



# FACA-401

## Fully Automatic Chemistry Analyzer



### **THE FACA-401 IS A BENCH TOP INSTRUMENT. THE CABINET IS OPTIONAL.**

Labomed introduces the FACA-401, an automatic biochemistry analyzer with varying testing capacities. FACA-401 conducts 400 tests/hr with True Random Access and 10 filters as follows: 340nm, 405nm, 450nm, 505nm, 546nm, 578nm, 620nm, 700nm, 800nm. Extra filters can be added.

### 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 - Peltier pad
- Powerful reaction cuvette washing system
- User-friendly interface
- Cuvette Washing Station - 8 channels automatic washing station, 1 for detergent wash (connect detergent bottle), 2-6 channels wash by water, 7 channel for first empty, 8 channel for final empty
- LIS software optional - must be purchased separately
- Water consumption: < 10 L/hr
- Absorbance alert provided when the Absorbance is abnormal
- ISE module and barcode scanner (optional)
- Works with Windows XP and Windows 7.
- Enzyme Kinetic GPT GOT tests.
- All FACA Fully Automatic Biochemistry Analyzers have 2 different sample plates:
  - Standard sample plate for use with serum cup (serum order)
  - Test tube sample plate for use with 13x75 - 13x100mm test tubes (that is optional)
- QC control function, based on Levy-Jennings chart analysis

### Accessories

<b>Item</b>	<b>Specification</b>	<b>Quantity</b>
Reagent bottle 1	40ml	50Pcs
Reagent bottle 2 with holder	15ml	15Pcs
Reaction cuvette		80pcs
Serum Cup		1000pcs
Tube		1 set
Fuse (4A/8A)		4 sets
Lamp (13.8V/50W)		1Pc
Power cable		2Pcs
Com Cable		1Pc
User manual		1
Operation software		1
Tool		1 set
Sensor		1Pc
Detect Probe,		2Pcs
Sample Probe		1Pc
Ground Cable		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

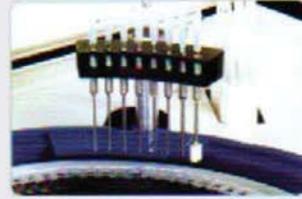
1 sample probe and 1 reagent probe for FACA-301  
 1 sample probe and 2 reagent probes for FACA-401  
 Only 1 sample / reagent probe for FACA-261

### 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.

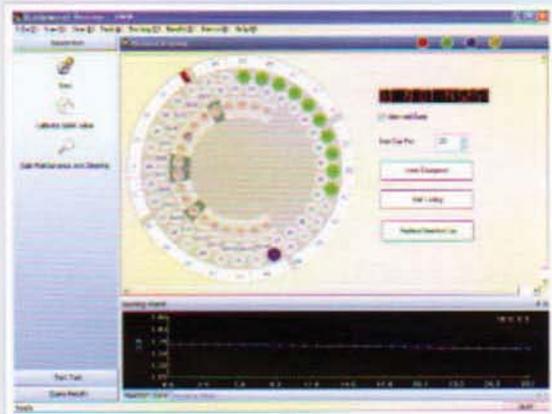


### Reagent Tray

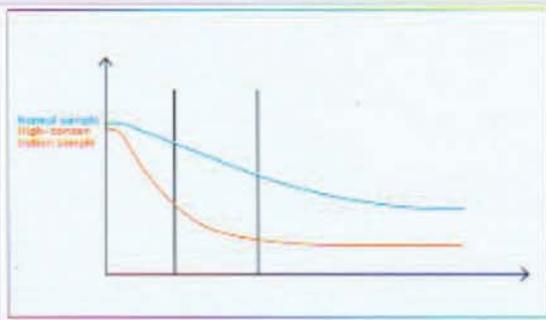
With cooling reagent chamber.



