

Halo BIOmaster

Spectrophotometer for Life

NEW



Halo BIOmaster allows measurement of nucleic acid concentrations and purity (using ratio function) including protein concentrations. As a high quality spectrophotometer, the Biomaster features touch screen operation packaged as a lightweight system with a compact footprint for life science and education related applications.

Life Science Programs

Halo BIOmaster contains onboard functions for the quantification of nucleic acid, including dsDNA, ssDNA, RNA and Oligonucleotides. The purity of the nucleic acid can also be determined with the ratio A260/A280 calculation. Protein concentrations can be measured from a range of colourimetric assays such as Bradford, Lowry, Biuret and BCA. Standard calibration data and curves can also be displayed. Furthermore, proteins can be quantified at 280nm.

Bacterial cell density at 600nm can also be measured under the OD600 cell culture optical density function. It can define a bacterial culture in exponential growth phase and at the most appropriate time for harvest or induction.

Compact Optics with Full Range Scanning

The single beam optics are compact resulting in significant bench space saving. The long life Xenon lamp optics system in the Biomaster ensures quick and reliable performance.

Color Touch Screen Operation

The intuitive color touch screen provides simple access to an extensive range of function. The touch screen is sensitive to stylus or hands (with and without gloves). Icon driven on board software improves accessibility and the quick action keys are another convenience feature.

Various Measurement Modes

In addition to the Lifescience program, BIOmaster also features

conventional spectrophotometer functions such as single/multiple wavelength analysis, spectrum scanning, kinetics and concentration measurement.

Optional Accessories

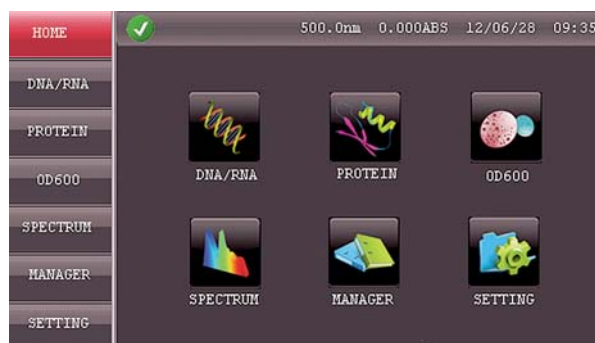
A various selection of accessories include: microcell holder, flow cell with sipper, temperature control holder, long path-length cuvette holder and an automatic multiple cell holder is available to enhance different application needs.

Storage and Data Output

External storage with SD card allows data export to PC in compatible text or spreadsheet format. MasterReport software is available to convert the raw data to an organized data table. Method and result storage is almost unlimited by exchanging the SD card when needed. A printer option is available for direct printing of data and / or graphics. Advanced control, analyses and reporting can be performed with the optional UV Detective software installed on a computer.

Validation Function

To ensure optimum instrument performance, self diagnosis functions are executed with the GLP/GMP wizard for performance validation and auditing.



BIOmaster SPECIFICATIONS	
Wavelength Range	190 to 1000nm
Resolution	1nm
Spectral Bandwidth	5nm
Transmittance Accuracy	±1% T
Transmittance Repeatability	0.50%
Detection Limit Concentration	dsDNA 1.5 - 100µg/ml (for 100µg cell)
Noise	0.004A at 0A at 250nm
Stray Light	<0.5% at 220nm, 340nm, 360nm
Wavelength Accuracy	±2nm
Wavelength Repeatability	1nm
Absorbance	-0.3 to 1.999
Transmittance	0 to 199.9%
Spectrum Scanning	Yes
Concentration	-300 to 1999
Selectable Resolution	1, 0.1, 0.01 or 0.001
Memory	SD card storage
Quantitation	-300 to 1999
Time Scan Display	Graphical and calculated concentration value
Wavelength Scan Analysis	Absorbance and wavelength of peaks and valleys
GLP	Clock and calendar Self diagnosis

Halo BIOmaster Ordering Information

PRODUCT	CATALOG NUMBER#
Halo BIOmaster Life Science Spectrophotometer with 100µg micro cell	BIOM
Test Tube Holder (Tube Diameter : 9-22mm; Height 70-150mm)	XB-10-TTH
Conventional 10mm Cell Holder	XB-10-CCH
Sample Sipper (with 150µl flow cell)	XB-10-SS
Temperature Control Holder (20- 40°C)	XB-10-TCH
Rectangular Long Pathlength Cell Holder (for 10, 20,30, 40, 50, 100mm)	XB-10-RLPH
Automatic 5 Cell Changer	XB-10-A5C
Flow Cell Holder (with 150µl flow cell)	XB-10-FCH
UV detective for XB-10 / VIS-20	UVDS-08-05
Compact Thermal Printer	XB-10-PRINT



Long Pathlength
Cell Holder



Temperature Controlled
Holder



Conventional 10mm
Cell Holder



Sample Sipper



Auto 5 Cell
Changer



Flow Cell
Holder



Test Tube
Holder



Compact Thermal
Printer