Celltac α

Automated Hematology Analyzer

MEK-6500K

Beyond the standard in 3-part-diff

CBC + 3 diff ▪ 19 parameters ▪ built-in open and closed system

Fighting Disease with Electronics

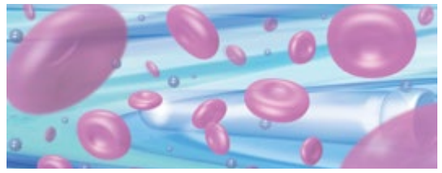
NIHON KOHDEN

Celltac α MEK-6500K
Automated Hematology Analyzer

Outstanding features Real benefits

19 parameters in 60 seconds

The Celltac α series provides 3-part-diff and RDW-SD to assist in the detection of iron deficiency or thalassemia.

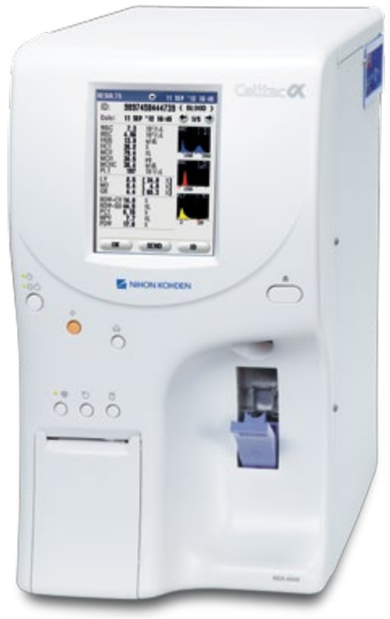


Built-in open and closed tube mode

To reduce the risk of contamination, the Celltac α MEK-6500K includes both, an open and a closed tube mode for easy blood sampling.

Auto dilution mode change

You can set panic value thresholds (abnormal high and low values) to trigger remeasurement in preset dilution ratio modes (low, normal, high, higher). In higher mode the measuring range for WBC can be extended to 599 x 10^3/µl while the low dilution mode gives high accuracy even in low values of WBC or PLT.



MEK-6500K

Capillary mode

The Celltac α MEK-6500K allows you to analyze capillary blood with only 10 µl. This is the ideal method to perform CBCs inclusive 3-part-diff for pediatric and geriatric patients.

Unlimited patient memory

The instrument can store unlimited patient samples together with QC results and alarm logs by using SD-card memory (2GB can store 30 000 patient samples).

Intuitive operation

Only 3 steps to the result

1. Mix the tube
2. Insert the tube into the closed tube holder
3. Close the tube holder

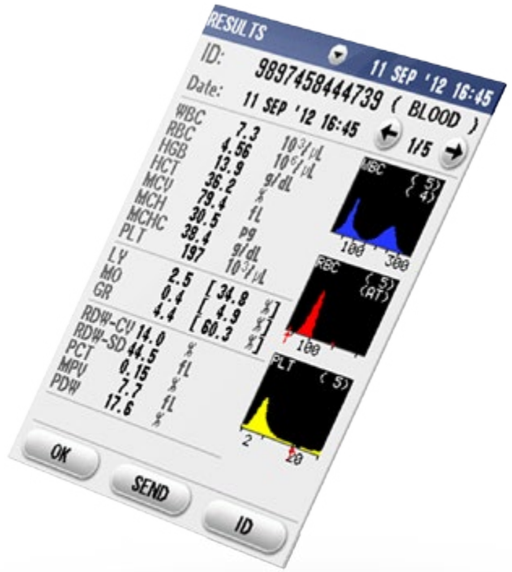
The measurement starts automatically. After 60 seconds the result will be displayed.

The complete result at a glance

There is no need for switching screens to get a first medical diagnostic. The results screen shows all relevant information in only one screen including parameters and histograms.

Easy to use color touch screen

The high resolution color touch screen gives easy access to all information and enables a stress-free operation.



Superior technology – highest quality

40 years of experience that guarantees highest quality standards

Nihon Kohden is a company with a high degree of experience. This allows controlling and directly influencing every process necessary to create, design and assemble high quality parts, units and devices for a high robustness and reliability of the Celltac instruments.

Innovation where you need it

Nihon Kohdens Celltac α range of hematology analyzers combines technology and innovation:

- The twin diluting nozzle system is dedicated for WBC and RBC dilution separately. This prevents cross contamination between RBC and WBC counting.
- Innovative fluid path lets the sample remain in the sample needle; there is no need for rinsing a syringe pump; this contributes to the low reagent consumption and carry over.
- The Celltac range is fully automatic in a true sense. The highlight is the automatic clog removal: a high voltage pulse passes through the aperture to remove possible clogs of proteins and lipids providing durability in result precision.