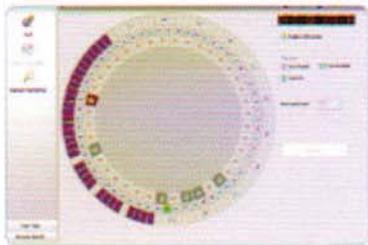
## Software



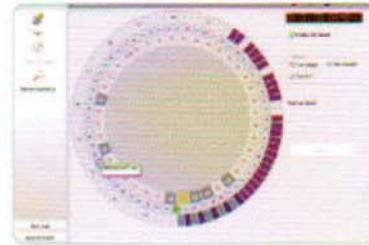
**User-Friendly Interface**  
**Compatible with Windows XP, Vista or Windows 7**



**Variable reading function**

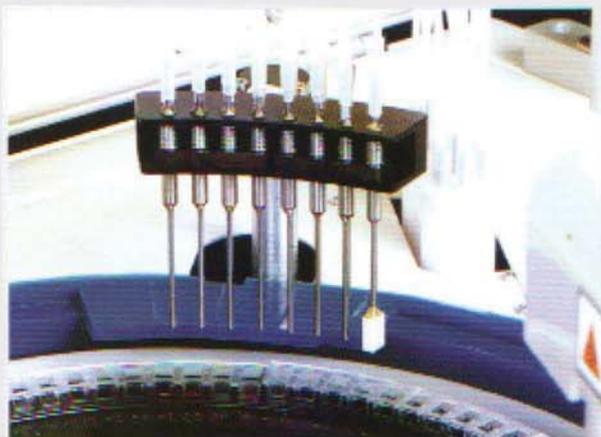


**Carry Over Control Function**



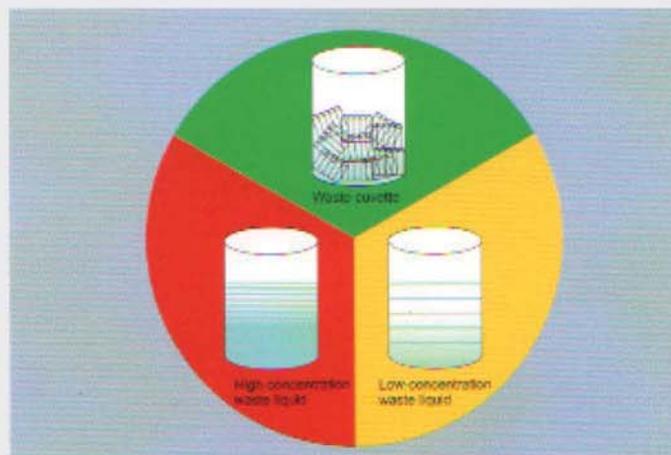
**Automatic Alarm for Malfunctions**

## Automatic Washing Station



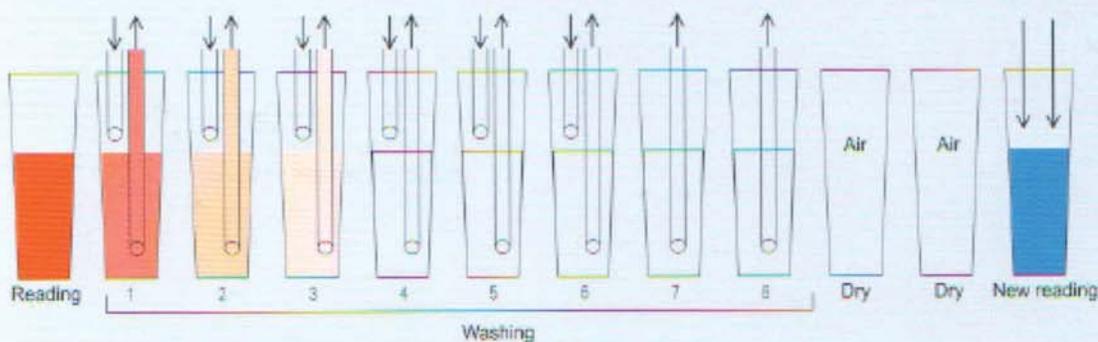
An 8-channel washing station ensures complete washing for cuvettes.

## Environmental Protection Design



The waste is automatically classified and collected into different containers.

