



Leading the way into 5-part-diff









MEK-7300K

On screen guidance – extremely simple

The Nihon Kohden Celltac Es displays intruction guidelines on how to use the device directly on screen. Self-explaining menus will guide the user very friendly with stress-free operation.

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Several dilution modes including capillary mode

The user can select from five different dilution modes: normal, pre-dilution, WBC high, WBC low and capillary. In the capillary mode only 10 μ L of blood is necessary.

Each Celltac Es provides two built-in sampling modes: open and closed. The closed tube mode ensures safety to the user and avoids blood contact.

you are perfectly equipped Analysis is running

Advanced Count – extremely reliable

Additional measurement can be performed without sampling additional blood when WBC or PLT are low. This unique feature ensures more reliable results in case of abnormal WBC or PLT counts.

Immature Granulocytes (IG)

The IG count is included in the complete CBC+Diff mode in absolute and relative value. The IG parameter is a good indicator of myeloid cell production which can result from inflammatory infection or severe haematological diseases.







Complete result – in only 60 seconds

Unlimited patient memory

Besides the internal memory, a SD-Card slot at the back of the analyzer can be used to get unlimited storage of patient samples, QC results and alarm logs (2 GB can store 30.000 patient samples).



Usability at its best – large 10.4 inch touchscreen

Convince yourself how easy to use Celltac Es is. The large 10.4 inch access full patient result in one screen. color touchscreen provides best easy and friendly operation. You can

The results review is very flexible: the user can see all necessary information at a glance or focus on different areas like zooming into scattergrams, histograms, flags as well as values itself for details.



preserving WBCs in their original state 5-part-diff Technology

Patented laser technology

The innovative 3 angle scatter detector provides better detection of WBC cells using precise light scattering measurement.

From a small forward angle (FSS) we obtain WBC size information, from a large forward angle (FLS) we obtain information of cell structure and complexity of nucleochromatin particles, and from a side angle (SDS) we obtain internal granularity and globularity information.

This 3D graphic information is calculated by the exclusive Nihon Kohden software algorithm.





No chemical processing of WBC

leaving the white blood cells intact. The nucleus, granules and cellularity are preserved in their original state. The cells are not altered by staining, shrinkage or differential lysis which can distort the measurement results. The Celltac Es can get morphological information from natural shaped WBC nuclei and granules and perform more accurate WBC 5 diff measurement. The Nihon Kohden patented leukocyte classification reagent selectively hemolyzes the red blood cells while

Single-channel measurement

Celltac 5-part differential measuré each cell in one unique flow cytometer. This eliminates measurement errors using multiple channel methods.

Unique Advanced Count

High result precision

Count triggers automatically additional count without sampling new blood. The Advanced Count provides higher precision of the absolute WBC and PLT count by increasing the volume of diluted blood according to the number of cells obtained per microliter. The Advanced Count is an exclusive feature of Nihon Kohden Celltac Es. The Advanced





The threshold of Advanced Count can be set for PLT to four different settings: 50,000/µl, 100,000/µl, 150,000/µl and off. For WBC it can be set to on (< 3,500 /µl) and off.

much more than Impedance CBC Technology

40 years of experience guarantees high quality standards

Nihon Kohden's quality guiding principle is based on a high degree of self-manufacturing performance. allows controlling and directly influencing every process necessary to design high quality instruments. This

Not just features, but real benefits

The Nihon Kohden Celltac analyzers give you real advantages:

- The twin diluting nozzle system prevents from cross contamination between RBC & WBC counting
- The Nihon Kohden original syringe pumps do not need disassembly or cleaning. The Celltac Es uses exclusive solenoid valves made by Nihon Kohden rather than pinch valves. This contributes to extremely low cost and time saving maintenance
- The Celltac Es offers an automatic clog removal, that removes blood proteins and dust particles from the aperture by a high voltage electrical pulse after each measurement
- With the Nihon Kohden innovative fluid path, the sample remains in the sample needle; there is no need for rinsing a syringe pump. This contributes to a better precision and prevents from a carry-over.

