

HumaLyzer 4000

A pioneer in the field of clinical chemistry photometers

- › Reliable German engineering and manufacturing
- › More than 50 validated settings for HUMAN reagents
- › High precision with reference channel optics

Clinical Chemistry



Human

Diagnostics Worldwide

HumaLyzer 4000

Setting new standards for semi-automated photometers

The HumaLyzer 4000 was developed together with our affiliated company LABiTec® in accordance with strict European IVD standards. The device is manufactured in Germany and has been successfully deployed in more than 70 different countries worldwide.



Smart hardware solutions

- > Large touch screen
- > Low energy consumption
- > Lamp save mode – warm-up within seconds
- > Built-in incubator block
10 round and 2 square positions

Excellent data handling

- > Data management via onboard results, database, LIS or csv-export
- > External mouse and keyboard for quick input of patient data*
- > Handheld barcode scanner for samples*



User friendly

- > Multilanguage interface
- > Fast Run or Worklist:
customize your workflow
- > Automatic maintenance reminders (e.g. cleaning)
- > Simple update of software and settings
via USB stick

Robust and cost efficient

- > Service by user, no technician necessary
- > Lamp life time of > 5000 h
- > Basic wear and tear parts can be replaced
without special tools by laboratory staff
- > No cleaning of interference filters required
(sealed photometer module)



* optional accessories

Innovative, convenient and reliable

Tutorial videos for staff training and an easy start

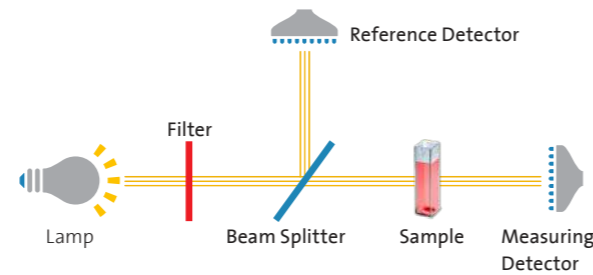
Included with the Humalyzer 4000 are 5 video training tutorials. Supplementing the user manual, these provide a quick visual overview of the functionality and operation of your new instrument. Register here to watch the first tutorial for free:

www.human.de/hl4000



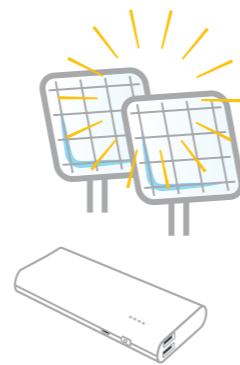
Quality and precision with reference channel technology

The reference channel, usually only found in automatic analyzers, reduces signal noise and increases the precision of the measurement. It also allows the instrument to wake up from lamp save mode in only a few seconds. The light of the lamp is divided into a measuring channel and a reference channel. The reference channel can compensate for drifts and fluctuations of the lamp or filters.



Independence from mains - reliable results under challenging conditions

Many patients in rural areas travel long distances to health centers to receive a diagnosis and therapy. Therefore, it is important to ensure that the results are accurate and available in a timely manner to ensure appropriate therapy. The Humalyzer 4000 can even run for almost up a full working day (4-8 hours) off-grid with the optional HUMAN battery pack. For greater flexibility, the battery pack can also be recharged using the optional solar panel.



Multipurpose reagents with validated settings - Made in Germany

HUMAN clinical chemistry reagents are manufactured to the highest quality standards at the HUMAN production facility in Germany. HUMAN offers ready-to-use, liquid stable reagents in different convenient kit sizes. The validated settings are pre-programmed on the Humalyzer 4000 and the whole clinical chemistry instrument line.



