

Multiskan Ascent®

Multiskan Ascent is capable of reading 96- and 384-well plates with outstanding accuracy, precision, linearity and speed. The ease of robotic integration makes the Multiskan Ascent ideal for high-volume testing.

Class-leading accuracy, precision and linearity

Multiskan Ascent is suited to kinetic and end point measurements in the spectral range of 340 to 850 nm. The patented single channel technology of the Multiskan Ascent ensures excellent precision, accuracy and linearity. With 96-well plates Multiskan Ascent is linear up to 4 absorbance units, and with 384-well plates up to 3 absorbance units, assuring reliable results even from the most highly concentrated samples.

Reliability from well to well, plate to plate

Multiskan Ascent provides very low intra- and interplate variation. Measurements have excellent consistency across all wells, and no bias is observed as a result of curves being set up from different

parts of the plate or between two separate plates. Good correlation is also observed between two different experiments using the same group of compounds (low inter-assay variation).

Ascent Software or internal software

Ascent Software is now supplied free of charge with the purchase of the instrument. The open assay setup and comprehensive data handling of Ascent Software enable various research applications. Please read more about Ascent Software on pages 24–26.

With the internal software, assay programming is made easy by sequential question-and-answer style data entry. For data handling, a wide range of quantitative curve fit types and qualitative cut-off equations are available together with

transformation and extrapolation capabilities. Scaling, validation, quality control and controlled access of the software make the internal software even more functional. Up to 100 assay protocols and 50 assay results can be saved in the internal memory.

Rapid measurements and high-volume testing

It only takes 20 seconds to measure a 384-well plate and only 9 seconds to measure a 96-well plate. Thanks to its simple robotic (or HIS/LIMS) integration, Multiskan Ascent is ideal for high-volume testing. Using automated plate handling devices, walkaway reading capacity can easily be increased.



Optional incubator

An optional incubator can be included for assays requiring temperature control and this can heat samples up to 50°C.

Optional floppy disk station

To facilitate saving protocols or test results, or to transfer them from the internal software to a computer, Multiskan Ascent can include a floppy disk station. Data is stored in ASCII format, and is easily handled in MS Excel, for example.

IQ/OQ/PQ

The instrument qualification IQ/OQ/PQ package is available for the Multiskan Ascent. The package includes the IQ/OQ/PQ Protocol Book and the Verification Plate for performance qualification. For your convenience, the Verification Plate can be ordered as a separate tool. For further information on the features of the IQ/OQ/PQ, see page 52, and for features of the Verification Plate, see page 27.

Multiskan Ascent applications

- immunoassays
- protein assays
- growth curves and hormones
- hybridization assays
- minisequencing assays
- cytotoxicity
- cell proliferation
- cell adhesion
- signal transduction
- enzyme assays
- endotoxins
- antioxidants
- food diagnostics

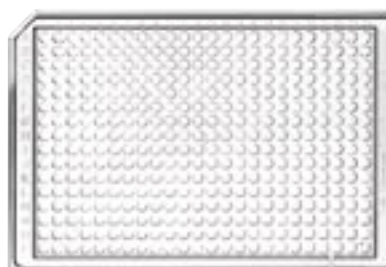
Technical Specifications

Wavelength range	340 nm – 850 nm, 3 filters now free of charge. The filter wheel can hold a maximum of eight filters.*)	
Linearity (96-well plate)	0 – 4 Abs, ± 2% with stepping mode 0 – 3 Abs, ± 2% with stepping mode at 340 nm and 405 nm 0 – 3 Abs, ± 2% with continuous mode	
Linearity (384-well plate)	0 – 3 Abs, ± 2% with stepping mode 0 – 2 Abs, ± 2% with continuous mode	
Read-out range	0 – 6 Abs	
Accuracy	± 1% or 0.003 Abs, whichever is greater (0 – 2 Abs) ± 2% (2 – 3 Abs)	
Precision	CV < 0.2% (0.3 – 3 Abs), CV < 1.0% (3 – 4 Abs) stepping mode CV < 0.2% (0.3 – 2 Abs), CV < 0.4% (2 – 3 Abs) stepping mode, 340 nm CV < 0.3% (0.3 – 2 Abs), CV < 1.0% (2 – 3 Abs) continuous mode CV < 0.3% (0.3 – 2 Abs), CV < 1.5% (2 – 3 Abs) continuous mode, 340 nm	
Resolution	0.001 Abs	
Measurement time	Continuous mode	9 s/96-well plate 20 s/384-well plate
	Stepping mode	14 s/96-well plate 42 s/384-well plate
Light source	Tungsten halogen lamp 6V/10 W	
Filters	Eight-position filter wheel Half bandwidth (HBW) 3 – 9 nm Wavelength accuracy ± 2 nm	
Detector	One silicon photo detector	
Optional incubator	Temperature range ambient +4°C to +50°C Uniformity ± 0.8°C across the plate	
Shaking	Linear shaking, 3 speeds	

*) Filters should be specified when ordering



Multiskan Ascent reads both 96- and 384-well plates.



→ Ordering information on pages 54–55.