



Thermo Scientific Fluoroskan, Fluoroskan FL and Luminoskan Microplate Readers

Versatile workhorses for fluorometric
and luminometric assays

Excellent optical performance. Improved ease-of-use.

The Thermo Scientific™ Fluoroskan™, Fluoroskan FL and Luminoskan™ microplate readers are compact, robust and high quality products with excellent performance. Fluoroskan is a dedicated fluorometer, Fluoroskan FL is a combined fluorometer and luminometer, and Luminoskan is a dedicated luminometer. Together, the user-friendly instruments coupled with the modern, easy-to-use Thermo Scientific™ SkanIt™ Software, help contribute to an effortless microplate reader workflow. This reader-software package is a versatile and reliable tool for a variety of research applications.

Fluoroskan, Fluoroskan FL and Luminoskan key features:

- Reliable measurement data due to automatic instrument calibration during run
- Flexibility to read 6- to 384-well plates, onboard dispensers for automatic reagent addition, temperature control and orbital shaking
- Simultaneous dispensing and measurement for monitoring fast kinetics right from the reaction triggering (such as Ca²⁺ assays)
- Extensive selection of filters available for optimal wavelength selection for the assay
- High sensitivity for both top and bottom reading
- Versatile tools for data processing and instrument control with the SkanIt Software



The compact and robust Fluoroskan, Fluoroskan FL and Luminoskan microplate readers offer excellent optical performance for a variety of fluorometric and/or luminometric research applications.



The optional reagent dispensers allow for easy and accurate reagent addition.

Skant Software

Fast, versatile, and easy to learn by anyone.

Skant Software is easy to operate and streamlines workflow processes for a multitude of users with different needs and skill sets—those who require the basic features, and more experienced researchers who require advanced features and data processing. The software comes in two versions: Research Edition for life science research, and Drug Discovery Edition which offers features for compliance with the FDA 21 Part 11 for the drug discovery industry.

Skant Software offers:

- Simplified measurement setup
- Visual tools and instructional pictures to guide the user
- Single-click data export to Microsoft Excel
- Several file formats for data export: *.xlsx, *.pdf, *.xml and *.txt
- No limit on the number of licenses; install the software on as many computers as needed
- Measurement data continuously saves to the database; helps prevent data loss due to interruptions such as power outage or accidental aborting

Applications:

- Ca²⁺ flux assays
- Cell proliferation
- Cytotoxicity
- Cell adhesion
- DNA quantitation
- Reporter gene assays
- Hybridization assays
- Quantitation of PCR products
- FRET assays
- BRET assays
- Molecular beacon assays
- Immunoassays
- Enzyme activity
- Bacterial quantitation
- Phagocytosis
- Oligonucleotide assays

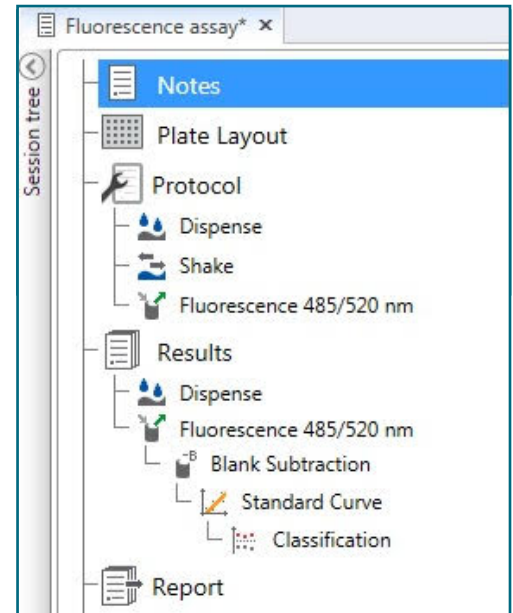


Figure 1. The session tree is the main area for navigating in the software. The measurement protocol and the result calculations are defined by a user-friendly steplist.

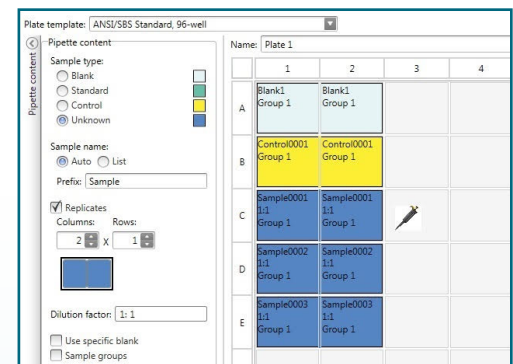


Figure 2. Innovative Virtual Pipetting Tool assists in defining samples to plate layout.

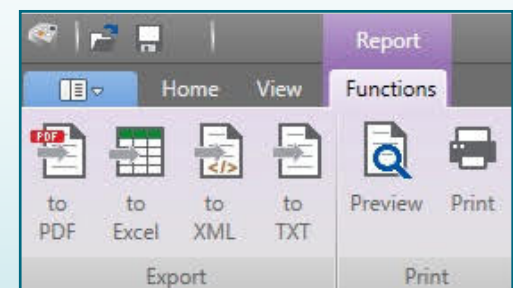


Figure 3. Skant software offers several file formats for data export.

