

**Pentra 400** ●  
Clinical Chemistry system



# Pentra 400

**From routine to specific testing**

Now, pass your Analysis with flying Colours

- Up to 420 tests per hour with the ISE module
- 55 on-board parameters with back-up availability
- Innovative cassette format
- Integrated work station and validation station
- Touch screen interface
- Real-time follow-up of your workflow



• High-precision

• High quality analytical technology



## Sample management

- Positive identification
- Multiple sample checks using shock, level and fibrin detection
- Continuous loading
- STAT capability
- Automatic Pre / Post-dilution
- Automatic Re-run



## Reagent management

- Barcoded cassettes
- Optimised test packaging
- Reagent test count down with automatic back-up
- Refrigerated zone with up to 44 positions
- Extensive on-board test menu
- User defined channels

# A concentration of technology for high quality results

## HIGH-PRECISION OPTICAL SYSTEM

To meet the requirements for highly accurate photometric measurements, HORIBA Medical has chosen the holographic grating technology developed in collaboration with HORIBA Scientific (Jobin Yvon Technology).

- Spectral unit offering 15 different wavelengths (mono or bi-chromatic)
- Optimised reading by continuous sweep
- Highly sensitive measuring (validated holographic technology)
- Space-saving design with maximum efficacy provided by the tungsten lamp

The holographic grating technology reduces light diffraction and provides a high signal / noise ratio which significantly increases the quality of measurement to produce precise and stable test results.



## INTEGRATED ISE MODULE

Optional ISE module designed by HORIBA Ltd., Japan.

- 180 tests/hour

- Simultaneous analysis of Sodium, Potassium and Chloride
- Applications on Serum, Plasma and Urine

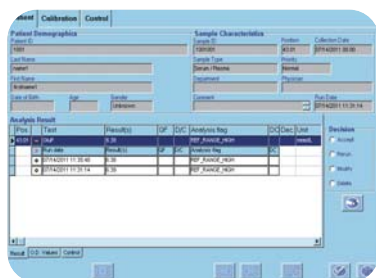
### High quality analytical technology

- Single-use reaction cuvette  
To perform the most sensitive tests and all latex assays with high stability results.
- High performance mixer design  
For optimal homogenisation in minimum time without cross-contamination.
- Optimum test sequence setting program with Incompatibility function

Optical system

● Integrated ISE module

● An extensive panel of liquid reagents



## Secure data management

- Secured results validation
- Reliable traceability in compliance with Accreditation Standards



## Patient management

- Work list generated by a manual entry or bi-directional connection
- Automatic validation based on user defined rules
- Intelligent delta checking
- Panic values monitoring
- Unlimited patients reports archiving

# An extensive panel of liquid reagents

## Cassette packaging

- Mono / Bi reagent cassettes
- Ready-to-use
- Extended range
  - > 52 reagents
  - > Enzymes / Substrates / Specific Proteins



## Easy management of your lab processes

- Random position on board
- Automatic traceability : lot number, expiration date, ...
- Automatic back-up
- Just one calibrator and two controls for global routine analysis



## Environment protection

Compact cassette packaging that respects the environment

- No more superfluous packaging
- Saves refrigerator space



## Cost control

- Optimised number of tests per cassette
- Limited calibrations
- Re-run analysis according to laboratory defined rules
- Activity measurement thanks to the test counter option<sup>(1)</sup>

Index	ISE	Analyzer	Barcode	Test Counter
Channel display				
IP: Parameters				
Other:				
All				
Time Period				
Once installation				
Test				
Re-run				
Stop				
Selection				
Channel #				
Current code				
Control				
Calibrator				
Patient				
Reportable				
Re-run				
T. Re-run				
Re-runable				
Total selected				
Total all				

(1) Test counter



# Pentra 400 New Generation

The Pentra C400 is an evolution of the successful system, the P400. This evolution ensures the user a platform that is reliable and extremely user friendly, whilst ensuring quality results that is the requirement in such an environment.

