



# FACA-801

## Fully Automatic Chemistry Analyzer



Labomed introduces an automatic biochemistry analyzer with varying testing capacities. FACA-801 conducts 800 tests/hr with True Random Access.

### Features

- Random Access and Direct Reading System.
- Automatic Washing System for Both Sample and Reagent Probe.
- Liquid Level Detection and Collision Protection for Both Sample and Reagent Probe.
- Reliable Cooling System for Reagent Chamber.
- Works with Windows XP and Windows 7
- Powerful Reaction Cuvette Washing System.
- User-Friendly Interface.
- ISE module and barcode scanner (optional)
- Enzyme Kinetic GPT and GOT testing

**Labomed, Inc. is certified by ISO 9001-2013, has CE Conformity and is FDA Licensed**

### Accessories

|                            |            |         |
|----------------------------|------------|---------|
| 40-type Reagent bottle 1   | (40ml)     | 100pcs  |
| Reagent bottle 2           | (15ml)     | 100pcs  |
| Cuvette                    | (20 holes) | 8pcs    |
| Detect probe               |            | 1 set   |
| Sample cup                 |            | 1000pcs |
| Sample probe               |            | 2pcs    |
| USB cable                  |            | 1pc     |
| USB extension cable        |            | 1pc     |
| Power cable                |            | 1pc     |
| Com cable                  |            | 1pc     |
| Ground cable               |            | 1pc     |
| Sensor                     |            | 2pcs    |
| Tube                       |            | 1 set   |
| Fixed buckle               |            | 2 sets  |
| Tool                       |            | 1 set   |
| Fuse                       |            | 4pcs    |
| Connector (Φ8) and its nut |            | 2pcs    |
| Connector(Φ4) and its nut  |            | 1pc     |
| Lamp with holder (12V/20W) |            | 1 set   |
| User manual                |            | 1pc     |
| Operation software CD      |            | 1pc     |
| PCI-E Card                 |            | 1 set   |
| Seal ring                  |            | 3pcs    |
| Detergent alarm needle     |            | 1pc     |



#### 1 Reagent Tray

40 reagent positions for FACA-301 and FACA-261  
80 reagent positions for FACA-401  
Cooling system may work independently for 24 hours.

#### 2 Sample Tray

60 sample positions for FACA-301 and FACA-261  
88 sample positions for FACA-401

#### 3 Cuvette

Either high quality UV-transmitted plastic  
cuvettes or quartz glass cuvettes available.

#### 4 Independent Mixer

1 mixer for FACA-301 and FACA-261  
2 mixers for FACA-401

#### 5 Sample probe/ Reagent probe

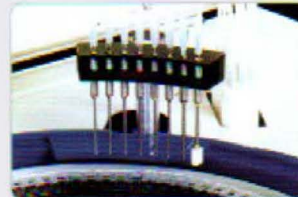
1 sample probe and 1 reagent probe for FACA-301  
1 sample probe and 2 reagent probes for FACA-401  
Only 1 sample / reagent probe for FACA-261

#### 6 ELE Module

ELE module available on request.

#### Cuvette Washing Station

8 channels automatic washing station.



#### Independent Mixer

Independent mixer ensuring quick and complete reaction.



#### Reaction Cuvette

High quality UV-transmitted plastic cuvettes, or quartz glass cuvette (optional).



#### Sample Probe / Reagent Probe

With liquid level sensor, anti-collision sensor and automatic cleaning function.



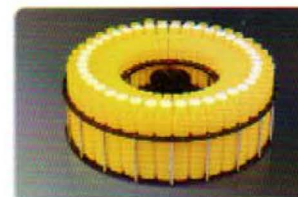
#### Reagent Bottle

More convenient and economical ready to use reagent kits.