## Automatic cuvette washing and blanking makes more precise results

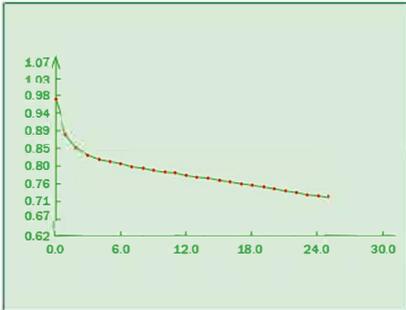


Wavelength	Reading	Wash1	Wash2	Wash3	Wash4	Wash5	Wash6	Wash7	Wash8	Dry	Dry	New reading
340nm	1.3100	0.025	0.0092	0.0037	0.0022	0.0008	0.0006	0.0005	0.0002	0.0800	0.0850	/
405nm	0.6920	0.0112	0.0075	0.0033	0.0019	0.0010	0.0005	0.0003	0.0002	0.0800	0.0805	/
450nm	0.5281	0.0108	0.0066	0.0031	0.0015	0.0009	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	0.0135	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	0.0028	0.0010	0.0005	0.0002	0.0002	0.0002	0.0800	0.0800	/

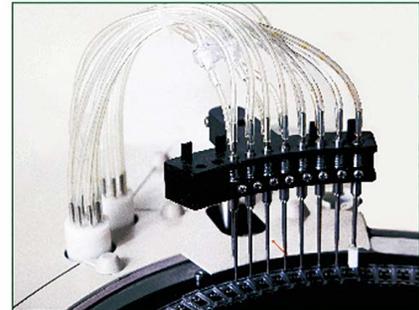
Test O.D. value-Real reagent blank=True O.D.value

**General Features:**

- New concept and more friendly software.
- New techniques and spare parts are used for much better quality and function.
- Automatic washing station for both sample and reagent probe.
- Liquid level detection and collision protection for both sample and reagent probe.
- Reliable cooling system for reagent chamber.
- Powerful reaction cuvette washing system.
- ISE module and barcode scanner(optional).
- Lower waste and more environment friendly.
- New concept test control system available (on request).



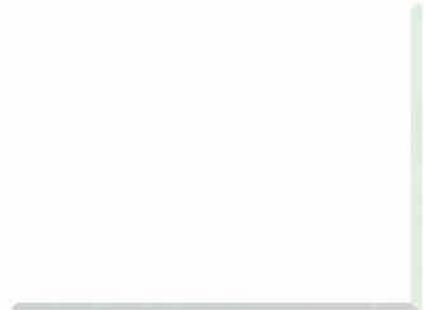
Reaction Cure Visible on line.

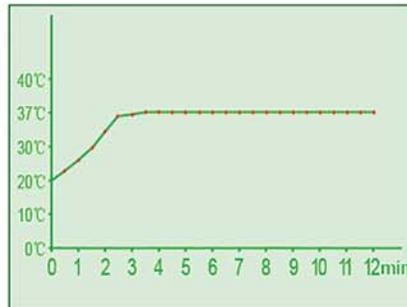


Cuvette Washing Station:  
8 channels automatic washing station.



Independent mixer ensuring full reaction of sample / reagent solution.





Quickly heating up and thermostable technique to ensure reaction solution reach  $37\pm 0.5^{\circ}\text{C}$  within 160s and stable at  $37\pm 0.2^{\circ}\text{C}$  more than 1200s.



Sample probe / reagent probe with liquid level sensor, anti-collision sensor and automatic washing function.



Reagent tray can be easily placed in cooling chamber.