## Save valuable time

### Automatic reagent management

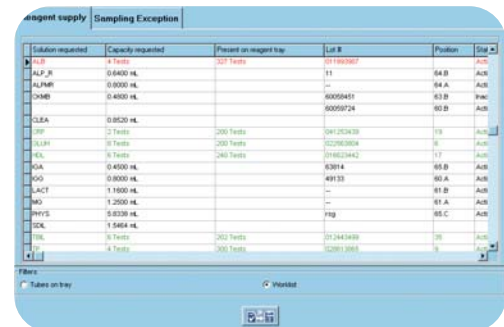
- Intelligent monitoring of reagent supply : the “workbalance” function assesses the stock on board relative to the workload requirements<sup>(1)</sup>
- Use limit date and Calibration validity checks

### Real-time workflow follow-up

- Control all your operations from the main screen (system, reagent and sample status)
- Dynamic display of the test results and sampling exceptions with the test review function<sup>(2)</sup>
- Multiple alarm sounds available

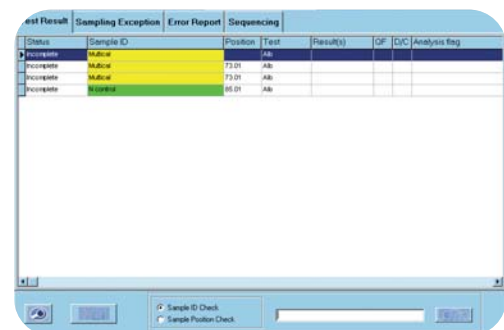
### Reduced maintenance procedures

- Automatic daily procedures
- Maintenance alerts
- Easy uploading of target values for calibrators and controls



Solution requested	Quantity requested	Percent on reagent tray	Lot B	Position	Sign
ALP_R	0.6400 mL	100 Tests	011000007	11	64 B
ALPHI	0.8000 mL	100 Tests	00000401	11	80 A
ALPHI	0.8000 mL	100 Tests	00000724	11	80 B
ALP	0.8000 mL	250 Tests	04120430	18	80 A
ALP	0.8000 mL	250 Tests	021003009	18	80 A
ALP	0.8000 mL	250 Tests	010023442	17	80 A
ALP	0.8000 mL	250 Tests	63014	18	80 B
ALP	0.8000 mL	250 Tests	49133	18	80 A
ALP	0.8000 mL	250 Tests	---	18	80 B
ALP	0.8000 mL	250 Tests	---	18	80 A
ALP	0.8000 mL	250 Tests	---	18	80 C
ALP	0.8000 mL	250 Tests	012443449	18	80 A
ALP	0.8000 mL	250 Tests	020013009	18	80 A

(1) Workbalance



Status	Sample ID	Position	Test	Result(s)	QC	C/C	Analysis flag
Incomplete	ALP_R	11	ALP	---			
Incomplete	ALPHI	11	ALP	---			
Incomplete	ALPHI	11	ALP	---			
Incomplete	ALP	18	ALP	---			

(2) Test review

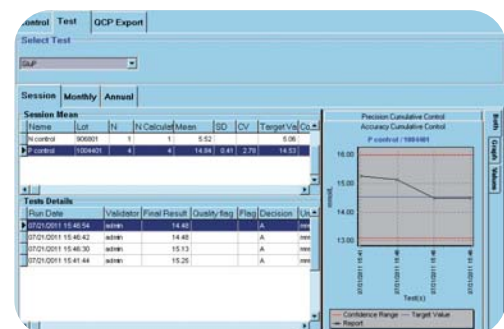
## Secure data management

### Secured results validation

- Westgard multirule Quality Control procedure with up to 3 controls
- Automatic calibration factor check
- Selective flagging

### Reliable traceability in compliance with Accreditation Standards

- Operator login history / Reagents, Calibration and Maintenance logs
- Full patient results traceability : multi-format option for archives review, end of day patient reports
- Full QC program : Up to 12-month control history, Levey-Jennings and Statistics<sup>(3)</sup>
- Easy export of archived data (USB key)



(3) Quality Control

# Pentra 400

Clinical Chemistry system by HORIBA Medical



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Medical

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