HumaReader HS

- System Specifications
- Accessories

System Overview

REF	16670
Analyzer type	1 plate ELISA reader
Reagent system	Open (Human tests predefined)
Throughput	1 plate /run
Reaction / reading system	96 well microtiterplate
Operation mode	Batch
Languages software	English, Russian, Spanish
Languages manuals	English, Spanish

Tests

Measuring modes	EIA photometric
Analysis modes	Endpoint
Calculation modes	Qualitative: cut-off Quantitative: absorbance calculation
Calculation algorithms	ABS, Single standard, point to point, kinetic, %ABS, linear regression, exponent regression, logarithm regression, power regression, cubic spline, 4 PL
# of programmable tests	Unlimited
# of programmable profils	Unlimited
# of standards per test	Up to 8 standards / 5NC / 5 PC / 5 QC

HumaReader HS

Semi-automatic, microprocessor-controlled photometer

Reaction unit/ Incubation

Capacity:	1 plate
Mixing capability:	Yes
Incubation temperature:	Ambient
Accuracy:	-
Uniformity:	-
Incubation time:	1-60 sec. mixing

Reading

Optical system	Filterwheel, continuously rotating
Readings	Single or double-wavelength simultaneous reading
Light source:	Halogen 6.5 V / 19 W or 8 V / 50 W 1 minute warm up Life expectancy 2500 h
Spectral range:	400 - 900 nm
Wavelengths filters pre-installed:	405, 450, 492, 630 nm
Max. # of wavelength filters installed	8
Read time (96 samples) Dual Wavelength:	Continuous mode < 5 sec., step by step mode < 15 sec.
Read time (96 samples) Single Wavelength:	Continuous mode < 5 sec., step by step mode < 15 sec.
Dynamic range (measurement range):	0 - 3.5 A (0 - 2,0 A)
Accuracy:	0 - 2.0 A : ± 1.0 % or ± 0.007 A
Precision	0 - 2.0 A : ± 0.5 % or ± 0.005 A
Detector	Photodiode detection
Linearity:	0 - 2.0 A ± 2.0 % or ± 0.007 A

Data Processing

Interfaces:	RS-232C serial interface, 2 x USB interface, 1x SD card slot
LIS/LIMS:	Prepared
Multiple assays per plate	1 assay per plate
Quality control module	QC are marked, but no rating
Report for	Patient, programs (Test)
Memory capacity	1000 patients and 10000 sample records
# of programmable tests	200 tests
User interface	5.7 LCD display (320 × 240 discernibility, 256 gray scale) Touch panel and pen, external mouse
Supported operating system	Windows CE based
Supported printers	Every printer with 5E protocol as, PCL Laser series (e.g. HP LaserJet 1022, P1007, P2014, 1160, P2035, Kyocera Mita FS-1320D) EPSON ME 1+

General

Physical dimensions (W x L x H)	Instrument without any components:	46 x 34 x 23 cm
	Space required for routine use:	46 x 40 x 35 cm
	Packaging:	64.5 x 43.5 x 31 cm
	Weight:	Gross: 9.6 kg, net: 7.0 kg
Electrical requirements	110...250 VAC, 50/60 Hz, 120 VA	
Environmental	Operating: temperature 10...40°C, humidity 20...85% non condensing	
	Transport: temperature 20…50°C, humidity < 93% non condensing	

Accessories

Additional Accessories	REF
PC Mouse with USB	16670/491
Laser Printer HP	18993L
Spare Lamp (until SN 450381)	16670/101
Spare Lamp (from SN 450382)	16670/102
Printer Cable	16670/50
Filter Optical 412 nm*	16670/51
Filter Optical 420 nm*	16670/52
Filter Optical 490 nm*	16670/53
Filter Optical 505 nm*	16670/54
Filter Optical 520 nm*	16670/55
Filter Optical 540 nm*	16670/56
Filter Optical 545 nm*	16670/58
Filter Optical 546 nm*	16670/59
Filter Optical 550 nm*	16670/57
Filter Optical 570 nm*	16670/63
Filter Optical 578 nm*	16670/60
Filter Optical 590 nm*	16670/62
Filter Optical 595 nm*	16670/61
Filter Optical 600 nm*	16670/67
Filter Optical 650 nm*	16670/65
Filter Optical 655 nm*	16670/66
Filter Optical 690 nm*	16670/64
Filter Optical 700 nm*	16670/68
Filter Optical 750 nm*	16670/69

* Spare Part - Set attenuation glasses REF 16670/82 must be ordered separatly

Scope of Supply	*Quantity*	REF
Panel pen	*1*	16670/40
Dust Cover	*1*	----------
Printer Cable	*1*	16670/50
Spare Lamp (from SN 450382)	*1*	16670/102
Power Cable	*1*	18999
Power Safety Socket	*1*	18969
Adapter EU to USA	*1*	18967
Adapter EU to UK	*1*	18968
RS-232 Serial Cable	*1*	16670/43
Fuses	*2*	16670/38
USB Mouse	*1*	----------
Operator's Manual	*1*	16670/1

Spare Lamp
REF 16670/102

Filter Optical 412 nm
REF 16670/51

Filter Optical 550 nm
REF 16670/57

Filter Optical 700 nm
REF 16670/68

Human

Diagnostics Worldwide