

HiPo MPP-96, Microplate Photometer


Microplate Photometer HiPo is a compact tabletop device for measuring the results of ELISA and microbiological studies in 96-well microplates. Photometer is controlled and outputs data via computer. An extensive range of additional interference filters is available (with average increment of 10 nm).

The device is supplied with specialized software **QuantAssay**. Features of **QuantAssay** software:

- ELISA assays of any complexity can be carried out via robust assay editor with help of Assay Wizard
- Quantitative assay includes up to 20 standards
- Avidity/Affinity assays
- Multiplex assays with up to 7 assays on one plate
- Qualitative assay includes up to 11 controls
- BestFit function for selecting the best calibration curve
- User friendly interface: get your results in 3 clicks
- Save, load and export results
- Creates visual reports
- Save, load and export results
- Creates visual reports

NEW PRODUCT



 Product video is available on the website



SPECIFICATIONS

Detection mode	Absorbance
Light source	LED, self-calibrating
Photodetector	8 silicon photodiodes
Plate type	96-well microplates (including strip-well microplates)
Reading Speed	5 - 8 s per wavelength
Measurement modes	Endpoint
Measurement channels	8
Reference channel	1
Measurement range	0 – 4.3 OD
Resolution	0.001 OD
Wavelength range	400 – 700 nm
Wavelength selection	up to 8* filters on wheel standard filters 405, 450, 492 and 620 nm
Shaking	4 amplitudes, 4 speeds
Software	QuantAssay
PC system requirements	Intel/AMD Processor, 1 GB RAM, Windows Vista/7/8, USB
Overall dimensions (W×D×H)	140 × 300 × 130 mm
Weight	4.6 kg
External power supply	Input AC 100–240 V 50/60 Hz, Output DC 12 V

* — It is possible to install up to 4 additional filters on request. Additional filters are available in two specifications: optical absorption not less than 3.5 OD or 4.3 OD

 **ORDERING INFORMATION:** Cat. number

HiPo MPP-96 BS-050108-A02

Optional accessories:

OD Plate, Verification tool BS-050108-AK

Additional filters* On request

Accuracy (405, 450, 492, 620 nm)

0.000 – 2.000 OD ≤ (0.5 % ± 0.010 OD) typical

2.000 – 3.000 OD ≤ (1 % ± 0.010 OD) typical

Precision / Reproducibility (405, 450, 492, 620 nm)

0.000 – 2.000 OD ≤ (0.5 % ± 0.005 OD)

2.000 – 3.000 OD ≤ (1.0 % ± 0.005 OD)



Quant Assay, Software for MPP-96



Software video is available on the website

ELISA assays of any complexity can be carried out via robust assay editor with help of Assay Wizard:

Measurement options

Assay name:
Assay Name (28.06 11:38:27)

Assay type

Quantitative Qualitative Avidity Multiplex

Pos. control count
Neg. control count
Group count
Standards count

Wavelength

405 nm 450 nm 490 nm 520 nm

Channel 1
Channel 2
Channel 3
Channel 4

Description

Form

Qualitative assay includes up to 11 controls;
Results can be outputted as Positive/Negative or Positive/Gray Zone/Negative;
Gray zone can be set as symmetric and non-symmetric;
Positivity ratio can be outputted

Choose Results types for Qualitative Assay



Positive / Negative

Positive / Gray Zone / Negative

Avidity/Affinity results be outputted as Positive/Negative or Positive/Gray Zone/Negative;
Avidity index margins can be easily set;
Avidity Index can be outputted

Margin Result

If AI < 0.30 +

If AI >= 0.30 and 0.50 < ++

If AI >= 0.50 +++

User friendly interface: get your results in 3 clicks:

Choose an assay, a template and press Play

Choose an assay

Quantitative ▶

Choose a Template

Usual template ▶

Save, load and export results

Creates reports: Excel, PDF, CSV



Quantitative assay includes up to 20 standards;
User can choose Standard/Reverse type of curves

Choose a type of Quantitative Assay

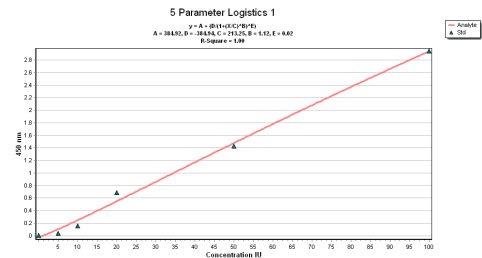


Quantitative Standard (OD directly proportional to the conc.)

Quantitative Reverse (OD inversely proportional to the conc.)

BestFit function for selecting the best calibration curve from following models:

4/5 Parameters logistics, Piece-wise linear, Linear, Index/Logarithm/Exponent regression models



Install up to 7 assays on one plate by using multiplex

	1	2	3	4	5	6	7
A	Smp1	Smp1	Smp1	Smp1	Smp1	Smp1	Smp1
	0	1	2	3	4	5	6
B	Smp2	Smp2	Smp2	Smp2	Smp2	Smp2	Smp2
	0	1	2	3	4	5	6
C	Smp3	Smp3	Smp3	Smp3	Smp3	Smp3	Smp3
	0	1	2	3	4	5	6

Easy fill of the samples

Name Smp 2 x Test Bkg P₁ N₁ x Std X

Group 2 Reset

	1	2	3	4	5	6	7	8	9
A	Smp1	Smp1							
	0.008	0.008	1.296	1.368	1.915	1.814	1.581	1.633	2.592

PDF report contains: Experiment information, Results table, List of variables and it's calculations, Interpretation parameters