Technical Specifications and Ordering Information

Thermo Scientific Fluoroskan, Luminoskan and Fluoroskan FL

	Fluoroskan	Luminoskan	Fluoroskan FL
Fluorometry			
Excitation wavelength range	320 - 700 nm		320 - 700 nm
Emission wavelength range	360 - 800 nm		360 - 670 nm
Excitation filters	Up to eight filters in the excitation filter wheel. 355 nm and 485 nm filters included as standard. Other filters available upon request.		Up to eight filters in the excitation filter wheel. 355 nm and 485 nm filters included as standard. Other filters available upon request.
Emission filters	Up to eight filters in the emission filter wheel. 460 nm and 538 nm filters included as standard. Other filters available upon request.		Up to six filters in the emission filter wheel. 460 nm and 538 nm filters included as standard. Other filters available upon request.
Sensitivity	2 fmol fluorescein/well in a black 96-well plate		2 fmol fluorescein/well in a black 96-well plate
Dynamic range	> 6 decades		> 6 decades
Luminometry			
Spectral range		270 - 670 nm	270 - 670 nm
Sensitivity		10 amol ATP/well using flash reaction, white 384-well plate	40 amol ATP/well using flash reaction, white 384-well plate
Dynamic range		> 6 decades over whole gain setting area	> 6 decades over whole gain setting area
Luminometric filters		Possibility to up to six luminometric filters in the filter wheel. All filters available upon request.	
Dispensing			
No. of dispensers	Up to 3*	Up to 3*	Up to 3*
Dispensing volume	4 - 1000 µl in 1 µl increments	4 - 1000 µl in 1 µl increments	4 - 1000 µl in 1 µl increments
Dispensing speed	30 s, 96-well plate, 5 µl/well	30 s, 96-well plate, 5 µl/well	30 s, 96-well plate, 5 µl/well
General Features			
Plate types	6 - 384-well plates	6 - 384-well plates	6 - 384-well plates
Measurement speed	18 s, 96-well plate 60 s, 384-well plate	18 s, 96-well plate 60 s, 384-well plate	18 s, 96-well plate 60 s, 384-well plate
Wavelength selection	Filters	Filters	Filters
Light source	Quartz-halogen lamp		Quartz-halogen lamp
Detector	Photomultiplier tube	Photomultiplier tube	Photomultiplier tube
Incubator	From ambient + 3°C to 45°C, at ambient 25°C	From ambient + 3°C to 45°C, at ambient 25°C	From ambient + 3°C to 45°C, at ambient 25°C
Plate shaking	Orbital	Orbital	Orbital
User interface	PC software (SkanIt software)	PC software (SkanIt software)	PC software (SkanIt software)
Computer interface	Ethernet port	Ethernet port	Ethernet port
Dimensions (H x W x D)	340 x 420 x 420 mm 13.4 x 16.5 x 16.5 in. Ethernet converter: 130 x 102 x 26 mm 5.1 in. x 4.0 in. x 1.4 in.	340 x 420 x 420 mm 13.4 x 16.5 x 16.5 in. Ethernet converter: 130 x 102 x 26 mm 5.1 in. x 4.0 in. x 1.4 in.	340 x 420 x 420 mm 13.4 x 16.5 x 16.5 in. Ethernet converter: 130 x 102 x 26 mm 5.1 in. x 4.0 in. x 1.4 in.
Weight	Basic unit 21 kg (46 lbs.) 2 optional dispensers add 2.5 kg to the weight	Basic unit 20.5 kg (45 lbs.) 2 optional dispensers add 2.4 kg to the weight	Basic unit 21 kg (46 lbs.) 2 optional dispensers add 2.4 kg to the weight

* Third dispenser available as service installed

Ordering information

Cat. No.	Description
Thermo Scientific Fluoroskan	
5200110	Fluoroskan 100 - 240 V, 50/60 Hz *)
5200111	Fluoroskan 100 - 240 V, 50/60 Hz, with one dispenser *)
5200112	Fluoroskan 100 - 240 V, 50/60 Hz, with two dispensers *)
*) Includes PC Software and filter pairs: Ex 355 nm / Em 460 nm, Ex 485 nm / Em 538 nm. Other filters available upon request.	
Thermo Scientific Luminoskan	
530330	Luminoskan 100 - 240 V, 50/60 Hz**)
530331	Luminoskan 100 - 240 V, 50/60 Hz, with one dispenser**)
530332	Luminoskan 100 - 240 V, 50/60 Hz, with two dispensers**)
**) Includes PC Software	
Thermo Scientific Fluoroskan FL	
520220	Fluoroskan FL 100 - 240 V, 50/60 Hz ***)
520221	Fluoroskan FL 100 - 240 V, 50/60 Hz with one dispenser***)
520222	Fluoroskan FL 100 - 240 V, 50/60 Hz with two dispensers***)
***) Includes PC Software and filter pairs: Ex 355 nm / Em 460 nm, Ex 485 nm / Em 538 nm. Other filters available upon request.	

Find out more at thermofisher.com/platereaders