

Semi Auto Chemilumi Basic CLIA 2096 plus



CLIA

... is designed to share a common platform with common advantages. Most of the core components in electronics, mechanics and software are identical for this instruments. Similar operation and maintenance within this product family improves efficiency and saves time and costs.

State of the art design

CLIA have been developed by a very experienced team in Europe. Using state of the art technology and more than 20 years of experience in microplate instrumentation the development was focussed on top level performance, cost efficiency and reliability

IVD

CLIA have passed all required tests and reviews, carried out by independent certified bodies, to certify compliance with the relevant directives 98/79/EC (IVD), 2004/108/EC (EMC) and 2006/95/EC (LVD).

No blower – no noise

The extremely low power consumption of the integrated electronics generates no heat. Accordingly no blower is required which makes standby operation absolutely silent. The temperature within the instruments remains at ambient level without any impact on the reaction in the plate.

The closed environment without air circulation in the instrument significantly reduces the entry of dust and other contaminants which impair the performance of the optical system. As a result service requirements and downtime of the instrument in the lab are reduced.

USB and RS232 serial interface

The instruments incorporate both a USB and an RS232 interface to connect the instrument with the computer. This makes sure the instrument can be connected, no matter which interfaces are installed in the PC.

Front Loader - CLIA

The front loading mechanism is designed to support the use of CLIA in a robotic operating environment.

The plate can be easily positioned and accessed. To enable easy and safe loading, the plate is not locked while the plate transport is located in load position and only held in a defined position once the plate carrier moves into the instrument. If a plate is dropped the instrument itself will not be spilled. This reduces service and maintains the value of the instrument. The plate carrier can easily be cleaned and decontaminated in load position.

Accommodates 96- and 48-well microplates

The plate carrier system is designed to accommodate all kinds of 96- and 48-well (4x12) microplates without an additional adaptor required.

CLIA is a state of the art microplate luminometer, designed to meet the demanding requirements of today's microplate based, glow luminescence applications.

Product highlights

High sensitivity 1×10^{-23} mole HRP

... allows detection of lower analyte concentrations, earlier diagnosis of diseases and efficient tracing of treatments.

Large dynamic range 0 to 1.6×10^9 RLU

... significantly increases assay linearity and enables reliable interpretation of very low and very high analyte concentrations in one test run without additional sample dilution.

Flat top surface

... can be used to accommodate other instruments and save valuable space in the lab. The surface can be easily cleaned and decontaminated.

Robotic integration

The accurate front loading mechanism which releases the plate in load position, its compact design and reliability make CLIA the ideal choice for integration into robotic systems.

If necessary the front panel can be easily removed.

OEM

CLIA available as OEM version with customized paint and labeling.

Very low crosstalk

CLIA incorporates a sophisticated, adaptive positioning system, keeping the detector as close as possible above the sample to eliminate instrument related crosstalk and make optimum use of CLIA's high sensitivity and dynamic.

Speed

It takes typically less than 40 seconds to read a 96-well plate at 0.1 sec integration time. With fast Luminol-based reaction systems, high reading speed greatly improves assay precision across a plate.

Specifications CLIA

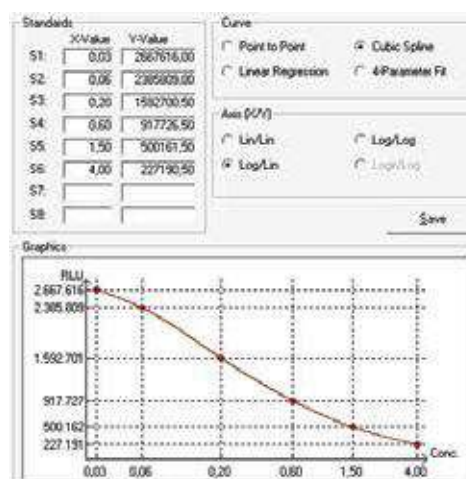
Detection system	Photomultiplier module
Detection mode	Glow luminescence
Spectral Range	300 - 650nm
Dynamic / Indication Range	0 - 1.600.000.000 RLU
Measurement unit	RLU (Relative Light Units)
Sensitivity at 545nm	1 x 10 ⁻²³ mole HRP
Repeatability	< 2%
Crosstalk	< 1 x 10 ⁻⁷ (typical)
Measurement time	typically <40 seconds at 0.1 sec. integration time for a 96-well plate
Integration time	0.1 sec to 10 sec in increments of 0.1sec
Plate types	96-well and 48-well (4x12) micro plates, max. height 15.2 mm
Shaking	3 modes
Dimensions	33.5cm x 20.5cm x 47.0 cm (w x h x l)
Weight	~13.0kg net
Power supply	external
voltage range	100-240V AC ±10%, 47-63Hz
Data connections	Serial Interface RS232 (9-pin), USB 2.0
Environmental conditions	
Operating	Temperature: 10°C to 40°C Humidity: 15%-75% RH non-condensing
Storage	Temperature: -10°C to 50°C Humidity: <95% RH non-con-densing
Scope of supply	Instrument, power supply, power cable, dustcover, serial cable, USB cable, AUTO soft - Autobio Control and Evaluation Software (Windows®) and user manual on CD