NKE-BRI-7300K/A

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For details please refer to the technical data sheet

Safety Standards Certification

within 4:0 % CV within 1.0 % CV within 1.5 % CV within 30.0 % CV within 20.0 % CV within 12.0 % CV within 5.0 % CV within 5.0 % CV Storage atmospheric pressure: 700 to 1060 hPa IEC 61326-2-6: 2005 MPV: Calculated from PLT, PCT Calculated from RBC, HGB, HCT WBC population: Light scatter by laser RBC/PLT/WBC: Impedance Methods Operating atmospheric pressure: 700 to 1060 hPa Operating humidity: 30 to 85% (noncondensing) Operating temperature: 15 to 30°C (59 to 86°F) Storage humidity: 10 to 95% EN 55011: 2007, Group 1, Class B CISPR11: 2003, Group 1, Class B EN 61326-2-6: 2006 EN 61326-1: 2006 IEC 61326-1: 2005 PDW: Calculated from PLT histogram RBC-CV: Calculated from RBC histogram PCT: Calculated from PLT histogram HCT: Calculated from RBC histogram MCV, MCH, MCHC: HGB: Photometry

within 1.5 % CV

ΒA ЕO MO \leq Ä 0 to 299 x 10³/µL 0 to 299 × 10³/µL

• BA% • NE% • PDW • MCV • BA# • NE# • LY% RDW-SD • PLT • MCH • RBC • LY# • MO% IG%

Features and technical specifications

Simultaneous 25 parameter measurement

Top Level accuracy and reproducibility

5 different dilution modes: Open and closed Tube mode Feature

• MPV • HCT RDW-CV

• MO#

• HGB MCHC

• PCT

• EO#

• WBC

Parameters:

BA%

0 to 100% 0 to 299 x 10³/µL

EO% MO% LY% NE% WBC

Power consumption: 250 VA 110 to 240 V \pm 10% AC, 50/60 Hz 382 W x 465 D x 532 H (mm); 35 kg

Dimensions and Weight:

cal Data (Ple

data sheet)

Flag reports

Power Requirements:

On screen guidance Compact design Durable and robust technology

Automatic priming and cleaning

Automatic sampling nozzle cleaning

Optional built-in printer CV calculation

• L&J Ч'n

• XD-CV ×B

Single/double count mode

Printer

Handy barcode reader

Recount mode

Advanced Count

Results zoom

within 2.0 % CV

Storage temperature: -20 to +60°C (-4 to +140°F)

Automatic sampling Automatic self-check

Colour LCD touch screen Fast access buttons Easy touch screen operation

> Capillary Normal

 WBC Low WBC High

Pre-dilution

Unlimited memory

• USB RS232

Data management

Automatic waste fluid treatment Automatic clog removal

Connection capability:

Access restriction with password

Variety of QC programs:

Mean

Easy maintehance

• E0%

• iG#

Throughput: 60 samples/hour

Specimen Volume:

55 µL (for CBC + 5-part-diff)
30 µL (for CBC only)

Reagents:

Isotonac 4 (20L)

MCHC

RDW-SD RDW-CV

0 to 1490 x 10³/µL 0 to 199.0 fL 0 to 50.0% 10 to 50 g/dL MCV

HGB

RBC

HCT

0 to 99.9% 0 to 29.9 g/dL 0 to 14.9 x 10⁶/µL

MCH

10 to 50 pg 20.0 to 199.0 fL

Cleanac (5L)

 Hemolynac 3N (1L) Cleanac 3 (1L)

Hemolynac 5 (1L)

Barcode format

UPC, NW-7, CODE 39, CODE 93, CODE 128 The following formats with or without check digits are acceptable: Industrial 2 of 5, ITF, JAN/EAN/

PDW

0 to 50.0% (in CV) 0 to 20.0 fL 0 to 2.9%

MPV

PCT PLT