

User convenience in photometric applications



Thermo Scientific[™] Multiskan[™] FC – Filter-based Microplate Photometer for Research and Routine Applications

The Thermo Scientific Multiskan FC microplate photometer is a reliable and robust instrument for a wide variety of research and clinical applications. It reads both 96- and 384-well plates, and is equipped with shaking and incubation capabilities for temperature critical assays. It can be used as a stand alone instrument or under PC control with our intuitive Thermo Scientific[™] Skanlt[™] Software.

Designed with 35 years experience in microplate photometry, the Multiskan FC combines the world-renowned quality of the Multiskan product line with a new large color screen, visual internal software with 'quick keys' and multiple language options to ensure excellent usability.

Multiskan FC Offers You:

- A broad wavelength range of 340–850 nm for a wide variety of research and routine applications
- Fast and accurate measurement of both 96- and 384-well plates for various throughput requirements
- Shaking and incubation up to 50°C for temperature critical assays
- Ease of use through the large color screen, visual internal software and a variety of language versions
- Visual and logical Skanlt Software for comprehensive instrument control and data handling
- Proven performance and reliable day-to-day results through patented optical design and in-built self diagnostics



Patented and proven optical design (US6111636)

Multiskan FC for a Wide Variety of Photometric Applications

The Multiskan FC is a reliable and robust microplate photometer designed to perform a wide variety of routine and clinical applications. It brings together 35 years experience of the well-known Multiskan product brand, with new features for enhanced usability. The Multiskan FC can be used as a standalone instrument or under PC control via our unique and easy-to-use Skanlt Software.

The Multiskan FC has a 340–850 nm wavelength range, enabling a wide variety of applications from enzyme kinetic studies to Lowry assays. It is equipped with an eight-position filter wheel with three standard filters, 405 nm, 450 nm and 620 nm, preinstalled. A comprehensive range of easy-to install additional filters is available for order directly from your Thermo Fisher Scientific representative.

The Multiskan FC provides fast and accurate measurements enabling complete 96-well plate reading in less than six seconds. Furthermore, the instrument is equipped with linear shaking as standard. A model is also available fitted with an incubator providing incubation temperatures up to 50°C and the capacity to read 384-well plates.

Reliable Results and Robust Performance

The proven and patented (US6111636) optical design of the Multiskan FC in combination with an autocalibration procedure that is performed during each measurement guarantees stable day-today and year-on-year performance and reliability.

During startup all major functions of the instrument, such as plate position, measurement stability, lamp functionality, filters, optical system, incubation and electronic operation, are checked to ensure reliable operation. In addition, the lamp is automatically switched off when not in use, which prolongs the lifetime of the lamp.

Ease of Use with Internal Software

The large color screen of the Multiskan FC, combined with the simple and logical internal software, ensures easy and intuitive assay setup. The 'quick keys' allow instant access to the most commonly used protocols in routine laboratories. In addition, the internal software contains both qualitative and quantitative calculations for single, dual and kinetic measurements providing flexible data handling capabilities.



Multiskan FC microplate photometer

The internal software memory can store up to 99 assays, and results can be saved to a USB memory stick for easy transfer to a computer.

The internal software is available in English, German, French, Spanish, Portuguese, Russian, Chinese and Japanese.

Thermo Scientific Skanlt Software for Optimal Computer Control

The highly visual and logical user interface of Skanlt Software facilitates instrument control and data handling for both research and routine applications. The graphical step list feature allows straightforward setup of any assay. Comprehensive inbuilt calculations, such as blank subtraction, quantitative curve fit, qualitative classification and kinetic calculations, as well as the versatile reporting tool, make data reduction with Skanlt Software trouble-free. Using the ready-made demo sessions in Skanlt Software, basic single, dual and kinetic measurements are performed quickly with only a few mouse clicks.

The same language selection for the internal software is available also for Skanlt Software. It simply speaks your language.

Furthermore, ready-made sessions for many common assays can be downloaded for Skanlt Software online from www.thermoscientific.com/platereaders.