Validated reagent settings preinstalled

High quality multipurpose reagents

We produce our reagents in accordance with the latest quality standards. More than 50 validated settings of HUMAN reagents are preinstalled



A-G	REF	H-U	REF
ALBUMIN liquicolor	10560, 156004	HbA1c liquidirect	10770
ALKALINE PHOSPHATASE liquicolor*	12117	HDL CHOLESTEROL liquicolor	10084, 10284
alpha-AMYLASE liquicolor	12218, 12018 12028	HEMOGLOBIN liquicolor	10751
anti-Streptolysin-O (ASO)	11251P	IMMUNOGLOBULINS direct IgA	11501
APOLIPOPROTEIN A1 (APO A1)	11101	IMMUNOGLOBULINS direct IgG	11502
APOLIPOPROTEIN B (APO B)	11102	IMMUNOGLOBULINS direct IgM	11503
auto-BILIRUBIN-D liquicolor	10741	IRON liquicolor	10229, 10230
auto-BILIRUBIN-T liquicolor	10742	IRON TPTZ liquicolor	12290, 12291
auto-CREATININE liquicolor	10052	LDL CHOLESTEROL liquicolor	10094, 10294
CALCIUM liquicolor	10011	LIPASE liquicolor	12006, 12026
CHLORIDE liquicolor	10115	MAGNESIUM liquicolor	10010
CHOLESTEROL liquicolor	10017, 10019 10028	MICROALBUMIN	11120
CHOLINESTERASE liquicolor	12007	PANCREAS-AMYLASE liquicolor	12009, 12029
CK NAC activated liquiUV*	12015	PHOSPHORUS liquirapid	10027
CK-MB liquiUV*	12118	RHEUMATOID FACTORS (RF Latex)	11261PA
CREATININE (enzym) liquicolor	10053	RHEUMATOID FACTORS (RF)	11261P
CRP	11241	SODIUM liquicolor	10113
CYSTATIN-C liquidirect	11150	TOTAL PROTEIN liquicolor	157004, 10570
gamma-GT liquicolor*	12213, 12013 12023, 12033	TRANSFERRIN	11115
GLUCOSE liquicolor	10121, 10260	TRIGLYCERIDES liquicolor mono	10720P, 10724, 10725
GLUCOSE liquiUVmono	10786	UREA liquicolor*	10505, 10506, 10507
GOT (ASAT) IFCC mod. liquiUV*	12211, 12011 12021, 12031	UREA liquiUV	10521
GPT (ALAT) IFCC mod. liquiUV*	12212, 12012 12022, 12032	URIC ACID liquicolor	10690, 10691
		URIC ACID liquicolorplus	10694

* two settings available, reagent and sample start



HumaLyzer 4000

Specifications

Analyzer overview

Analyzer type	Semi-automatic photometer	
Reagent system	Open	
Reaction system	Flow cell or square cuvette	
Incubator	Built-in: 10 round, 2 square positions; optional external incubator	
	HumaCube (220V)	REF 17050
	HumaCube (110V)	REF 17070
Printer	Built-in, thermal printer	

Optical overview

Overview	Reference channel optics with 8 different interference filters and 5W halogen reflector lamp	
Photometer performance	Linearity 0.01 to 2.5 OD, Resolution 0.001 mAbs	

Consumable

Flow Cell Cleaner 100 ml	REF 18222
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Analyzer operation

User interface	Color touch screen
Measuring modes	Photometry (colorimetry, UV-tests, turbidimetry)
Liquid handling	Peristaltic pump

Memory

Result storage	10,000 results incl. reaction curve, method and calibration in searchable database + more on internal SD card (8 GB)
Method storage	144 method positions, including over 50 validated methods for HUMAN reagents plus user programmable methods
QC module	Up to 4 levels of controls, monitored via QC periods and Levey Jennings charts

Ordering information

HumaLyzer 4000	REF 18250
Battery Pack Portable Battery System 73Wh	REF 18250/74
Solar Panel for recharging of 73 Wh battery	REF 18250/73
External Barcode Scanner Includes 1D barcode scanner and adapter cable	REF 18250/76
HumaLyzer Calibration Tool Set Includes grey glas filter and reference values, aluminum block and USB stick for backup	REF 60600

Your local HUMAN partner