#### Reagent Tray

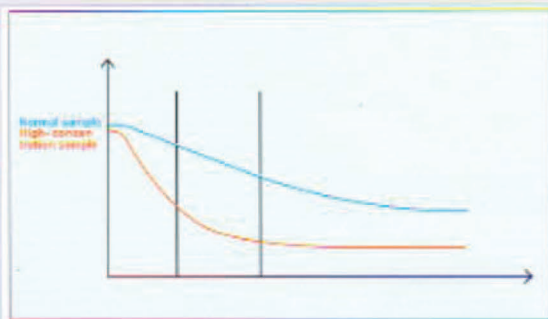
With cooling reagent chamber.



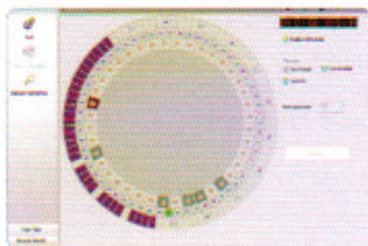
## Software



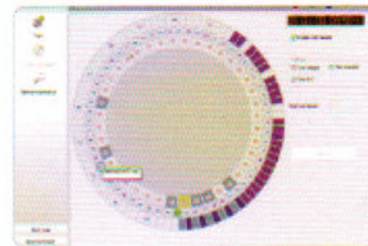
**User-Friendly Interface**  
**Compatible with Windows XP, Vista or Windows 7**



