Thermo Scientific Multiskan FC Microplate Photometer



Filter-based microplate photometer for research and routine 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 routine applications. It reads both 96- and 384- well plates, and is equipped with shaking as well as incubation capabilities for temperature critical assays. It can be used as a standalone instrument or under PC-control with our intuitive Thermo Scientific Skanlt Software.

Designed with 30 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 kevs' 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 varying 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 dayto-day results through patented optical design and in-built self diagnostics
- Designed with 30 years experience in microplate photometry

Multiskan FC for a wide variety of photometric applications

Multiskan FC is a reliable and robust microplate photometer designed to perform a wide variety of routine and research applications. It brings together 30 years experience of the well known Multiskan product brand, with new features for enhanced usability. The Multiskan FC can be used as a stand-alone instrument or under PC control via our unique and easy-to-use Skanlt Software.

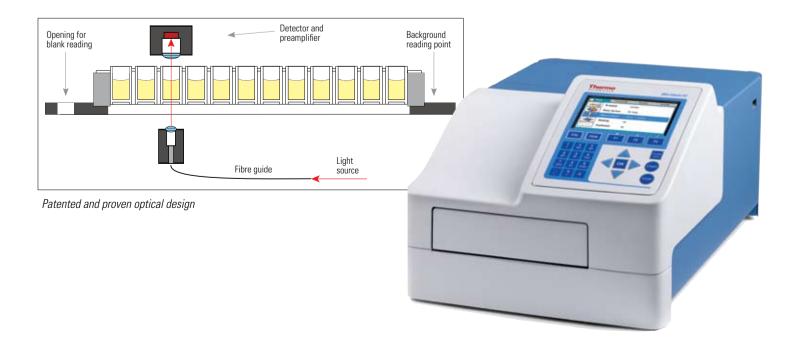
The Multiskan FC boasts a 340 – 850 nm wavelength range, enabling a wide variety of applications from enzyme kinetic studies through to Lowry assays. It is equipped with an eight position filter wheel with three standard filters 405, 450 and 620 nm pre-installed. A comprehensive range of easy to install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

The Multiskan FC offers fast and accurate measurements providing complete 96-well plate reading in less than 6 seconds. Furthermore, the instrument is equipped with linear shaking as standard. Moreover, a model is 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 optical design of the Multiskan FC in combination with the auto-calibration procedure that is performed during each measurement, guarantees stable day-to-day and year-on-year performance and reliability.

During start up 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. Additionally, the lamp is



automatically switched off when not in use, thus prolonging 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 offering flexible data handling capabilities. 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 the Skanlt® Software, makes instrument control and data handling for both research and routine applications easy. 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

the Skanlt Software, basic single, dual- and kinetic measurements are performed quickly with only a few mouse clicks. Furthermore, readymade sessions for many common assays can be downloaded for the Skanlt Software online from the Reading Room (www.thermo.com/readingroom).

Robot compatibility for high throughput environments

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

Multiskan Verification Plate for instrument verification

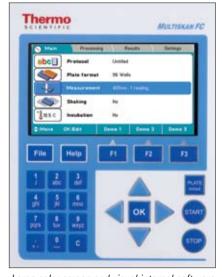
The Multiskan Verification Plate combined with the Skanlt Software verification feature, offers an excellent tool for verifying instrument performance and allows users to prove the integrity and validity of their results. Additionally, the installation, operation and performance qualification (IQ/OQ/PQ)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

Meets RoHS directive

Built using the highest quality components, 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, 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, fast mode 0 – 4 Abs, ± 2%, 96-well plate, normal mode 0 – 2.5 Abs, ± 2%, 384-well plate, fast mode 0 – 3 Abs, ± 2%, 384-well plate, normal mode					
Resolution	0.001 Abs					
Accuracy (405 nm)	± 1% (0.3 – 3 Abs), ± 2% (3 – 4 Abs)					
Precision (405 nm)	CV ≤ 0.2% (0.3 – 3 Abs), CV ≤ 1.0% (3 – 4 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					
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	ca. 210 mm (H) x 290 mm (W) x 400 mm (D)					
Weight	Weight 8.5 kg [18.7 lbs.]					
Safety specifications	Meets the following safety regulations: RoHS (Restriction of Hazardous Substances), CE mark, 2002/96/EC (Waste of Electrical and Electronic Equipment), FCC Part 15, Subpart B/Class B (July 2004)					
PC requirements for Skanlt Software						
Minimum system requirements	IBM® PC compatible computer with Pentium 4, AMD Athlon XP or faster processor. 1 GB RAM, 5 GB free hard disk space, USB, CD-ROM drive, mouse or equivalent, XVGA monitor with 1024 x 768 resolution					
Operating system	Windows® XP Professional with service pack 2 or Windows Vista® 32 or 64 bit Business edition					

Ordering information						
Code	Instrument	Shaking	Incubation	96-well plates	384-well plates	
51119000	Multiskan FC	X		X		
51119100	Multiskan FC with incubator	X	X	X	Х	

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North America: USA/Canada +1 800 522 7763

Europe: Austria +43 1 801 40 0, Belgium +32 2 482 30 30, France +33 2 2803 2180, Germany national toll free 08001-536 376, Germany international +49 6184 90 6940, Italy +39 02 02 95059 434-254-375, Netherlands +31 76 571 4440, Nordic countries +358 9 329 100, Russia/CIS +7 (495) 739 76 41, Spain/Portugal +34 93 223 09 18, Switzerland +41 44 454 12 12, UK/Ireland +44 870 609 9203 **Asia:** China +86 21 6865 4588 or +86 10 8419 3588, India toll free 1800 22 8374 India +91 22 6716 2200, Japan +81 45 453 9220,

Other Asian countries +852 2885 4613 **Countries not listed:** +49 6184 90 6940 or +33 2 2803 2180

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