Cell	Type	Sample Name	AM	Group	OD 490 nm	Result 1	Result 2	Mean Concentration	Calculated Concentration	Mean (CO)	Standard Deviation (SD)	Coefficient of Variation (CV)
A1	S0	Snd S0		0.008	OK			0.0	1.24 IU	1.24 IU	0.008	0.000
A2	S0	Snd S0		0.008	OK			0.0	1.24 IU	1.24 IU	0.008	0.000
A3	S1	Smp1	1	1.296	In Range			45.21 IU	44.05 IU	1.332	0.036	2.70%
A4	T1	Smp1	1	1.368	In Range			45.21 IU	46.38 IU	1.332	0.036	2.70%
A5	T9	Smp9	9	1.915	In Range			62.62 IU	60.30 IU	1.965	0.051	2.71%
A6	T9	Smp9	9	1.814	In Range			62.62 IU	60.95 IU	1.965	0.051	2.71%
A7	T17	Smp17	17	1.581	In Range			54.14 IU	53.20 IU	1.607	0.026	1.62%
A8	T17	Smp17	17	1.633	In Range			54.14 IU	56.99 IU	1.607	0.026	1.62%
A9	T25	Smp25	25	2.592	Out of Range			119.57 IU	87.51 IU	3.456	0.864	25.00%
A10	T25	Smp25	25	2.633	Out of Range			119.57 IU	105.58 IU	3.456	0.864	25.00%
A11	T33	Smp33	33	0.910	In Range			28.47 IU	28.47 IU	0.910	0.000	0.00%
A12	T33	Smp33	33	0.910	In Range			28.47 IU	28.47 IU	0.910	0.000	0.00%
B1	S1	Snd S1		0.008	OK	5.0		2.48 IU	2.48 IU	0.008	0.000	0.00%
B2	S1	Snd S1		0.008	OK	5.0		2.48 IU	2.48 IU	0.008	0.000	0.00%
B3	T2	Smp2	2	1.080	In Range			38.09 IU	37.32 IU	1.110	0.030	2.70%
B4	T2	Smp2	2	1.140	In Range			38.09 IU	39.04 IU	1.110	0.030	2.70%
B5	T10	Smp10	10	1.556	In Range			52.41 IU	53.78 IU	1.554	0.042	2.70%
B6	T10	Smp10	10	1.512	In Range			52.41 IU	51.04 IU	1.554	0.042	2.70%
B7	T18	Smp18	18	1.318	In Range			45.46 IU	44.78 IU	1.340	0.022	1.61%
B8	T18	Smp18	18	1.361	In Range			45.46 IU	45.15 IU	1.340	0.022	1.61%
B9	T26	Smp26	26	2.100	In Range			97.84 IU	72.54 IU	2.880	0.720	25.00%
B10	T26	Smp26	26	3.000	In Range			97.84 IU	125.20 IU	2.880	0.720	25.00%
B11	T34	Smp34	34	0.700	In Range			27.83 IU	27.83 IU	0.700	0.000	0.00%
B12	T34	Smp34	34	0.700	In Range			27.83 IU	27.83 IU	0.700	0.000	0.00%
C1	S2	Snd S2		0.160	OK	10.0		7.01 IU	7.01 IU	0.160	0.000	0.00%
C2	S2	Snd S2		0.160	OK	10.0		7.01 IU	7.01 IU	0.160	0.000	0.00%
C3	T3	Smp3	3	0.900	In Range			32.15 IU	31.36 IU	0.920	0.020	2.70%

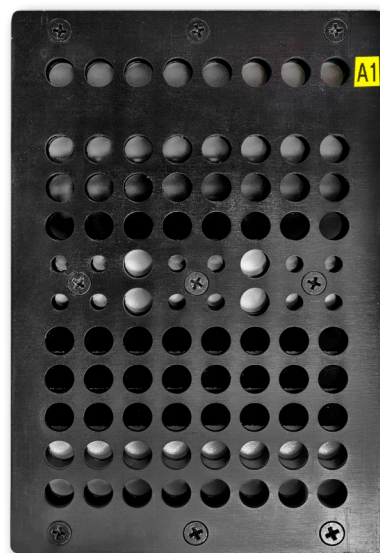
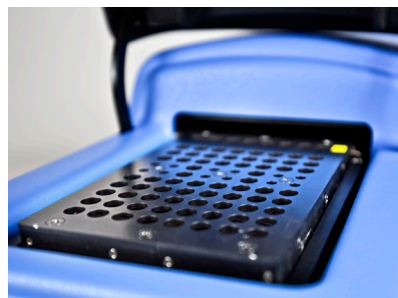
OD Plate, verification instrument for MPP-96 HiPo



OD Plate is the quality verification instrument for microplate photometer MPP-96 HiPo. The instrument is designed to verify the accuracy and precision of measurements of the photometer at 6 levels of optical density: 0.3; 0.6; 1.0; 2.0; 3.0; 4.0 OD. The instrument is supplied with the following verification wavelengths: 405, 450, 492, 540, 570, 620 and 650 nm. Additional verification wavelengths are available in the range from 400 to 700 nm.

Instrument is provided in a shockproof container with an USB flash drive containing:

- Copy of measurement results in an accredited laboratory
- User manual



Optical density levels	0.3; 0.6; 1.0; 2.0; 3.0; 4.0 OD
Available verification wavelengths range	400 – 700 nm
Standard verification wavelengths	405, 450, 492, 540, 570, 620, 650 nm
Instrument dimensions	128 × 86 × 12 mm
Net weight	0.2 kg

 **ORDERING INFORMATION:** Cat. number
OD Plate, Verification tool BS-050108-AK