Elisys Duo
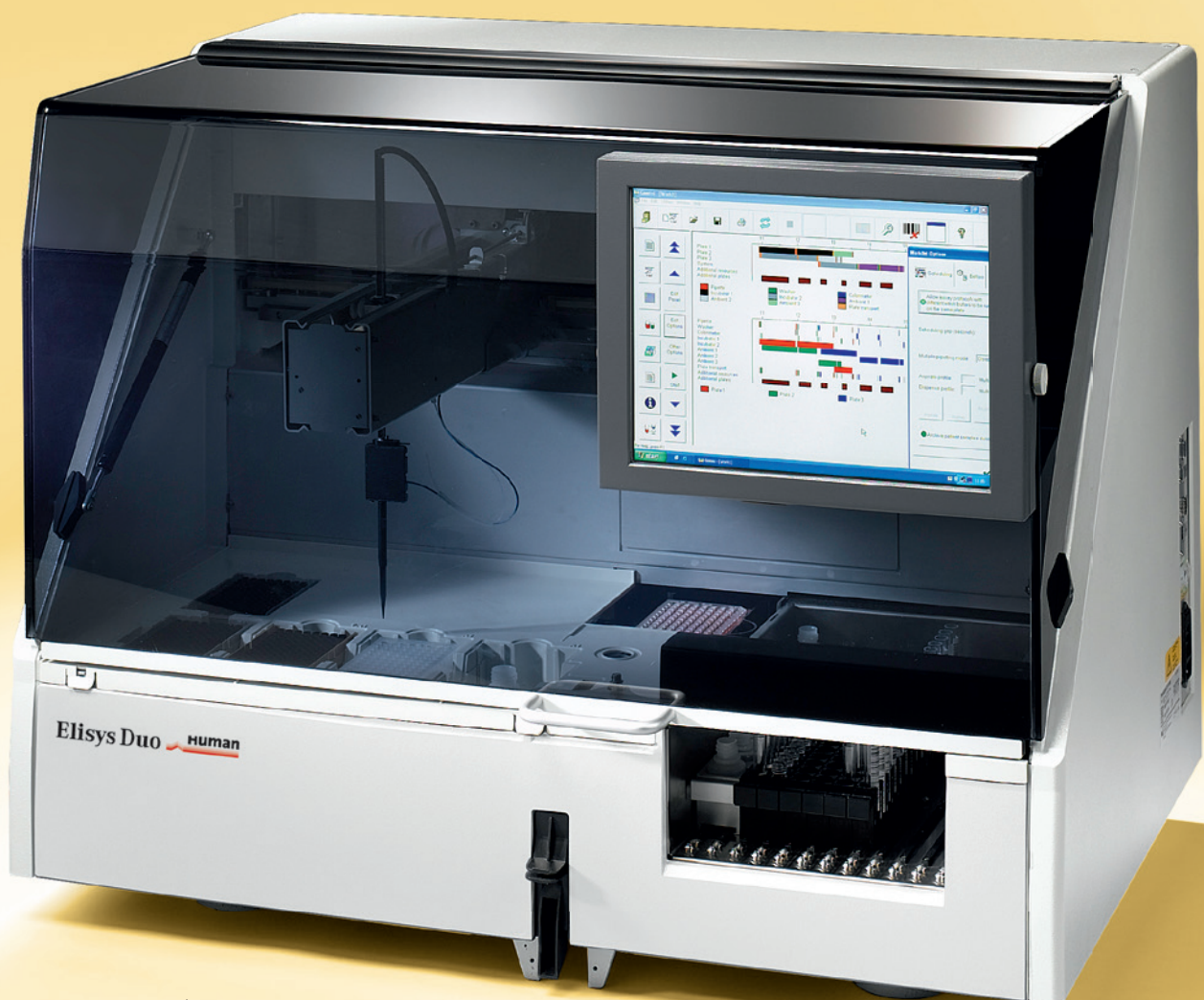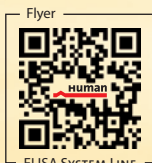
Fully Automated ELISA Analyzer

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

ELISA

Human
Diagnostics Worldwide

Elisys Duo

Compact Advanced Fully Automated ELISA Analyzer
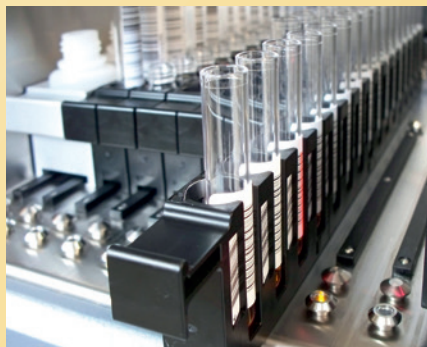
New generation of ELISA analyzer