**Variable reading function**

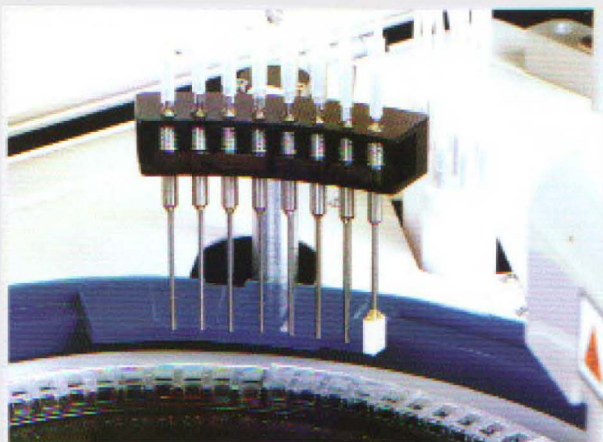


**Carry Over Control Function**



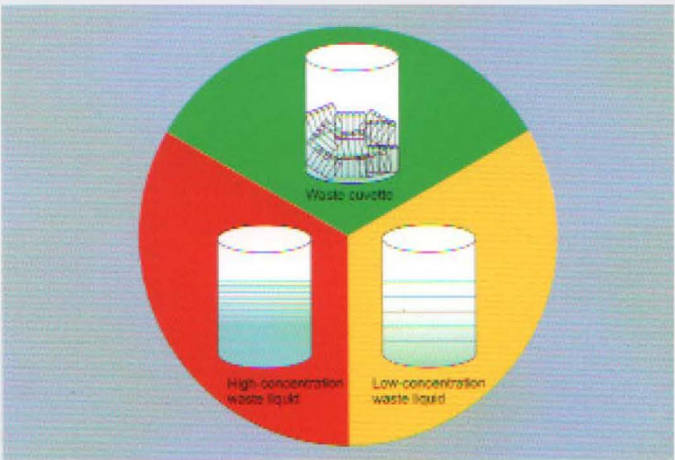
**Automatic Alarm for Malfunctions**

# Automatic Washing Station



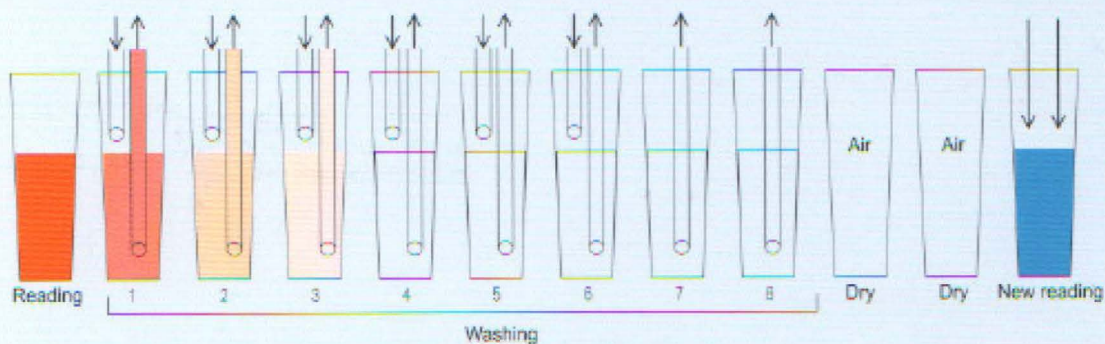
An 8-channel washing station ensures complete washing for cuvettes.

# Environmental Protection Design



The waste is automatically classified and collected into different containers.

## Automatic cuvette washing and blanking makes more precise results



| Wavelength | Reading | Wash1  | Wash2  | Wash3  | Wash4  | Wash5  | Wash6  | Wash7  | Wash8  | Dry    | Dry    | New reading |
|------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|
| 340nm      | 1.3100  | 0.025  | 0.0092 | 0.0037 | 0.0022 | 0.0008 | 0.0006 | 0.0005 | 0.0002 | 0.0800 | 0.0850 | /           |
| 405nm      | 0.6820  | 0.0112 | 0.0075 | 0.0033 | 0.0019 | 0.0010 | 0.0005 | 0.0003 | 0.0002 | 0.0800 | 0.0805 | /           |
| 450nm      | 0.5281  | 0.0108 | 0.0066 | 0.0031 | 0.0015 | 0.0009 | 0.0003 | 0.0003 | 0.0002 | 0.0806 | 0.0805 | /           |
| 510nm      | 0.7005  | 0.0113 | 0.0055 | 0.0027 | 0.0012 | 0.0006 | 0.0002 | 0.0002 | 0.0001 | 0.0810 | 0.0811 | /           |
| 546nm      | 0.5388  | 0.0184 | 0.0072 | 0.0043 | 0.0013 | 0.0008 | 0.0002 | 0.0002 | 0.0002 | 0.0840 | 0.0843 | 0.5080      |
| 578nm      | 0.0136  | 0.0135 | 0.0064 | 0.0031 | 0.0012 | 0.0006 | 0.0002 | 0.0002 | 0.0002 | 0.0800 | 0.0800 | /           |
| 620nm      | 0.0189  | 0.0189 | 0.0054 | 0.0026 | 0.0010 | 0.0005 | 0.0002 | 0.0002 | 0.0002 | 0.0800 | 0.0800 | /           |

Test O.D. value-Real reagent blank=True O.D.value

## FACA-801 Automatic Biochemistry Analyzer

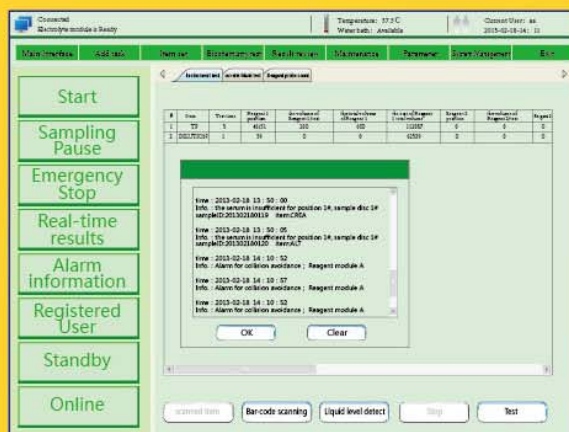
More powerful software meets all need.



