Fully Automated ELISA Analyzer

- > Optimised for medium throughput segment
- > Up to 3 plates simultaneously
- > 180 HUMAN/IMTEC ELISA tests available*
- > Engineered and manufactured in Germany and Switzerland

ELISA



* IMTEC tests in Q1 | 2010



Diagnostics Worldwide

Compact Advanced Fully Automated ELISA Analyzer

New generation of ELISA analyzer

- > Advanced technology
- > Optimized for routine

Convincing performance

- > Built-in-PC and touchscreen
- > Open system
- > Up to 3 plates can be loaded
- > Up to 8 different tests on one plate
- > Continuous loading of samples, reagents and plates
- > Sample and reagent barcode reader in-build
- > True walk away system

Easy and safe operation

- > Operation software windows
- > Barcode identification for samples and reagents
- > All HUMAN and IMTEC methods are preprogrammed
- > HUMAN tests specific racks
- > Direct use of HUMAN/IMTEC kit components
- > Disposable carbon tips
- > No carry over

High processing security

- > Event log documentation
- > Password protection on several levels
- > QC control program
- > In-process-control features

Flexible easy to use software

- > Graphical interface
- > Time management
- > ASTM interface (bidirectional)





- > 144 samples & reagents
- > Primary samples
- > Barcode reading
- > Use of original kit bottles



High precision and safety

> Disposable tips



Event log documentation

- Run-specific information about hardware, software and assay processing
- Optional printout thogether with the results

Self-explanatory structure

- Permantly graphical update about the assay status and reagent allocation
- Simple access and controlling via icons





300 µl disposable tips 1100 µl disposable tips Cat. No. 17200 Cat. No. 16300/10 Cat. No. 16300/11

Technical Data

2 plate fully automated ELISA analyzer

Number of plates	up to 3 plates	
Number of samples	max. of 144	
Number of reagents	depending on rack configuration	
Controls & standarts	depending on rack configuration	
Dilution area	for up to 192 dilution positions	
	(2 x 96 Deep well plate)	
Number of tips	up to 3 tip racks for 300 µl	
	or 1100 µl disposable tips	
Loading	continuous loading of plates, samples	
0	and reagents	

Photometer

Spectral range	400 – 700 nm	
Dynamic range	-0.100 to 3.000 OD	
	(measurement range 1 wavelenght)	
	-3.000 to + 3.000 OD	
	(measurement range 2 wavelenghts)	
Accuracy	+/- 0.005 OD or 2.5 % (whichever is	
	greater)	
Linearity	0 – 2.000 OD +/– 1 %	
Detection	photodiode	
Read modes	OD	
Filters	up to 8 positions	

Pipetting system

Pipettor	Liquid pipettor for disposable tips	
Liquid level detection	standard (capacitive)	
Min/Max volumes	10 µl to 300 µl (with 300 µl tip) or	
	301 to 1000 µl (with 1100 µl tip)	
Processing time	patient samples (100 µl/well)	
	appr. 16 min. for 96 positions	
	reagent (100 µl/well)	
	appr. 4 min. for 96 positions	
Accuracy	< 10 % at 20 µl, < 5 % at 100 µl	
Precision	6 % at 20 µl, 3 % at 100 µl	
Features	tip detection, mixing, multi-dispensing	

Incubation

Capacity	2 independently controlled chambers,	
	1 ambient	
Temperature range	ambient +5 to 45 °C	
Accuracy	–2 °C; +0° C (measured in plate, 200 μl	
Uniformity	+/– 1.5°C (measured in plate, 200 µl	
	aqua)	
· · · · · · · · · · · · · · · · · · ·	–2 °C; +0° C (measured in plate, 200 μ +/– 1.5°C (measured in plate, 200 μl	

Washing

vva:	sning	
	Capacity	up to 3 buffers. 2 x 2 l bottles, 1 x 1 l
		bottel
	Wash head	1 x 8
	Dispense volume	200 – 999 µl /well
	Precision	10 % CV at 300 µl
	Residual volume	< 3 µl in U Bottom
		< 6 µl in F Bottom
	Fluid alarms	low reagent, waste full
	Features	sweeps, soak, purge, top & bottom,
		wash, variable pump speeds, Plate &
		Strip mode
Oth	ers	
	Barcode	Samples and in rack system
	Plate barcode reader	(optional)
	Operating system	Windows XP
	Interfaces	ASTM interface
ASC	II import of worklist s	ample ID's
	Time Scheduling	schedules 3 plates
	Multiple assays per plate	up to 8 assays per plate
	Export options	ASCII export/report
	Qualitative	user definable result classes
	Quantitative	linear to quadratic regression,
		sigma, and many more
	QA analysis	Mean, SD, CV, Standard Error
		and Levey-Jennings (basic version)
Pow	er supply	
	Universal AC input	wide range AC 50/60 Hz,
		~100-240V+/-10%
		typically Max 240 VA
.		
Jim	ensions	
	Packaging	97 (W) x 82 (D) x 75 (H) cm
	Installed	120 (W) x 66 (D) x 110 (H) cm
		(with bottlle tray and open cover)
	Weight	90 kg
Envi	romental conditions	
	Temperature	operating: 15 – 30 °C
	peratare	transport: 5 – 50 °C
	Humidity	operating: 30 – 80 % non condensing
	inamoney	transport: 10 – 85 % non-condensing
		and port to by whom-condensing



Diagnostics Worldwide

HUMAN Gesellschaft für Biochemica und Diagnostica mbH Max-Planck-Ring 21 · 65205 Wiesbaden · Germany Tel. +49 6122-9988-0 · Fax +49 6122-9988-100 · e-mail: human@human.de · www.human.de