



BIOLIS30i

Automated Clinical Analyzer

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ISO9001: 2008 ISO13485: 2003

LABORATORY SOLUTION

BIOLIS30i

Improved user-friendly interface and test efficiency

The latest model of Biolis series meeting various needs of clinical laboratory tests



Compact & Easy Operability & Excellent Function

BIOLIS30i

Brand new user interface

- Intuitive screen layout with a sense of unity
- Item parameter in one screen relieving the bother of page feeding

Upgraded operability

- Various touch panel operation (swipe-to-select / drag & drop) contributing to better facility of operation
- Enlarged touch buttons for reducing operation errors.

Upgraded throughput

- 270 tests/hour (maximum 450 tests/hour with ISE)

Hemolysis of whole blood sample for HbA1c

- Automatic process on board contributing to the test efficiency.

Automatic sample clot detection

- Automatic detection & clean-up of sample probe clots (such as fibrin)

Crash prevention

- Prevent reagent & sample probes from crash during operation for safety

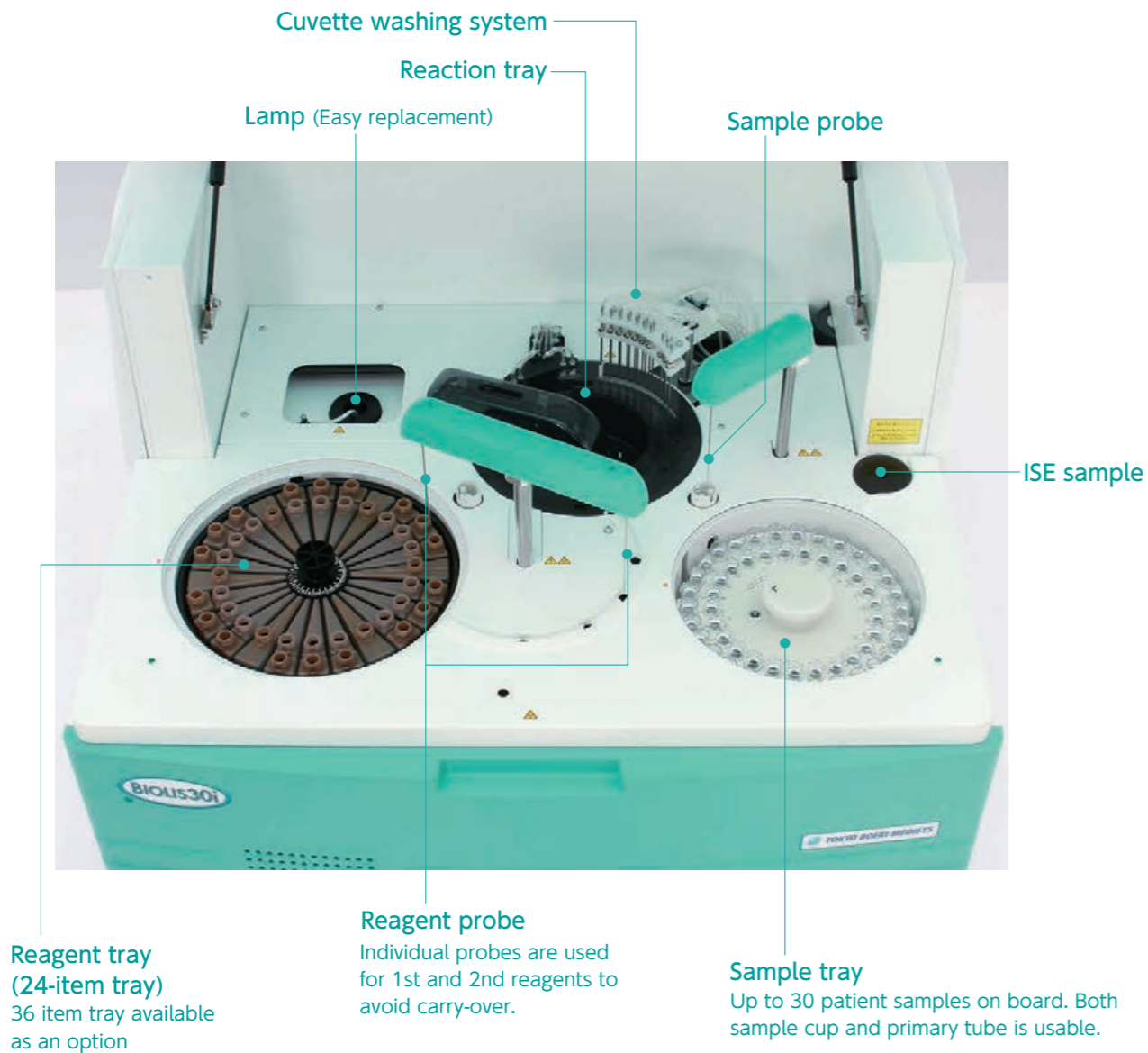
Automatic startup and shutdown

- Stress-free operation by cutting waiting time

LAN connections

- LAN connections between machine and operation PC for higher-speed and more stable communication

