

## MICROPLATE READER



- Low power consumption
- Automatic wavelength detection
- Intelligent LED-plugins
- No more lamp replacements
- UV ready (340nm) anytime

## HALO LED 96



- ▶ LED technology
- ▶ Unrivaled optical performance
- ▶ intelligent LED-plugins
- ▶ UV ready (340nm)
- ► Easy and safe operation
- ▶ Computer controlled
- ▶ MikroWin2000 compliant



HALO LED 96 is a computer controlled microplate reader for 96 well plates. Easy and safe operation take away 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 fitted with up to 6 intelligent, wavelength specific LED-plugins (patent pending). Each plugin contains it's 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 at 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. Autorecognition of the individual plugins takes away the worry about filter positions in the reader.

**Computer Controlled:** HALO LED 96 is fully computer controlled. Capture 96 (included) allows to read plates and collect the raw OD data from the reader. With it's clipboard function, it allows to paste raw data into any spreadsheet program for further calculations.

**MikroWin2010 compliant:** In combination with Mikro-Win2010 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.

All these great features combined in one product make our HALO LED 96 the next generation microplate reader of your choice!

Parameter	Value		
Plate Types	96 well		
Optical system	8 channel Transmission Photometer		
Light source	Digital controlled LED lamps, wavele	olled LED lamps, wavelength specific	
Photodetector	8 silicon Photodiodes	otodiodes	
Wavelength range	340 - 750nm (special wavelengths u	750nm (special wavelengths up to 900nm)	
Resolution	0.1 mOD (0.0001 OD)		
Indication range	0.000 - 4.000 OD (Abs)		
Accuracy	better than $\pm$ 1% and $\pm$ 0.005 OD up (any wavelength)		
Linearity	$\leq$ ±0.5% and ± 0.005 0D from 0.1 to (any wavelength) $\leq$ ±0.75% from 1.5 to 2.5 0D (400nr $\leq$ ±0.75% and ± 0.005 0D from 0.1 to (340 - 400 nm)	ngth) om 1.5 to 2.5 OD (400nm – 750nm) nd ± 0.005 OD from 0.1 to 2 OD	
Reproducibility	better than $\leq$ ±0.3% at 10D (any way better than $\leq$ ±0.5% at 20D (400-75	$n \le \pm 0.5\%$ at 20D (400-750nm)	
Measurement Mode	Single and dual wavelength	ual wavelength 30 points/well) for agglutination etc.	
Reading speed	5 seconds (kinetic interval, single wa	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)		
Ordering information	WR-302-02 HALO LED 96 Microp WR-302-xxx LED plugin (xxx = wa WR-302-03 MikroWin2010 Lite	valength in nm	
	Screening&Curve Fit, basic WR-302-04 Mikrowin2010 Full Ve Screening&Curve Fit, exten WR-302-05 Mikrowin2010 Full Ve	ersion 1 ded functions ersion 2	
	Screening&Curve Fit&Kinetin For more information on MikroWin2: features, please visit www.mikrotek.	010 and it's	