, 12 mm x 47 mm (1,000 pcs./box)   |
|                         | 9778     | Lumi vials, 5 ml, 12 mm x 75 mm (3,000 pcs./box)   |
| <b>Software</b>         | 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) |
| <b>Validation Tools</b> | 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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