AUTOsoft

AUTOsoft control and evaluation software

Autobio considers software used to control the instruments and perform the required evaluation as integral part of an efficient system, focussed on processing the variety of microplate based applications. AUTOsoft – Autobios powerful Windows® control and evaluation software – is designed to perform the vast majority of routine and scientific applications.

AUTOsoft is supplied free of charge with CLIA. Unlike other manufacturers Autobio supplies a powerful evaluation package with the instruments and not just a basic data acquisition program, which has to be upgraded for significant additional costs in order to provide the features required by the user. Standard curves can be stored and used for subsequent test runs as measured or adjusted by single or dual point calibration.



AUTOsoft features and highlights

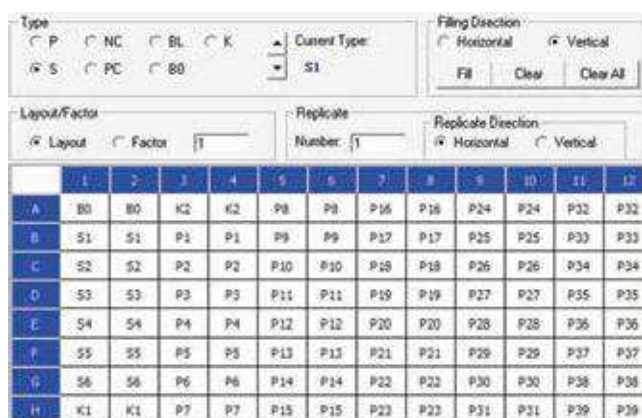
User administration

User Administration with 2 different authorization levels.



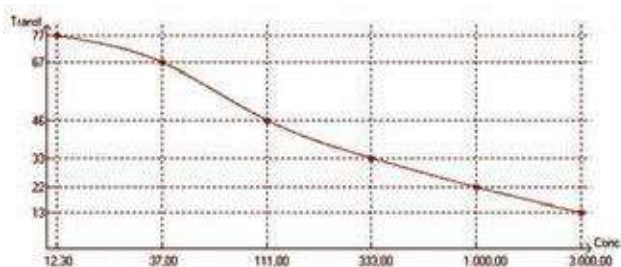
Plate Layouts

... can be defined and saved independent from the test definition using convenient positioning, filling and replicate functions.



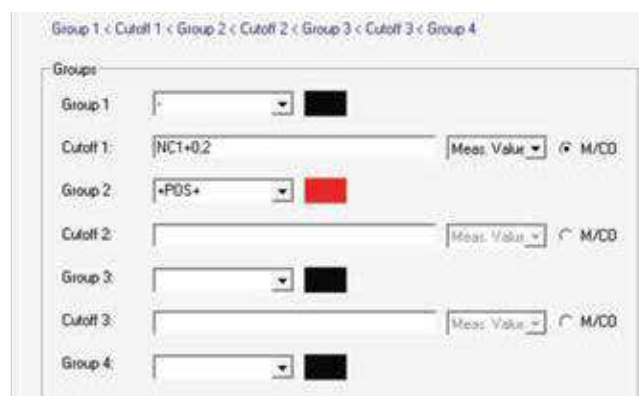
Quantitative evaluation:

Curve fits modes: linear regression, point to point, cubic spline and 4 parameter fit Axis scaling: linear, logarithmic, logit-log axis scaling and extra polation option



Qualitative analysis:

Up to 3 different cut off values can be used to assign samples to up to 4 different ranges. Classification is based on measurement values, concentrations or transformation result. The desired cutoff value can be selected to calculate the ration of cutoff value and measurement values of the samples (M/CO).



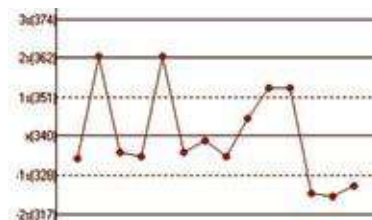
Assay validation:

... to verify correct assay performance can automatically be performed based on formulas defining the required validation criteria.



Internal quality control function

... used to monitor and statistically analyze controls over time and test runs.