## Technical Specifications

<b>Model</b>		<b>FACA-401</b>					
<b>Assay Model</b>		Random access with direct reading system					
<b>Method</b>		End point, Kinetic, Fixed time, Immunoturbidimetry, 1-2 reagent, Multistandard, reagent/serum blank, etc					
<b>Assay Item</b>		80 assay ISE mould (Na <sup>+</sup> , K <sup>+</sup> , Cl <sup>-</sup> / Li <sup>+</sup> )					
<b>Throughput</b>	<b>1 Reagent</b>	400 tests/h(max)					
	<b>2 Reagent</b>	400 tests/h					
	<b>With ISE</b>	400 tests/h + 120 tests/h = 520 tests/h					
<b>Test Menu</b>		T.BILI	r-GT/GGT	CHO	Ca	APOB-1/B	CHE
		D.BILI	ALP/AKP	TG	CL	APOB	CREA
		TP	UREA	CK	P	CK-MB	Mg
		ALB	CREA	LDH	C	ASO	AFU
		Lactic Acid	ALT/GPT	UA	α-HBDH	CO <sub>2</sub>	FMN
		LP(a)	AST/GOT	GLU	AMY	LDL-C	HDL-C
		CHE	LA	TBA	ADA	HS-CRP	PA
		Fe	Cu	Zn	C3	C4	IgG
		IgM	IgA	and drug, toxicity, etc			
<b>Sample Position</b>		80					
		Including standard, control and stat; either serum cup or primary tube available					
<b>Sample Volume</b>		1~100µl, 0.1µl / step					
<b>Reagent Position</b>		2 x 40					
<b>Reagent Volume</b>		R1: 1~400µl, 1µl / step, R2: 1~400µl, 1µl / step					
<b>Reagent / Sample Probe</b>		With liquid level sensor, collision sensor, teflon coating and automatic washing station					
<b>Reaction Time</b>		0~999 seconds					
<b>Cuvette</b>		High quality uv-transmitted plastic cuvette. Quartz glass cuvettes available on request					
<b>Cuvette Washing</b>		8 channels automatic washing system for reaction cuvettes					
<b>Probe And Mixer Washing</b>		Independent washing station for each sample/reagent probe and mixer					
<b>Alarm</b>		Automatic alarm for malfunction (eg: collision, reagent / sample insufficiency, full waste container, etc)					
<b>Calibration</b>		Linear, Non-linear, Multi standard, K factor					
<b>Sample Dilution/Retest</b>		Sample can be diluted and retested if results are out of range or sample is insufficient. Also with calibrator auto diluting function					
<b>Wavelength</b>		340~810nm					
<b>Light Source</b>		Halogen lamp					
<b>Absorbance Resolution</b>		0.0001A					
<b>Absorbance Accuracy</b>		±0.0003A(0~2.5A)					
<b>Repeatability (CV %)</b>		≤2%					
<b>Quality Control</b>		Levy Jennings quality control program at 3 levels					
<b>Bar Code</b>		Optional					
<b>Printer</b>		Multiple report formats available					
<b>Test Control Function</b>		New card control system available on request					
<b>Language</b>		English, French, Spanish, German, Russian, etc.					
<b>System</b>		Windows XP or Vista ; Windows 7					
<b>Power Supply</b>		220V / 50Hz or 110V / 60Hz (optional)					
<b>Dimension</b>		100×85×70 (cm)					
<b>Weight</b>		137Kg					



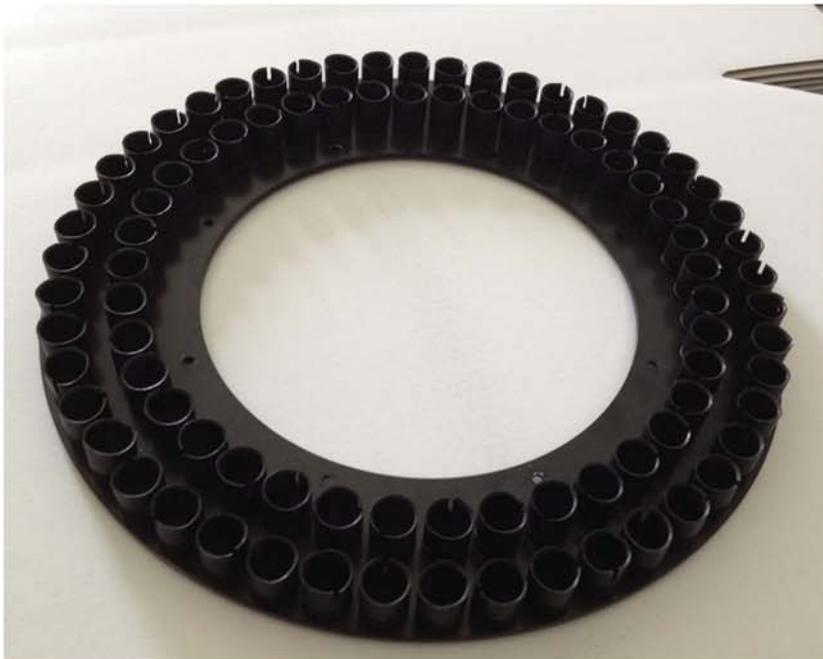
**LABOMED, INC.**

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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