

TECHNICAL SPECIFICATION

Model Type : Fully automated, random access and discrete bench top clinical chemistry analyzer
Throughput : 200 tests / hour constant

Analysis Method : End-Point method, Two-point method, Kinetics method, Sample bank
Assay Method : Colorimetry, Turbidimetry Single & Double Reagent, Multi Standard, Mono and Bi-Chromatic

SAMPLE/REAGENTS OCCUPANCY

Reagents Positions : 40 Positions with cooling system
Sample Positions : 40 Positions
Sample Volume : 2-45µl (0.1µl Steps)
Reagent Volume R1 : 120-450µL (Adjustable in 0.5 µL Steps)
Reagents Volume R2 : 10 – 250 µL (Adjustable to 0.5 µL step)

REACTION SYSTEM

Reaction Cuvette : 81 reusable cuvettes, 9 cuvettes / segment
Reaction Volume : 120 – 500 µL
Cuvette Washing : On board laundry with 8-step washing system
Reaction Time : 30 to 600 secs (Depending on the designated cycle time. & number of reagents)
Reaction Temperature : 37°C ± 2° C
Optical Length of cuvette : 5 mm
Probe : Electropolished probe

OPTICAL SYSTEM

Light Source : Halogen lamp with fibre optics
Measurement Principle : Photometry, turbidimetry, potentiometry (optional)
Wavelength : 8 wavelengths from including 340, 405, 450, 510, 546, 578, 620 & 670 nm
Photo Detector : Silicon Diode
Absorbance Range : 0 - 4.000 Abs
Display : Touch Screen LCD (15'Inch)

CALIBRATION

Calibration Type : K-Factor, Linear (one, two and muti point), Logit Log, Spline, Exponential, Polynomial (second, third, fourth order)
Calibration Points : Multipoint curves for up to 6 points execution by repeat run lists or auto execution
Auto Re-run : Auto execution according to abnormal marking or range over
Quality Control : Within day and as well as day-to-day X and X-R control diagram (L-J Chart), real time quality control based on multi rule method mean, SD, %CV, R is calculated for all parameters for sample replicates

WORKING CONDITIONS

Power supply : 110/220 VAC 50-60 Hz (Max Power 250 W)
Temperature : 10 °C - 40°C
Humidity : 10% - 90% free from water dew formation
Water Consumption : 4 Litres / hour
Operation System : Windows XP, Windows 7, Windows 8 or Windows 10
Input : USB, RS232 interface / In-built 15" touch screen
Output : Multi format printout / In-built 15" touch screen
Dimensions : 800 X 660 X 646 MM
Weight : 101 Kgs

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Yumizen
C210

Yumizen C210

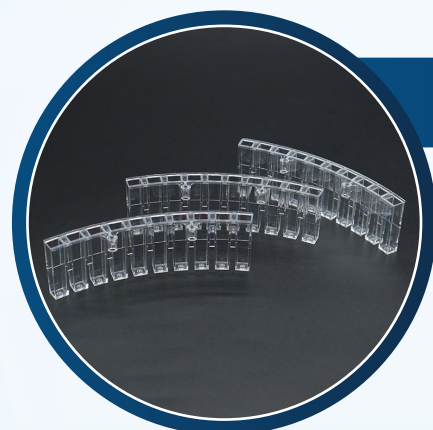
Benchtop Fully Automated Clinical Chemistry Analyzer

The **Yumizen C210** is a compact, high-performance analyzer designed for the evolving demands of small and medium laboratories.

- Exclusive Benchtop Design
- Constant throughput of 200 test per hour
- Built to support routine chemistry testing with precision and ease



Reaction & Optical System Unit



- 81 reusable cuvettes with a 5 mm optical path, arranged in 9 segments
- High transmittance cuvette material
- Halogen lamp with fibre optics

Sample / Reagent Multifunction Probe and Stirrer

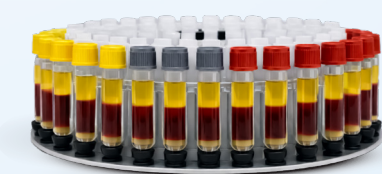
- Electropolished probe and teflon coated stirrer to minimize cross contamination
- Internal and external probe washing with carryover <1%; capacitive level detection
- Vertical and horizontal obstruction detection to prevent probe collisions
- Long life pipetting system with a precision stepper motor-driven plunger



Reagents & Sample Tray

40 refrigerated reagent positions & 40 sampling positions concentrically arranged

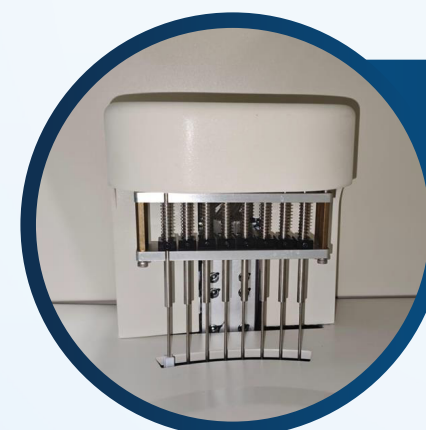
- Barcode-enabled reagent and sample positions
- Compatible with 5 mL, 7 mL, 10 mL primary tubes & 2 mL/0.5 mL sample cups; supports continuous loading
- STAT samples, controls & calibrators can be placed in any position; includes a detachable reagent tray
- Peltier-based cooling system maintaining 4°C to 15°C
- Simply place the whole gel tube into the sample positions for easy and efficient use
- Wide test based menu



8 - Step Onboard Laundry System

Designed for complete and consistent reaction cuvette cleaning

- Hot-water cuvette wash ensures carryover remains below < 1%
- Continuous monitoring of cuvette blanks; units exceeding threshold are automatically bypassed
- Water usage: approximately 4 liters per hour



Full-color Touchscreen Workstation

- **15-inch Touchscreen for Easy Operation**
Touch controls streamline complex button sequences, making routine actions—such as calibration, QC, and reagent loading—faster and simpler
- **Error Reduction Through Clear Visual Guidance**
Clear color-based prompts and notifications help prevent operational errors and guide correct execution