Main unit arrangement



Specifications

| | | |
|-----------|---|---|
| Analysis | System | Discrete single line random access multi-test analysis |
| | Number of test items on board | 36+3 (ISE) or 24+3(ISE) |
| | Throughput | 270 tests/hour, 450 tests/hour including ISE, 90tests/hour for HbA1c only |
| | Analysis method | End point, Rate, ISE |
| Sample | Calibration curve | 8 kinds (linear, spline, etc) |
| | Sample kind | Serum, Plasma, Blood cell, Urine, Dialysis, CSF (ISE not available for CSF and Blood cell) |
| | Sample container | Sample cups, primary tube (5, 7, 10ml) |
| | Number of samples on board | Software tray (30 positions for patient sample, and 45 positions for standard and blank sample) |
| | Sample tray mode (software tray) | Selectable modes for patient sample, calibration and QC |
| | Sample dispensing volume | 2.0 ~ 25.0μl (0.1μl step) |
| Reagent | Dilution ratio | 0.5 ~ 100 times |
| | STAT | available during measurement (step between samples by priority) |
| | Reagent tray | 36 items or 24 items (removable) |
| | Number of bottles on board | 72 (36 items) or 48 (24 items) |
| Reaction | Bottle size | 36 items : 13, 25, 40 ml 24 items : 20, 40, 60 ml |
| | Reagent dispensing volume | R1 : 140 ~ 300μl(1μl step), R2 : 20 ~ 260μl(1μl step) |
| | Reagent storage | 24 hours cooling |
| | Reagent volume check | Level sensing or count down |
| Interface | Cuvette material | Plastics (semi-disposable) |
| | Reaction volume | 140μl ~ 400μl |
| | Reaction time | approx 10 min. (1st reaction 5 min., 2nd reaction 5 min.) |
| | Reaction temperature | 37±0.1°C |
| | Optical measurements | Fixed 13 wavelengths (340 ~ 800nm) |
| | Optical source | Tungsten halogen lamp |
| | Optical range | OD 0 ~ 2.5 |
| | Cuvette washing | Auto washing with heated water and 2 kinds of washing solutions |
| | Reaction waste collection | Reaction waste stored in a dedicated tank |
| Option | Pure water consumption | Maximum 3.8l /hour |
| | Operation | Personal computer |
| | OS | Windows 10 |
| | Reaction monitor | Optical absorbance graphic display |
| Option | Quality control | Current, Daily and Cumulative QC. Westgard algorithms |
| | Output | LAN connection |
| | ISE module | |
| Option | Sample barcode reader, Reagent barcode reader | |

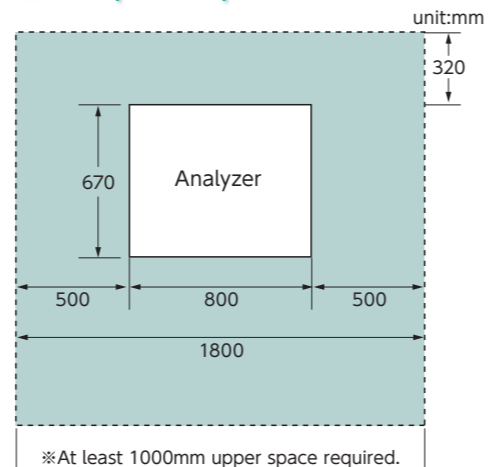
※Specifications are subject to change without notice.

Installation

Conditions

| Item | Description |
|-----------------------|---|
| Dimensions and Weight | Analyzer W800×D670×H555(mm) Approx. 95Kg |
| Power supply | AC 100/115/220/230V, 50/60Hz Voltage fluctuation less than 10% |
| Power consumption | 600VA |
| Grounding | Earth resistance of ground terminal should be less than 100Ω |
| Ambient temperature | 15~30°C |
| Humidity | 45~85% (No condensation) |
| Water consumption | Max 3.8 l / hour |
| Waste liquid | Separate drainage (low and high density waste) |