Features and technical specifications

Features			
Simultaneous 19 parameter measurement	Open and closed Tube mode	Automatic clog removal	Access restriction with password
Top Level accuracy and reproducibility	6 different dilution modes:	Automatic waste fluid treatment	Connection capability:
Easy touch screen operation	• Normal • High • Lower	Data management	• RS232
Fast access buttons	• Capillary • Higher • Pre-dilution	Unlimited memory	• USB
5,7" Colour LCD touch screen	Automatic self-check	Variety of QC programs:	• Handy barcode reader
Easy maintenance	Automatic sampling	• Mean • $\overline{X}$-R • $\overline{X}$B	• Printer
Durable and robust technology	Automatic priming and cleaning	• CV calculation • L&J • $\overline{X}$D◦CV	Single/double count mode
Compact design	Automatic sampling nozzle cleaning	Optional built-in thermal printer	Recount mode

Technical Data (Please refer also to the tech data sheet)

Dimensions and Weight:

230 W x 450 D x 428 H (mm); 20 kg

Power Requirements:

MEK-6500/10K: 220 to 240 V ± 10% AC, 50/60 Hz
Power consumption: less than 120 VA
Cooling system: Natural cooling

Parameters:

- WBC
- RBC
- PLT
- HGB
- HCT
- MCV
- MCH
- MCHC
- PDW
- PCT
- LY%
- LY#
- MO%
- MO#
- GR%
- GR#
- MPV
- RDW-CV
- RDW-SD

Throughput: 60 samples/hour

Specimen Volume:

- 30 µL for CBC + 3 part diff
- 10 µL or 20 µL for pre-dilution mode
- 10 µL for capillary mode

Reagents:

- Isotonac 4 (20L)
- Cleanac (5L)
- Cleanac 3 (1L)
- Hemolynac 3N (1L)

Linearity and Reproducibility

WBC	0 to 59.9 x 10^3/µL	within 2.0 % CV
RBC	0 to 14.9 x 10^6/µL	within 1.5 % CV
PLT	0 to 1490 x 10^3/µL	within 4.0 % CV
HGB	0 to 29.9 g/dL	within 1.5 % CV
HCT	0 to 99%	within 1.0 % CV
MCV	20 to 199.0 fL	within 1.0 % CV
MCH	10 to 50 pg	—
MCHC	10 to 50 g/dL	—
LY%	0 to 100 %	within 5.0 % CV
MO%	0 to 100 %	within 12.0 % CV
GR%	0 to 100 %	within 5.0 % CV
LY	0 to 59.9 x 10^3/µL	—
MO	0 to 59.9 x 10^3/µL	—
GR	0 to 59.9 x 10^3/µL	—
PCT	0 to 2.9 %	—
MPV	0 to 20 fL	—
RDW-CV	0 to 50.0 %	—
PDW	0 to 50.0 %	—

Safety Standards Certification

- IEC 61010-1: 2001
- EN 61010-1: 2001
- IEC 61010-2-101: 2002
- EN 61010-2-101: 2002
- IEC 61010-2-081: 2001
- IEC 61326-1: 2005
- EN 61326-1: 2005
- IEC 61326-2-6: 2005
- CISPR11: 2003, Group 1, Class B
- EN 55011: 2002, Group 1, Class B
- Type of protection against electrical shock: CLASS I EQUIPMENT
- Degree of protection against harmful ingress of water: IPX0 (non-protected)
- Degree of safety of application in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide: Equipment not suitable for use with this presence
- Mode of operation: Continuous operation
- Equipment types (classification): Indoor stationary
- Equipment requirements for marking of IN VITRO DIAGNOSTIC instruments: EN 1658: 1996

Environmental Conditions

- Storage temperature: –20 to +60˚C (–4 to +140˚F)
- Storage humidity: 10 to 95% (noncondensing)
- Storage atmospheric pressure: 700 to 1060 hPa
- Operating temperature: 15 to 30˚C (59 to 86˚F)
- Operating humidity: 30 to 85%
- Operating atmospheric pressure: 700 to 1060 hPa

Methods

- RBC/PLT/WBC: Impedance
- HGB: Photometry
- 3-part WBC differentiation: Impedance + specific lyse action
- HCT: Calculated from RBC histogram
- MCV, MCH, MCHC: Calculated from RBC, HGB, HCT
- PCT: Calculated from PLT histogram
- MPV: Calculated from PLT, PCT
- RDW-CV, RDW-SD: Calculated from RBC histogram
- PDW: Calculated from PLT histogram

Electromagnetic Compatibility

- IEC 61326-1: 2005
- EN 61326-1: 2005
- IEC 61326-2-6: 2005
- EN 61326-2-6: 2006
- CISPR11: 2003, Group 1, Class B

NIHON KOHDEN

EC REP

NIHON KOHDEN EUROPE GmbH
Raiffeisenstrasse 10, 61191 Rosbach, Germany
Phone: +49 (0) 6003 827-0, Fax: +49 (0) 6003 827-599
Internet: www.nihonkohden.net, E-mail: info@nke.de

NIHON KOHDEN CORPORATION
1-31-4 Nishiochiai, Shinjuku-ku, Tokyo 161-8560, Japan
Phone: +81 (3) 59 96-80 36, Fax: +81 (3) 59 96-81 00
Internet: www.nihonkohden.com

NKE-BRH-6500K/A

Printed in Germany