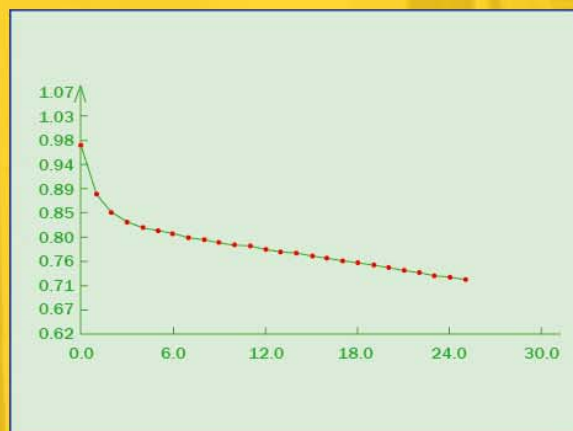
- High throughput random access...
- 800 Tests/hour
- New style software, more friendly, efficient and convenient.
- Water-bath incubation technology ensures accurate reaction temperature.
- Frequency conversion technology makes movement more stable, reliable and lower noise.
- Perfect self-test and position auto-locating function minimize mechanical error.
- Auto stand-by function for saving energy consuming and 24 hours ready for work.
- Perfect Instrument-Reagent-Control/Calibrator system ensures the results with good traceability and coherence.



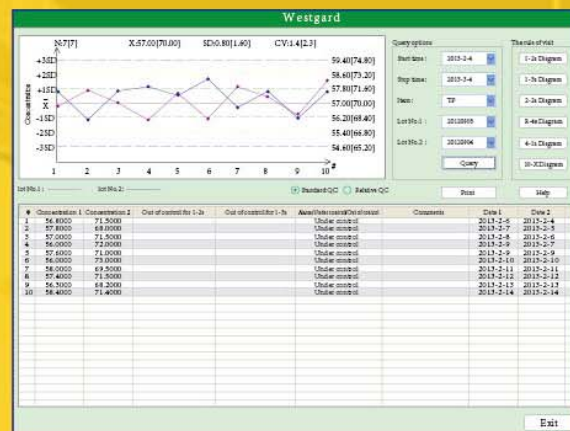
# FACA-801 Automatic Biochemistry Analyzer



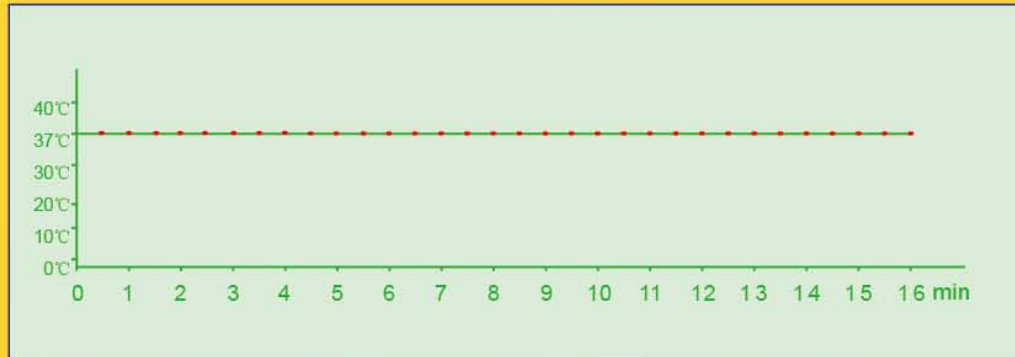
- Smart warning and easy to correct function.