The space required for installation



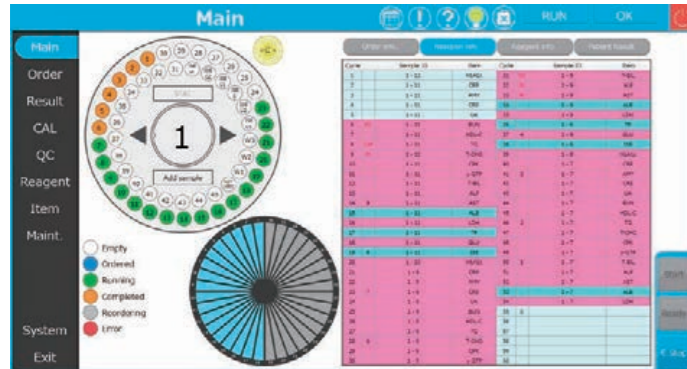
Test Items List

| | | | | | | | |
|--------------------|---------|----------|----------|-------|-------|---------|-------|
| Clinical chemistry | LD(LDH) | AST(GOT) | ALT(GPT) | ALP | γ-GTP | CK(CPK) | CK-MB |
| | ChE | AMY | P-AMY | LAP | CRE | UA | BUN |
| | Cys-C | TG | T-CHO | HDL-C | LDL-C | TP | ALB |
| | IP | Mg | Ca | Fe | UIBC | Zn | Cu |
| | GLU | HbA1c | 1,5-AG | GA | μTP | μALB | IRI |
| | L-FABP | T-BIL | D-BIL | TTT | ZTT | NH3 | *NEFA |
| | *PL | *SIA | *Fer | *Li | | | |
| Couglution | *ATIII | *FDP | *D-dimer | | | | |
| Immuno-assay | CRP | RF | TPAb | RPR | *IgG | *IgA | *IgM |
| | *IgE | MMP-3 | | | | | |
| TDM | VCM | ABK | TPM | MTX | EVER | TACR | BRP |
| | CBZ | DIG | HAL | PB | PHT | THEO | VPA |
| ISE | Na | K | Cl | | | | |

* Above includes test items under verification.

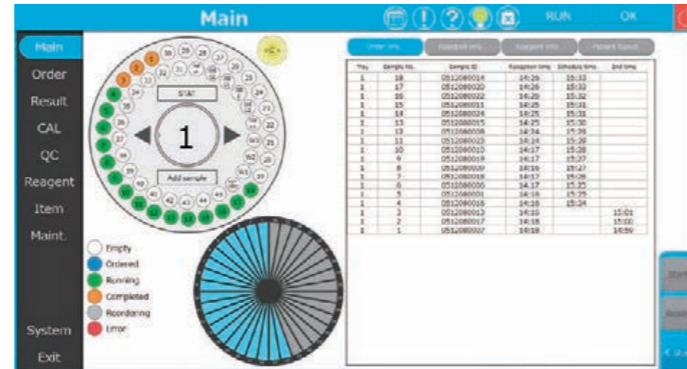
User Interface

Run monitor screen



Monitor measurement info by cycles

Journal screen



View sample ordered time and result out-put time

Order screen



Easy to select test items by swiping the touch screen

QC graph screen



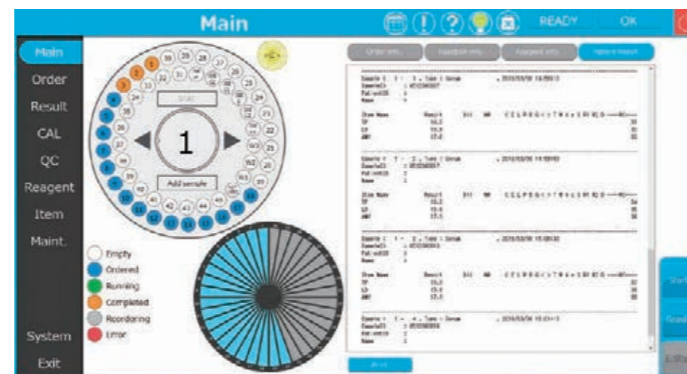
Current,daily,and cumulative QC

Auto startup & shutdown screen



Auto maintenance available before shutdown

Result screen



Show current day test results
(Separate printer needed for output)

Air pressure mixing system

Our original system for mixing the sample and reagent using air pressure alone.

Reaction cuvette

- Specially developed to utilize air pressure mixing system.
- The material is water repellent plastic (Semi-disposable)

Advantages of Air Pressure Mixing

- No carry-over because a stirrer is not used
- No water consumption for stirrer washing
- No dilution of the reaction solution by washing water from the stirrer

HbA1c sample preparation and measurement

Centrifuged sample → Aspirating the red blood cell → Cuvette1 → Cuvette2 → HbA1c(%) is calculated from hemoglobin and A1c results.

Dispensing the red blood cell into the hemolyzing reagent and mixing them.

Hemoglobin (Hb) is measured by R1. A1c is measured by R2. In the case of Enzymatic method

ISE module (OPTION)

Side view

ISE is Direct Method

- Throughput is 450 tests/hour including ISE
- ISE module is equipped with Biolis 30i
- Easy to replace electrodes

Consumables for ISE module

- Calibrator
- Cleaning solution
- Electrode (Na, K, Cl, Ref)