

HORIBA
Medical

Yumizen
Solutions for Laboratories



C1200 AL

Together, let's build the future

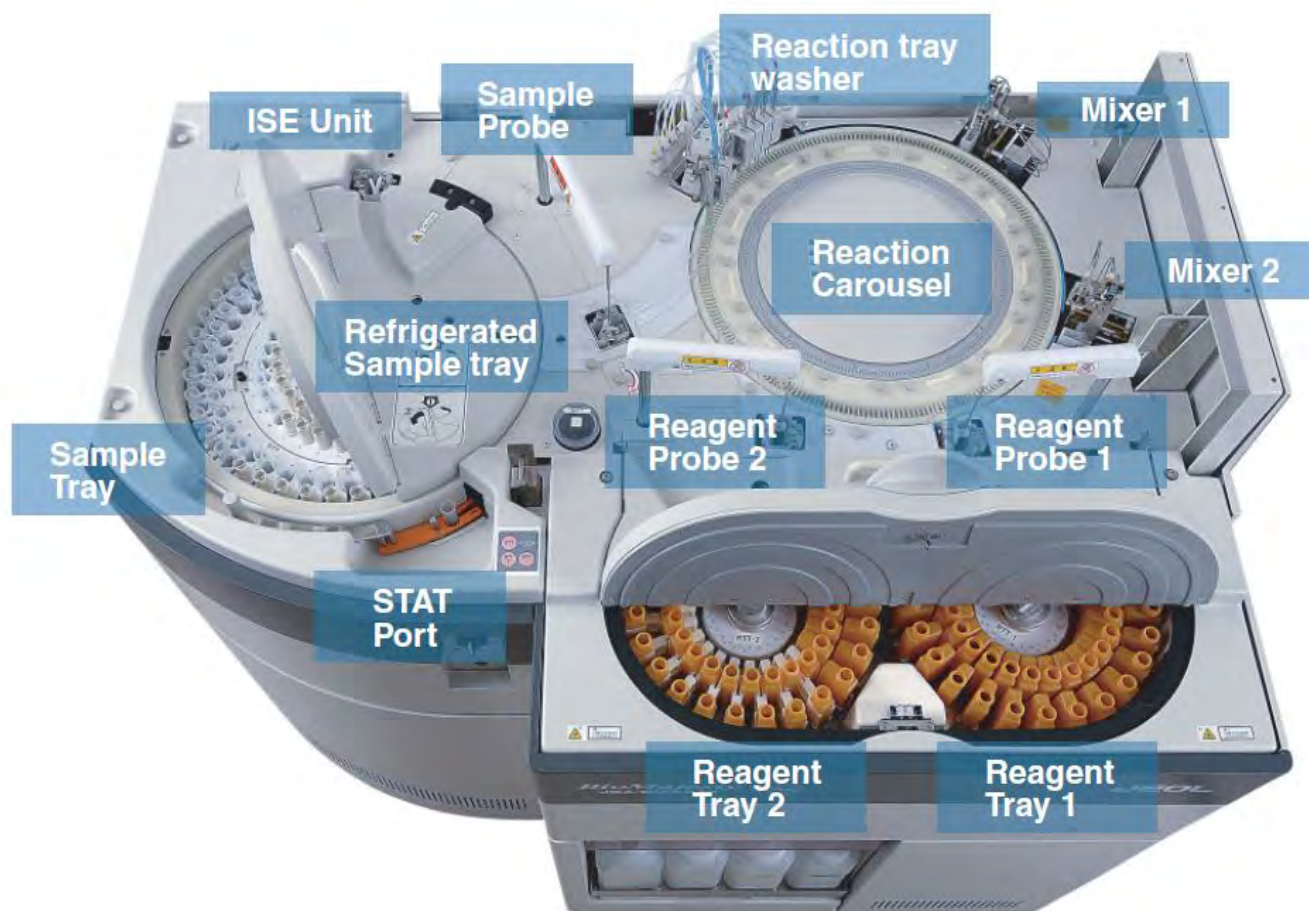
HORIBA

Big lab automation in a small footprint

HORIBA, Ltd. has been providing analytical instrumentation for over 75 years, and is an expert in analysis and measurement technologies covering liquids, gas and solids.

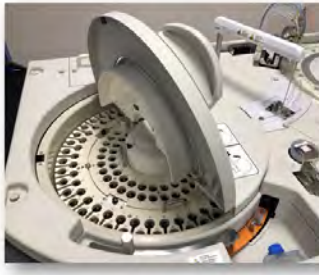
The Yumizen C1200 AL is the next generation chemistry system designed to provide high efficiency, and accuracy, and optimal workflow capabilities for laboratories processing 2.0M+ tests annually.

With a throughput of 1200 tests/hour, dedicated port for STAT patient samples and a large test menu, the Yumizen C1200 system guarantees the enhanced flexibility and performance laboratories require for everyday use.



