Halo LED 96

Microplate Reader

HALO LED 96 is a computer controlled microplate reader for 96 well plates. Easy and safe operation removes the hassle from your daily microplate reading jobs. It is based on the most modern LED technology, no need to worry about lamp replacements anymore.

LED Technology

Instead of lamps and filters, HALO LED 96 is supplied with up to 6 intelligent, wavelength specific LED-plugins (patent pending). Each plugin contains its own digital ID, LED-light source, filter and lenses in one easily exchangeable component.

Low Power Consumption

In times like these, low power consumption must be a key issue with any electrical devices. With a maximum consumption of 12W during reading and a standby consumption of not more than 2W, HALO LED 96 again is setting new standards.

Unrivaled Optical Performance

Using LED's as light source moves all those known problems with halogen lamps used in other readers to history. Modern LED's are known for their high and extremely stable light energy paired with very low energy consumption and no heat development.
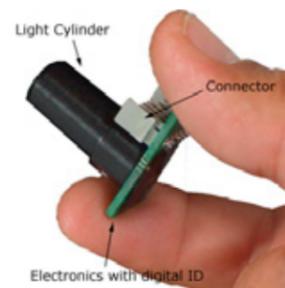
Intelligent LED Plugins

Adding new wavelengths (e.g. 340nm) or exchanging existing ones is as easy and safe as 1-2-3. Auto-recognition of the individual plugins takes away the worry about filter positions in the reader.

Computer Controlled

HALO LED 96 is fully computer control-led. Capture 96 (included) allows plate reading and collecting the raw OD data from the reader. With its clipboard function, it allows raw data to be pasted into any spreadsheet program for further calculations.

MikroWin2010 Compliant

In combination with MikroWin2010 data reduction software (optional), HALO LED 96 adapts itself to any of your requirements for microplate based assays. Depending on your package selection, MikroWin2010 is the best choice for routine applications as well as extended screening, curvefit and kinetic studies.

Light Cylinder
Connector
Electronics with digital ID

HALO LED 96 SPECIFICATIONS	
Plate Types	96 well
Optical system	8 channel Transmission Photometer
Light source	Digital controlled LED lamps, wavelength specific
Photodetector	8 silicon Photodiodes
Wavelength range	340 - 750nm (special wavelengths up to 900nm)
Resolution	0.1 mOD (0.0001 OD)
Indication range	0.000 - 4.000 OD (Abs)
Accuracy	better than ± 1% and ± 0.005 OD up to 2.5 OD (any wavelength)
Linearity	≤ ±0.5% and ± 0.005 OD from 0.1 to 1.5 OD (any wavelength) ≤ ±0.75% from 1.5 to 2.5 OD (400nm – 750nm) ≤ ±0.75% and ± 0.005 OD from 0.1 to 2 OD (340 - 400 nm)
Reproducibility	better than ≤ ±0.3% at 1OD (any wavelength) better than ≤ ±0.5% at 2OD (400-750nm)
Measurement Mode	Single and dual wavelength Linear scan (30 points/well) for agglutination etc.
Reading speed	5 seconds (kinetic interval, single wavelength) 10 seconds (96 well, dual wavelength)
Wavelengths	4 wavelengths onboard (405, 450, 492, 620nm) up to 6 possible (340 - 750)
Shaking	4 speeds
PC-Interface	USB 2.0 (USB 1.1 compatible)
PC Software	Capture96 included MikroWin2010 demo version included
Dimensions	23cm x 12cm x 36cm (W x H x L)
Weight	6.7 kg net
Housing	Anodized Aluminium
Power Supply	external power adapter 100-240V, 50 or 60 Hz (autosensing), 24VDC, 2.5A (approved to EN 60601-1-2, EN 61000-6-3, EN 61000-6-1, EN 60601-1, EN 60950)
Scope of Supply	Power adapter, USB Cable, 4 Standard Filters, User manual (CD), Capture96 Control Software, MikroWin2010 Connect (demo version)

Halo LED 96 Ordering Information

PRODUCT	CATALOG NUMBER#
HALO LED 96 Microplate Reader	WR-302-02
LED plugin (xxx = wavalength in nm)	WR-302-xxx
MikroWin2010 Lite (Screening & Curve Fit, basic functions)	WR-302-03
Mikrowin2010 Full Version 1 (Screening & Curve Fit, extended functions)	WR-302-04
Mikrowin2010 Full Version 2 (Screening & Curve Fit & Kinetic, extended functions)	WR-302-05

For more information on MikroWin2010 and it's features, please visit www.mikrotek.de