

# HumaLyzer 4000

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### System Overview

REF	18250
Analyzer type	Semi-automatic photometer
Reagent system	Open (Human methods pre-installed)
Reaction / reading system	Flow cell 34 µl or Cuvette (macro or semi-micro)
Languages available	English French Spanish
User interface	Color LCD 640 x 480 Touchscreen

# HumaLyzer 4000

## Semi-Automatic Microprocessor Controlled Photometer

Tests	Measuring modes	Photometry (colorimetry, UV-tests, turbidimetry)
	Analysis modes	End point
		Fixed time
		Kinetic
		Absorbance
	Calibration modes	Factor , 1-point and multi-point
	Calculation algorithms	Linear and poly-linear regression
	# of standards per test	Up to 8
	# of programmable tests	144

Sample / Control / Calibrator Handling	Sample type	Serum, plasma, urine, CSF, whole blood, others
	Sample vessels	All vessels using the aspiration through flow cell
		Semi-micro or macro cuvette replacing the flow cell
	Pre-Dilution	Manual
	Post-Dilution	Manual, automatic calculation

Liquid Handling	Liquid transportation	Peristaltic pump
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Reaction unit / Incubation	Positions for incubation	10 round positions (13 mm diameter)
		2 square positions (11 x 11 mm)
	Reaction volume (minimum)	200 µl (450 µl recommended)
	Reaction volume (maximum)	999 µl
	Incubation temperature	25, 30 and 37°C
	Incubation time	5-3600 s (in flow cell)

## Reading

Optical system	Interference filters
Readings	Mono- or bichromatic
Light source	Halogen lamp ( 5 W )
Spectral range	340 - 750 nm
Half bandwidth	8 ± 2 nm (10 ± 2 nm at 340 nm)
Wavelengths pre-installed	340, 405, 505, 546, 578, 620, 700, 750 nm
Max. # of wavelengths installed	8
Wavelength error (accuracy)	± 2 nm
Detector	Measurement and reference detector
Absorbance range (linearity)	0.01- 2.5 OD
Resolution detector	0.001 displayed
Abs drift	≤ 0.003/h

## Data processing

Memory for	QC, samples, calibrations, reaction curve
Memory capacity	10,000 results in searchable database + 8 GB SD-card
Reports for	Standard printout, QC, sample results, patient, calibration
Quality control module	Mean, SD, CV, Levey Jennings
Max. number of control levels	Up to 4 levels per test
Warnings	Normal range, QC status
Printer	Internal thermal printer
LIS	RJ-45 LAN (with proprietary protocol), uni-directional

## General

PC min. requirements	Not required, remote access via LAN	
Physical dimensions (W x D x H)	Instrument without any components:	31 x 37 x 19 cm
	Space required for routine use:	75 x 80 x 50 cm
	Packaging:	40 x 59 x 34 cm
	Weight:	Gross: 8.1 kg, net: 4.3 kg
Electrical requirements	110...240 VAC, 50-60 Hz, < 90VA (17W average)	
Environmental	Operating: temperature 15...32°C, humidity ≤ 85% non condensing	
	Transport: temperature 2...50°C, humidity ≤ 85% non-condensing	
Wash / waste tank	Waste tank included (500 ml)	

# HumaLyzer 4000

## Accessories & Consumables

Scope of Supply	Quantity	REF
HumaLyzer 4000	1	18250
Dust Cover	1	-----
Flow Cell (built-in)	1	-----
Halogen Lamp (built-in)	1	-----
Power Supply	1	-----
Thermal Printer Paper (1 Roll)	1	-----
User Manual	1	18250/1
Waste Bottle	1	-----
SD-card (built-in)	1	-----
Printer Paper Cover	1	-----
Lamp Replacement Tool	1	-----
Touch Pen	1	-----

### Accessories

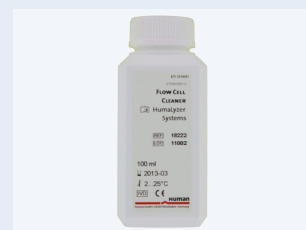
	REF
HumaCube 230 VAC (incubator)	17050
HumaCube 110 VAC (incubator)	17070

### Consumables

	Unit/Size	REF
Disposable Macro Cuvettes	1000 pcs	18052
Flow Cell Cleaner	100 ml	18222
Thermal Printer Paper	5 pcs	18144/5
Halogen Lamp	1 pc	18250/50
Peristaltic Pump Tube	2 pcs	18250/51
Dust Filter	12 pcs	18250/53
Reaction tubes 12 x 85 mm	1,000 pcs	16890/30



Disposable Macro Cuvettes  
REF 18052



Flow Cell Cleaner  
REF 18222



HumaCube  
REF 17050

### Legal statement

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