Automatic replicate elimination

Based on a formula, outliers of replicated samples can be automatically excluded from further evaluation.

Index	Formula	Base	Min.Repl
1	PC1*0.9<PC1X<PC1*1.1	Meas. Value	1
2		Meas. Value	

Database storage

All data is stored in a database supporting flexible patient data / result management, sample based reporting including recording of external results, flexible export functions, reagent batch management, etc.

Results from CLIA

... are assigned to the corresponding sample IDs. Results of external tests can be added to the sample and printed in a complete sample report.

Multitest and Kindling test

Up to 12 different assays per sample (multitest) or up to 5 subsequently drawn samples of one patient (kindling test) can be processed on one plate.

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.88	7.28	1.18	1.00	11.87	<0.10	2.80	4.71	4.19	1.00	5.90	6.91
B	1.00	1.10	1.05	10.00	106.41	6.99	4.00	3.96	10.00	1.00	1.07	7.92
C	0.70	6.47	1.41	100.00	93.06	24.58	8.00	1.24	2.10	5.00	6.40	8.39
D	10.00	1.61	1.71	1.000.00	25.80	1.34	10.00	4.38	9.75	10.00	3.77	5.75
E	1.79	2.64	1.08	3.79	8.20	100.00	6.17	3.00	5.10	5.29	8.71	6.67
F	1.46	1.76	1.75	1.91	100.00	41.42	10.00	3.41	10.00	6.91	1.37	5.87
G	1.11	4.02	7.89	1.30	48.28	152.41	6.88	3.34	10.00	8.13	9.91	6.78
H	0.45	1.11	8.23	13.98	644.58	281.87	11.71	7.71	3.49	2.41	6.18	5.91

Quick- and scan measurement

... supports raw data acquisition and export for standard OD

Quick Test

Meas. Parameter

☒ Spectrophotometric
 Meas. Filter (nm): 405 Meas. Time (s): 0.1 sec

☐ Photometric
 Ref. Filter (nm): C=0

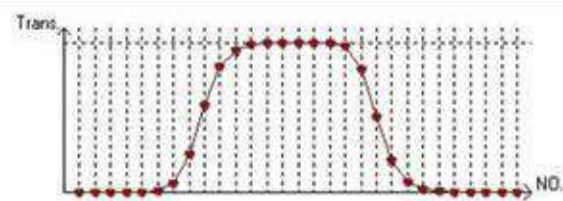
ALL Wells Clear

Select Wells Results Status

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.049	1.466	0.709	1.375	1.069	0.931	0.165	0.074	0.953	1.474	0.954	1.117
B	0.048	1.493	0.702	1.394	1.085	0.946	0.177	0.079	0.973	1.481	0.960	1.121
C	0.374	0.418	0.804	0.758	0.306	1.439	1.360	1.283	0.866	1.027	1.448	0.374
D	0.359	0.912	0.860	0.764	0.308	1.462	1.354	1.295	0.877	1.057	1.492	0.362
E	0.582	0.731	1.233	0.653	1.024	1.176	0.386	1.205	1.474	1.017	1.321	1.275
F	0.592	0.748	1.275	0.653	1.018	1.181	0.400	1.225	1.500	1.047	1.315	1.300
G	0.933	0.229	0.346	0.730	1.465	0.417	0.232	0.476	0.857	0.865	1.364	1.257
H	0.915	0.225	0.356	0.771	1.505	0.439	0.240	0.479	0.881	0.867	1.394	1.264

Start Div Export Exit

and high resolution scan measurements.



Copy/paste and export

... displayed measurement result and sample data to use it in other applications (e. g. Excel™).

Sample IDs and patient data

can either be entered manually, generated automatically, or imported from a file. The corresponding results are displayed together with the sample data or printed in a sample report.

Details		Results	
Sample ID:	0012120011	No.	Test Name
Name (H):	Smith, John	0012120011	Test1
Sex:	Male	0012120011	LDL
Birth Date:	28.07.1963	0012120011	HDL
ID Card:	12345		
Deliver To:	Dr. Carter		
Sample Type:	Plasma		
Sec. Office:	Internal		

Details(0012120011)

Directory

...is used to manage commonly used data and simplify routine data entry.

OEM customization and multilingual user interface

The used interface of AUTOsoft can easily be customized to match the requirements of OEM customers regarding graphics and language.

Included with CLIA

AUTOsoft is included for free with CLIA providing a fully featured system ready to support your work in the laboratory.

▶▶▶ Regulatory compliances



▶▶▶ Corporate Social Responsibility



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2. Improving quality of life by offering YOGA Training courses, Workshops / Seminars etc.

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▶▶▶ Reach us @



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