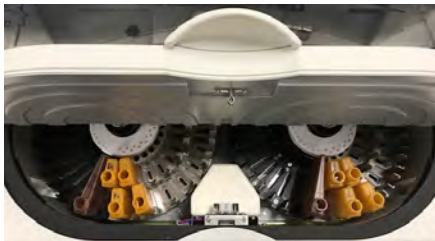
- Compact footprint and enhanced usability
- High speed and micro-volume technology for improved performance and cost efficiency
- Robust performance with industry standard MTBSF of 2.5 days

Accuracy | Efficiency | Optimum Workflow



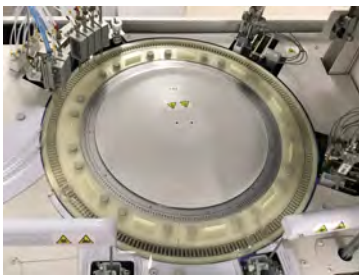
Sample Handling

- 84 positions for routine sample testing
- Micro-volume analysis; sample volume 1-25 μ L
- Analyzes serum, plasma and urine
- Refrigerated area for controls and calibrators



Reagent Handling

- 45 refrigerated positions | 100 applications
- Program 3-reagent assays
- Micro-reagent pipetting: 5-300 μ L
- Open channels for esoteric assays



Reaction Tray and WUD Station

- 11 replaceable segments, 21 reaction wells per segment
- Two mixers enable maximize throughput and help to reduce sample and reagent carryover
- Oil bath provides high resolution for quality results, maintains reaction temperature, and eliminates bubbles, bacterial growth and water stains
- Seven-step wash process ensures thorough cleaning



STAT Mode

- External access outside of sample carousel
- Easy loading and off-loading
- 10 pre-defined panels for samples without barcodes



Autoloader

- Autoloader loading capacity: 65 samples
- 13 racks; 5 samples per rack
- 800 samples/hr
- Sample tube types: 5, 7 and 10 mL

Technical Specifications

General Description

| | |
|-----------------------|--|
| Analysis Method Types | Spectrophotometry: colorimetric and turbidimetric assays |
| Indirect ISE | Na ⁺ , K ⁺ , Cl ⁻ |
| Throughput | 1200 tests/hour |
| Automatic Maintenance | During start-up and shutdown |

Sample Handling

| | |
|-----------------------------|--|
| Sample Tray | 84 samples, continuous loading |
| Sample Probe | Liquid level sensing, cap/shock and clot detections |
| Sample Identification | Integrated barcode reader |
| Sample Types | Serum, plasma, urine |
| Sample Collection Format | 5, 7, 10 mL tubes and sample cups |
| ISE Sample Volume | 22 µL (serum, urine) |
| Sample Volume | 1 - 25 µL (0.1 µL increment) |
| Automatic Sample Dilution | 1/2 to 1/300 |
| Calibrator and Control Tray | 61 refrigerated positions for calibrators and controls |
| STAT Sample Handling | Dedicated STAT position |

Reagent Handling

| | |
|------------------------|--|
| Reagent Tray | 2 trays with 45 reagent positions each |
| Refrigeration | All reagents refrigerated at 2° - 8° C |
| Reagent Cartridge | 20 (with adaptors), 40 or 70 mL |
| Dispensing System | 2 reagents probes, 3-part reagent capability |
| Reagent Identification | Integrated barcode system |
| Reagent Volume | 5 - 300 µL |

Reaction System

| | |
|---------------------------|--|
| Reaction Tray | 231 reusable cuvettes |
| Reaction Volume | 80 - 430 µL |
| Reaction Temperature | 37° C ± 0.5 with oil bath |
| Reaction Time | 3, 4, 5, 10, 15 minutes |
| Extended Reaction Time | 21 or 31 minutes |
| Photometer Reaction Cycle | 13.5 seconds |
| Reagent/Sample Mixing | Rotation and repeat left-right movements by stirrers |
| Automatic Correction | Serum blank, cell blank, measurement point change |

Optical System

| | |
|-----------------------|--|
| Light Source | Halogen lamp with cooling system (coolant circulation) |
| Measurement Principle | Endpoint, rate reaction, 2 point rate, immunoassay |
| Wavelengths | 14 wavelengths (340 - 884 nm), mono- and bichromatic |

Physical Specifications

| | |
|----------------------|---|
| Analyzer Size | 122 W x 85 D x 110.8 H cm / 48" W x 33" D x 43" H |
| Analyzer Weight | 450 kg / 992 lbs |
| Ambient Temperature | 18° - 30° C |
| Humidity | 40% to 70% with no condensation |
| Power Source | 2.6 kVA, 110 V or 220 V ± 10%, 50/60 Hz |
| Water Consumption | 20 L/hour |
| Water Specifications | Conductivity < 1 µs/cm |
| Autoloader | 77 W x 118 D x 101 H cm 46.5" W x 30.3" D x 39.8" H |
| Autoloader Weight | 98 kg / 216 lbs |



MED-ADV-10703