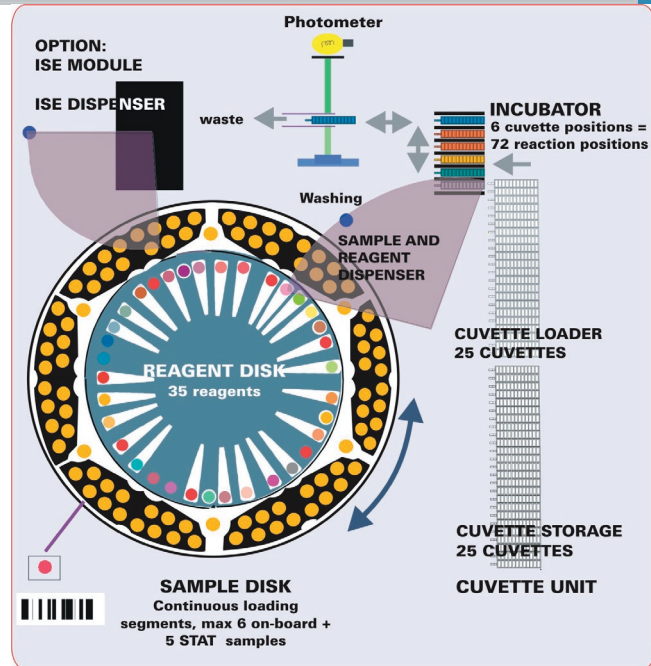


Konelab 20

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.



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 µl ; typically 2-15 µl and 50 µl for Na⁺, K⁺ and Cl⁻ 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 µl; typically 120 - 200 µl.

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.

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 μ l. SAMPLE CARRY OVER: <1%. REPRODUCIBILITY: CV less than 2% for sample volumes ≥ 2 μ l and for reagent volumes >5 μ l

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 $^{\circ}$ 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 $SD \leq 0.005$ A at 2 A.

ISE Measurement in the model Konelab 20i

Direct potentiometry. Electrodes for Na^{+} , K^{+} and Cl^{-} ; upon request Li^{+} . SAMPLES: Serum, plasma and urine. USABLE RANGE: (mmol/l)
serum, plasma:
 K^{+} 2.0 - 10
 Na^{+} 100 - 200
 Cl^{-} 55 - 150
serum:
 Li^{+} 0.2 - 4.0
urine:
 K^{+} 20 - 200
 Na^{+} 20 - 200

Environmental Conditions

Operating temperature range of 15-32 $^{\circ}$ C; humidity 40-80% (non condensing).

Regulatory

CONFORMITY WITH:
98/79/EC IVDMD Directive.



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 available. 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 \pm 10%, 50-60 Hz \pm 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_0
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