Robot Compatibility for High-throughput Environments

The plate carrier of the Multiskan FC is specially designed for convenient stacker and robot arm access, allowing microplate gripping in both portrait and landscape configurations. In addition, the Skanlt Software automation interface enables easy integration with robotic software.

Multiskan Verification Plate for Instrument Verification

The Thermo Scientific[™] Multiskan[™] Verification Plate, combined with the Skanlt Software verification feature, provides an excellent tool for verifying instrument performance and allows users to test the integrity and validity of their results. Moreover, the installation, operation and performance qualification (IQ/OQ/PQ) package provides a convenient way to document evidence, thus demonstrating the integrity of the instrument and its performance.

Meets European Directives

The Multiskan FC (IVD model) with the internal software conforms to the European IVD (In Vitro Medical Device) directive, making it ideal for qualitative and quantitative ELISA applications in clinical laboratories. Built using the highest quality components, the Multiskan FC conforms to the RoHS (Restriction of Hazardous Substances) directives.



Visual and logical user interface of Skanlt Software



Large color screen and visual internal software

Applications: Immunoassays (ELISA), protein assays, endotoxins, cytotoxicity and proliferation assays, enzyme assays and growth curves



USB port for easy data transfer



Robot-friendly plate carrier for both 96- and 384-well plates

Technical Specifications						
Light source	Quartz-halogen lamp 6 V/10 W					
Wavelength range	340–850 nm					
Filters	8-position filter wheel, the instrument is delivered with the following standard filters installed: 405 nm, 450 nm and 620 nm. Additional filters can be ordered					
	separately.					
Half-bandwidth of filters	3–9 nm					
Read-out range	0–6 Abs					
Linearity (405 nm)	0–3 Abs, ± 2%, 96-well plate					
	0–2.5 Abs, ± 2%, 384-well plate					
Resolution	0.001 Abs					
Accuracy (405 nm)	\pm 1% (0–3 Abs) or \pm 0.003 Abs, which ever is greater					
Precision (405 nm)	$CV \le 0.2\% (0.3-3 \text{ Abs})$					
Measurement speed	6 s, 96-well plate, fast mode					
	12 s, 96-well plate, normal mode					
	11 s, 384-well plate, fast mode					
	33 s, 384-well plate, normal mode					
Optional incubator	Temperature range from ambient + 4°C up to 50°C					
Shaking	Linear shaking with three modes: slow, medium and fast					
Robotic compatibility	Yes					
Display	High contrast color display (480 x 272 dots)					
User interface	Internal software or PC control with Skanlt Software					
Internal memory (standalone)	At least up to 99 assay protocols and 100 test results, 96-well plate					
External printer type	HP PCL5, PCL5e or PCL5c					
Communication	USB for computer connection					
	USB memory stick position for data export					
	USB for external printer					
Mains input	100–240 V (50/60 Hz)					
Power consumption	Max. 100 VA, standby 8 VA					
Overall dimensions (H x W x D)	220 x 290 x 400 mm					
	8.7 x 11.4 x 15.7 in.					
Weight	8.5 kg (18.7 lbs.)					
Conformity to regulations	2006/95/EC (Low Voltage Directive)					
	2004/108/EC (Electromagnetic Compatibility Directive, EMC)					
	FCC Part 15, Subpart B/Class B (July 2004)					
	2002/95/EC RoHS Directive					
	2002/96/EC (Waste of Electrical and Electronic Equipment)					
	98/79/EC (In Vitro Medical Device)*					
PC requirements for Skanlt Software						
Minimum system requirements	Intel [™] Pentium [™] 4 or equivalent, 1 GB RAM, 5 GB free hard disk space, USB port, CD-ROM drive and XVGA monitor					
Operating system	Microsoft [™] Windows [™] XP Pro with SP3 or later, Microsoft Windows Vista [™] with SP2 or later and Microsoft Windows 7					

Ordering Information						
Code	Instrument	Shaking	Incubation	96-well plates	384-well plates	
51119000	Multiskan FC	х		х		
51119010*	Multiskan FC (IVD model)	x		х		
51119100	Multiskan FC with incubator	х	Х	Х	х	

* Not available in North America

thermoscientific.com/platereaders thermoscientific.com/ELISAsolutions

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