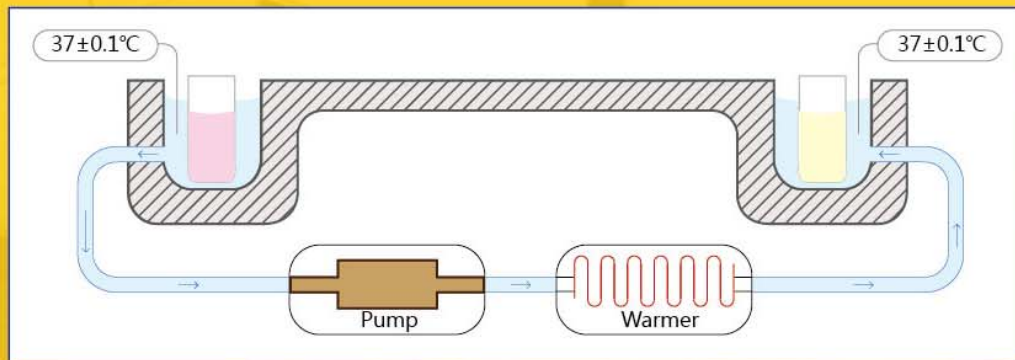
- Reaction curve displaying on line and storing helps results analysis.



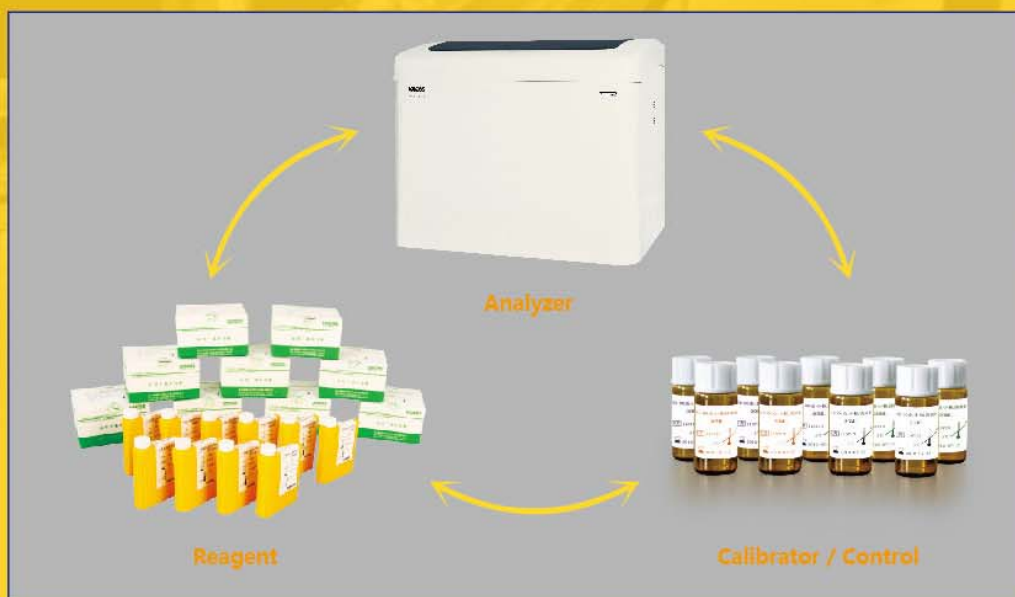
- Levy jennings quality control program at multi-level.



- Automatic high precision water-bath technology to ensure the temp. keeps at  $37\pm 0.1^{\circ}\text{C}$  immediately and constantly.



- Water-bath system.

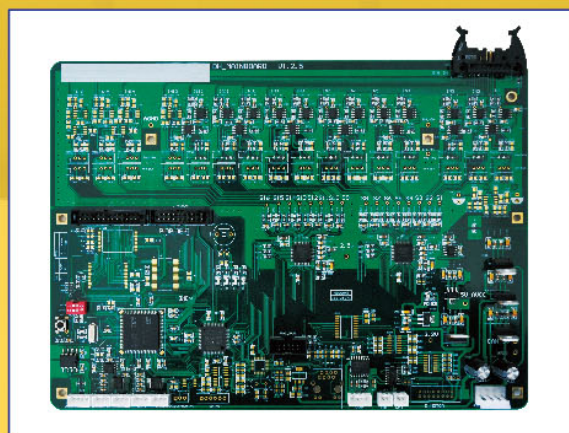


- Complete Instrument-Reagent-Control/Calibrator system guarantees traceability and reliability of all results.

