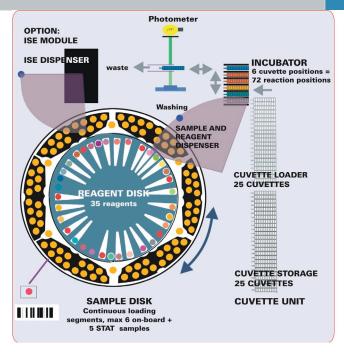
# Konelab 20

Konelab 20 is a random access clinical chemistry system for routine chemistries, electrolytes and specific proteins.

The broad range of CE marked applications can be complemented with user-definable tests.



# Thermo KONELAS 201

# Throughput

Workload dependent, being in typical routine use up to 200 tests/hour. Time to first result is typically 3 to 12 minutes.

### Samples

Continuous access to samples without interrupting test processing.
MAX ON-BOARD CAPACITY:
84 routine samples and 5 STAT samples - 6 segments with 14 positions per segment. Integrated barcode reader and cup/ tube recognition.
SAMPLE CUPS AND TUBES:
0.5 ml and 2.0 ml cups, 5 ml and 7 ml tubes, 10 ml tubes with tailored segments.

SAMPLE TYPES: Serum, plasma, urine, CSF, whole blood. SAMPLE VOLUMES: Possible range 1-120  $\mu$ I; typically 2-15  $\mu$ I and 50  $\mu$ I for Na+, K<sup>+</sup> and Cl<sup>-</sup> tests.

### Reagents

Continuous access to reagents without interrupting test processing. External barcode reader for identification. Real time reagent status clearly displayed. Up to four reagent additions / test possible.

ON-BOARD STORAGE:

35 positions in the cooled reagent disk.

REAGENT VESSELS: 10, 20 and 60 ml REAGENT VOLUMES: 2-250  $\mu$ l; typically 120 - 200  $\mu$ l.

### Cuvettes

Discrete disposable multicell cuvettes. Continuous access to cuvettes without interrupting test processing.
ON-BOARD CAPACITY:
600 measurement cells - 50 multicell cuvettes with 12 reaction cells, typically up to up to 3 hours walk-away time.



# **Technical Specifications** Konelab 20 Applicable for use outside the US

### Calibration

Linear, non-linear or bias calibration. Method-dependent use of individual calibrators or automatically diluted series from a stock calibrator. Automatic repeat for bias correction available.

Memory for 99 different calibrators.

# **Quality Control**

Real time QC with multiple, user-definable Westgard rules. Programmable control interval. QC chart printouts, daily and cumulative reports. Memory for 99 different controls.

### Sample and Reagent Dispensing

Externally and internally rinsed single probe dispensers equipped with level sensing. Dispensing with precision syringes driven by stepping motors. REACTION END VOLUME: 100-250 μl. SAMPLE CARRY OVER: <1%. REPRODUCIBILITY: CV less than 2% for sample volumes ≥2 µl and for reagent volumes >5 μl

### **Dilutions**

Automatic sample pre-dilution. Automatic post-dilution with both high and low secondary dilution ratios. Ability to add the value of manual pre-dilution for the result calculation. **AUTOMATIC DILUTION RATIOS:** 

up to 1+120

NOTE: The information and technical specifications are subject to change without notice.

### Photometric Measurement

Single channel interference filter photometer with beam splitting reference- 11 fixed filters, others available upon request. SPECTRAL RANGE: 340-800 nm. MEASUREMENT TEMPERATURE: 37 °C MEASUREMENT PRINCIPLES: Colorimetric, turbidimetric. **MEASUREMENT MODES:** Kinetic, end-point. KINETIC MEASUREMENT. 30 sec to 60 min, max 12 points LIGHT SOURCE: Halogen lamp. with linear absorbance range of 0-2.5 A, resolution of 0.001 A and reproducibility of SD≤0.005 A at 2 A.

### ISE Measurement in the model Konelab 20i

Direct potentiometry. Electrodes for Na<sup>+</sup>, K<sup>+</sup> and Cl<sup>-</sup>; upon request

SAMPLES: Serum, plasma and urine

USABLE RANGE: (mmol/l)

serum, plasma: K+ 2.0 - 10

Na<sup>+</sup> 100 - 200 Cl 55 - 150 serum:

Li<sup>+</sup> 0.2 - 4.0urine:

20 - 200 Na+ 20 - 200

## **Environmetal Conditions**

Operating temperature range of 15-32 °C; humidity 40-80% (non condensing).

Regulatory CONFORMITY WITH:

# Data Management

Windows® XP workstation (included) with graphical user interface. Data input online, by mouse, keyboard or barcode reader connected alongside with the keyboard. Different language versions avail-

SAMPLE BARCODES IN USE: Code 128, Code 39, USS Codabar, Interleaved 2 of 5.

LIS INTERFACE: ASTM 1394-91 or KONE Online.

HARDWARE INTERFACE:

RS-232 or TCP/IP

RESULT REPORTS: Collated by patients, manual entry of off-line results allowing for fully collated result reports, results calculated from both measured and off-line results. Automatic or 'on request' printouts, automatic STAT reporting. Abnormal values and repeats flagged automatically.

DATA STORAGE: Long term storage of patients with demographics including test and QC results and calibrations.

# **Dimensions and Weight**

Width 80 cm, depth 79 cm, height 115 cm, weight 130 kg. Separate workstation table.

# Power Requirements

100-240 V ±10%, 50-60 Hz ±5%, 300 W Konelab 20, 350 W Konelab 20i.

### Water Consumption

Typically < 0.5 l/h On-board storage with no external connections required.

### **Ordering Codes** 981800 Konelab 20i

981801 Konelab 20

Code 895311 O 04 / 2008



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