

**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 stand-alone instrument or under PC-control with our intuitive Thermo Scientific SkanIt 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 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 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 SkanIt 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
- 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 SkanIt Software.

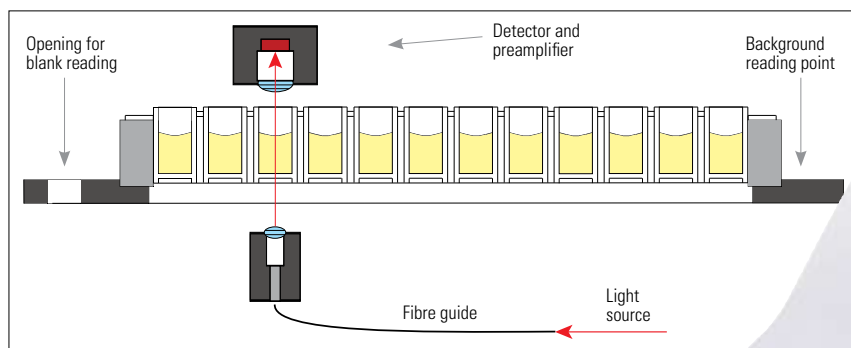
The Multiskan FC boasts a 340 – 850 nm wavelength range, enabling a wide variety of applications from enzyme kinetic studies through to Lowry assays. It is equipped with an eight position filter wheel with three standard filters 405, 450 and 620 nm pre-installed. A comprehensive range of easy to install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



Patented and proven optical design



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 SkanIt Software for optimal computer control

The highly visual and logical user interface of the SkanIt® 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 SkanIt Software trouble-free. Using the ready-made demo sessions in

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

### Robot compatibility for high throughput environments

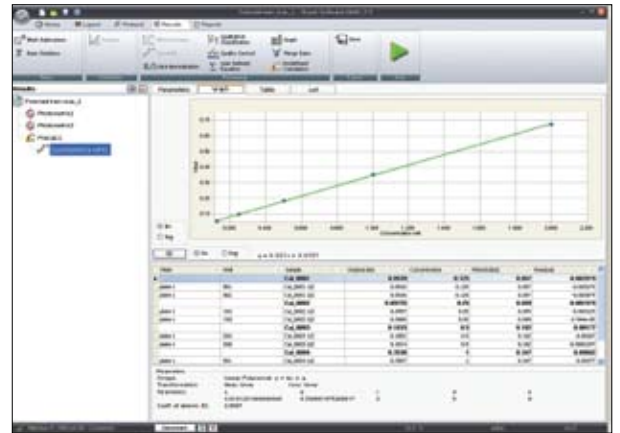
The plate carrier on the Multiskan FC is specially designed for convenient stacker and robot arm access, allowing microplate gripping in both portrait and landscape configurations. Additionally, the SkanIt Software automation interface enables easy integration with robotic software.

### Multiskan Verification Plate for instrument verification

The Multiskan Verification Plate combined with the SkanIt 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 SkanIt 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                   |   |
|--|---|
| <b>Light source</b>                        | Quartz-halogen lamp 6 V / 10 W  |
| <b>Wavelength range</b>                    | 340 – 850 nm  |
| <b>Filters</b>                             | 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.                               |
| <b>Half-bandwidth of filters</b>           | 3 – 9 nm  |
| <b>Read-out range</b>                      | 0 – 6 Abs   |
| <b>Linearity (405 nm)</b>                  | 0 – 3 Abs, ± 2%, 96-well plate, fast mode<br>0 – 4 Abs, ± 2%, 96-well plate, normal mode<br>0 – 2.5 Abs, ± 2%, 384-well plate, fast mode<br>0 – 3 Abs, ± 2%, 384-well plate, normal mode                    |
| <b>Resolution</b>                          | 0.001 Abs   |
| <b>Accuracy (405 nm)</b>                   | ± 1% (0.3 – 3 Abs), ± 2% (3 – 4 Abs)  |
| <b>Precision (405 nm)</b>                  | CV ≤ 0.2% (0.3 – 3 Abs), CV ≤ 1.0% (3 – 4 Abs)  |
| <b>Measurement speed</b>                   | 6 s, 96-well plate, fast mode<br>12 s, 96-well plate, normal mode<br>11 s, 384-well plate, fast mode<br>33 s, 384-well plate, normal mode   |
| <b>Optional incubator</b>                  | Temperature range from ambient + 4° C up to 50° C   |
| <b>Shaking</b>                             | Linear shaking with three modes: slow, medium and fast  |
| <b>Robotic compatibility</b>               | Yes   |
| <b>Display</b>                             | High contrast color display (480 x 272 dots)  |
| <b>User interface</b>                      | Internal software or PC control with SkanIt Software  |
| <b>Internal memory (standalone)</b>        | At least up to 99 assay protocols and 100 test results, 96-well plate   |
| <b>External printer type</b>               | HP PCL5   |
| <b>Communication</b>                       | USB for computer connection<br>USB memory stick position for data export<br>USB for external printer  |
| <b>Mains input</b>                         | 100 – 240 V (50/60 Hz)  |
| <b>Power consumption</b>                   | Max. 100 Va, standby 8 Va   |
| <b>Overall dimensions</b>                  | ca. 210 mm (H) x 290 mm (W) x 400 mm (D)  |
| <b>Weight</b>                              | Weight 8.5 kg [18.7 lbs.]   |
| <b>Safety specifications</b>               | Meets the following safety regulations:<br>RoHS (Restriction of Hazardous Substances), CE mark,<br>2002/96/EC (Waste of Electrical and Electronic Equipment),<br>FCC Part 15, Subpart B/Class B (July 2004) |
| <b>PC requirements for SkanIt Software</b> |   |
| <b>Minimum system requirements</b>         | IBM® PC compatible computer with Pentium 4, AMD Athlon XP or faster processor.<br>1 GB RAM, 5 GB free hard disk space, USB, CD-ROM drive, mouse or equivalent,<br>XVGA monitor with 1024 x 768 resolution   |
| <b>Operating system</b>                    | Windows® XP Professional with service pack 2 or Windows Vista® 32 or 64 bit<br>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              | X               |

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