## FACA-801 Automatic Biochemistry Analyzer



- ISE module is optional, test various ion items at the same time with accurate results and stable performance.



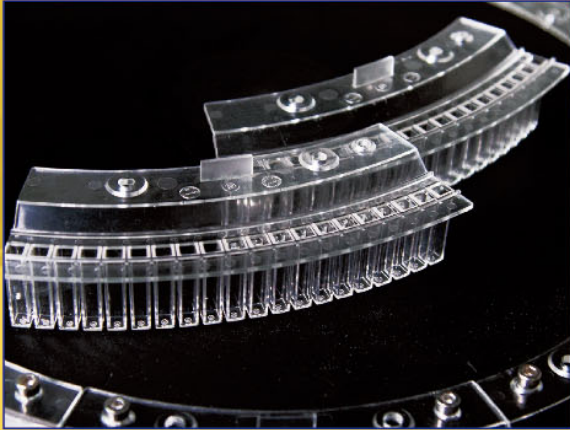
- Advanced high sensitive test technology.



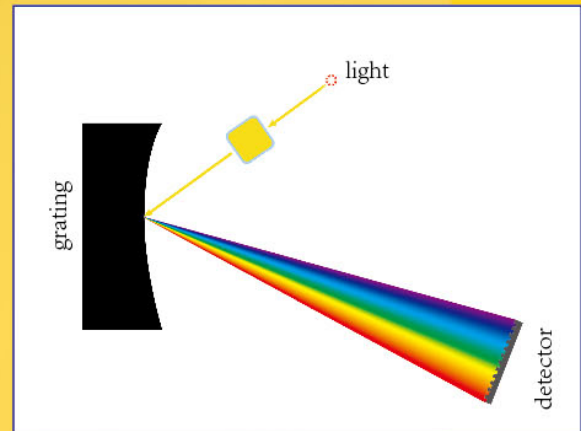
- Eight channels washing station for each cuvette cleaning, automatic record and deduct cuvette blank value. Heavy washing function available for "dirt cuvette" to ensure each cuvette perfectly clean.



- High accuracy diluter, advanced sealed and connecting technology to guarantee accurate sampling.



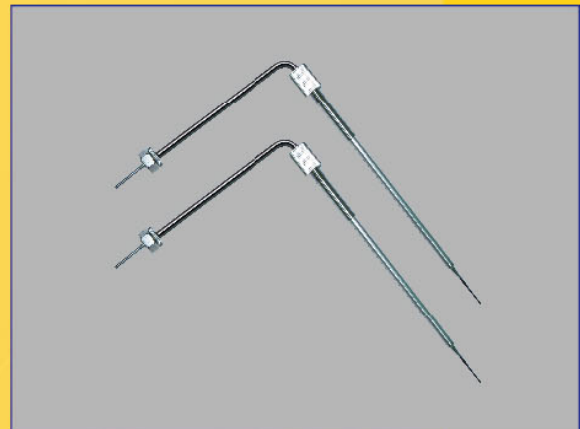
- High quality plastic cuvette (quartz glass cuvette available on request).



- High resolution concave grating system, wavelength range 340-800nm, multi-wavelength polychromatic assay at the same time.



- Two separate reagent chambers with independent refrigerator.



- Internal and external nano treated probe effectively reduce probe residual and carry over.