> **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
> Build-in sample and reagent barcode reader
> True walk away system
> Incubation / shaking

High-capacity software

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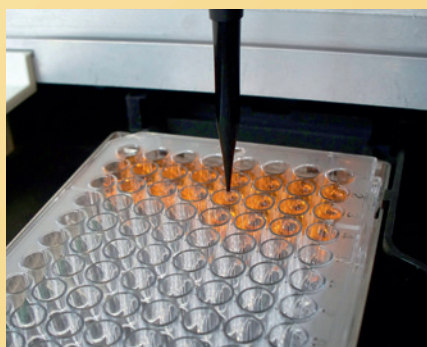> Barcode reading
> Use of original kit bottles

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 precision and safety

> Disposable tips

High processing security

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

Event log documentation

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

Flexible easy-to-use software

> Graphical interface
> Time management
> ASTM interface (bidirectional)
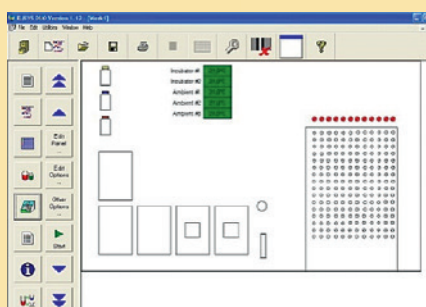
Self-explanatory structure

> Permanent graphical update about assay status and reagent allocation
> Simple access and controlling via icons

Elisys Duo

Dilution in deep-well plates (192 positions)

2 incubators (temperatures up to 45 °C)

2 wash buffers

	14	15	16
TPO Ab			
TSH			
TRAb			
System			
Additional resources			
Additional plates			

■ Pipette	■ Washer	■ Colorimeter
■ Incubator 1	■ Incubator 2	■ Ambient 1
■ Ambient 2	■ Ambient 3	■ Plate transport
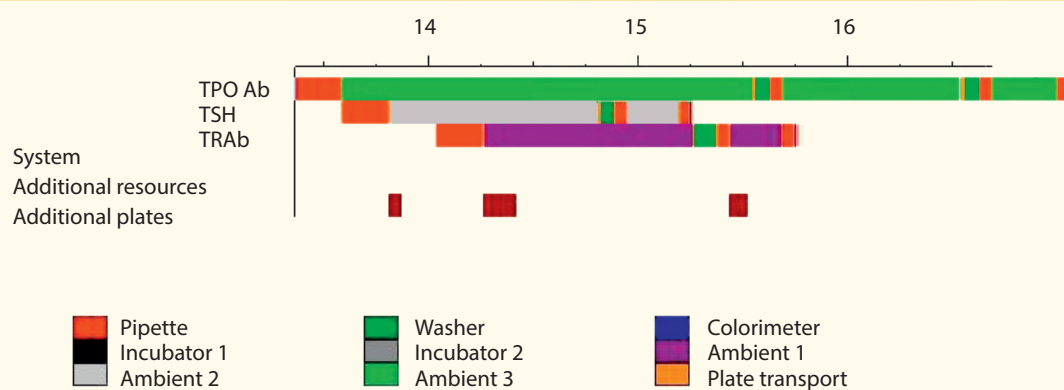
Time management

> Real-time-mode display

> Processing time optimizer

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

Elisys Duo

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 & standard	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 and reagents

Photometer

Spectral range	400 – 700 nm
Dynamic range	−0.100 to +3.000 OD (measurement range 1 wavelength) −3.000 to +3.000 OD (measurement range 2 wavelengths)
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 µl 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)

Washing

Capacity	up to 3 buffers. 2 x 2 l bottles, 1 x 1 l bottle
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	Sweep, soak, purge, top & bottom, wash, variable pump speeds, Plate & Strip mode

Others

Barcode	Samples and in rack system
Plate barcode reader	(optional)
Operating system	Windows XP
Interfaces	ASTM interface

ASCII import of worklist sample 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)

Power supply

Universal AC input	wide range AC 50/60 Hz, ~100 – 240 V ±10 % typically Max 240 VA

Dimensions

Packaging	97 cm (W) x 82 cm (D) x 75 cm (H)
Installed	120 cm (W) x 66 cm (D) x 110 cm (H) (with bottle tray and open cover)
Weight	90 kg

Environmental conditions

Temperature	operating: 15 – 30 °C transport: 5 – 50 °C
Humidity	operating: 30 – 80 % non-condensing transport: 10 – 85 % non-condensing

HUMAN

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