## Technical Specifications

|                              |                                                                                                                                                                                                                                                                     |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Model</b>                 | <b>FACA-801</b>                                                                                                                                                                                                                                                     |
| <b>Assay types</b>           | Random access                                                                                                                                                                                                                                                       |
| <b>Throughput</b>            | 960 T/hr(include ISE), 800 T/Hr(biochemical test only)                                                                                                                                                                                                              |
| <b>Analytical methods</b>    | End point, Kinetic(Rate), Fixed time, Single standard, Multi-standard, Single wavelength assay, Bichromatic, Bi-reagent assay, Serum blank assay, Immunospectrophotometric assay and ISE assay (K <sup>+</sup> Na <sup>+</sup> Ca <sup>2+</sup> Cl <sup>-</sup> PH) |
| <b>Sample capacity</b>       | 2 x 92 primary tube or micro serum cup                                                                                                                                                                                                                              |
| <b>Sample/reagent probe</b>  | With liquid level sensor, automatically checking and tracking reagent allowance ability, internal and external nano treated, stereoscopic collision protection, plugging probe checking ability                                                                     |
| <b>Sample volume</b>         | 1.0–100ul in 0.1 µl/step                                                                                                                                                                                                                                            |
| <b>Reagent volume</b>        | 1–500ul in 0.1 µl/step                                                                                                                                                                                                                                              |
| <b>Reagent tray</b>          | 2 reagent trays, barcode scanner available (on request), R3/R4 assay models available                                                                                                                                                                               |
| <b>Reagent refrigerator</b>  | 2–8 °C, 24 hrs available                                                                                                                                                                                                                                            |
| <b>Reading Cuvette</b>       | 160 cuvettes,made of ultraviolet transmittable plastic(or quartz glass cuvettes available on request)                                                                                                                                                               |
| <b>Reaction volume</b>       | Minimum 120 µl                                                                                                                                                                                                                                                      |
| <b>Reaction disc temp.</b>   | Water bath system, 37 ± 0.1°C,(air bath on request)                                                                                                                                                                                                                 |
| <b>Cuvette cleaning</b>      | Automatical warm water washing station with 8 channels, blank reading for ensuring each cuvette well cleaned before using. Smart detergent clean for high contamination cuvette and probe, efficiently decreasing carry-over                                        |
| <b>Carry-over</b>            | Less than 0.05%                                                                                                                                                                                                                                                     |
| <b>Monochromator</b>         | Concave grating                                                                                                                                                                                                                                                     |
| <b>Wavelength range</b>      | 340–810nm                                                                                                                                                                                                                                                           |
| <b>Alarm</b>                 | Automatic alarm for lack of reagent, sample , water, or waste filled and other errors, showing the info on monitor                                                                                                                                                  |
| <b>Mixer</b>                 | 2 nano-surface treated mixing probers, with automatic warm water washing station for each one                                                                                                                                                                       |
| <b>Quality control</b>       | Multi-level QC for the same item automatically monitoring and alarming if the results out of control                                                                                                                                                                |
| <b>Assay Linearity range</b> | Wide linearity range measuring, also with automatically diluting function for high value sample                                                                                                                                                                     |
| <b>Calibration</b>           | Single or multi-points calibration, supporting linear and nonlinear assay                                                                                                                                                                                           |
| <b>Data processing</b>       | Powerful software for calculating, blanking, multi-analysis, data reviewing, QC and results management,on line monitoring, editing etc.                                                                                                                             |
| <b>Data storage</b>          | Long-term storage, storage capacity upon PC hard disc                                                                                                                                                                                                               |
| <b>Print</b>                 | Multi report formats and user-self-defined report format are available                                                                                                                                                                                              |
| <b>Power supply</b>          | AC 110V/60Hz or 220V/50Hz                                                                                                                                                                                                                                           |
| <b>Dimensions</b>            | 1200mm x 900mm x 1100mm                                                                                                                                                                                                                                             |

US & Europe Patents Pending

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**LABOMED, INC.**

All FACA Fully Automatic Biochemistry Analyzers have 2 different sample plates:  
Standard sample plate for use with serum cup (serum order)



**STANDARD  
SAMPLE  
PLATE**

Test tube sample plate for use with 13x75 - 13x100mm test tubes (that is optional)



**TEST TUBE  
SAMPLE  
PLATE**

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