

Chemistry Analyzer – AU480

**A
U
F
A
M
I
L
Y**



Pakistan

Yasir Aziz

AU480 a member of the AU Family



AU Clinical Chemistry Analyzer

**Beckman Coulter Biomedical K.K
Mishima, Japan**



AU Clinical Chemistry Analyzer

The first one



AU550 (1985)

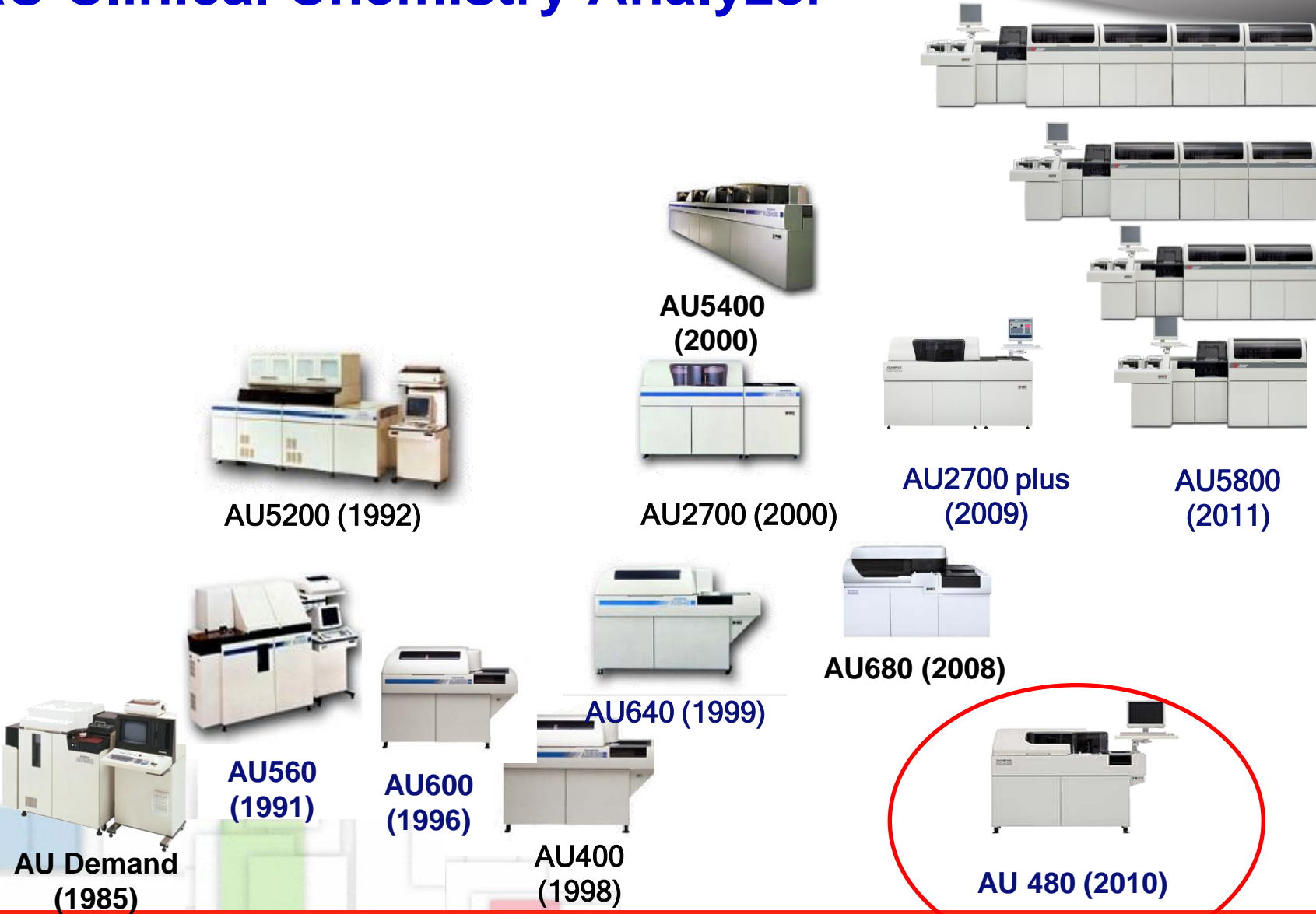


Olympus Diagnostics (Japan) made the first analyzer in 1980's and achieved perfection after series of Improvement based on Customer Feedback.

Today Beckman Coulter offers the new version of the Chemistry Analyzers that give precise, accurate, fast and reliable results...

AU Clinical Chemistry Analyzer

Throughput

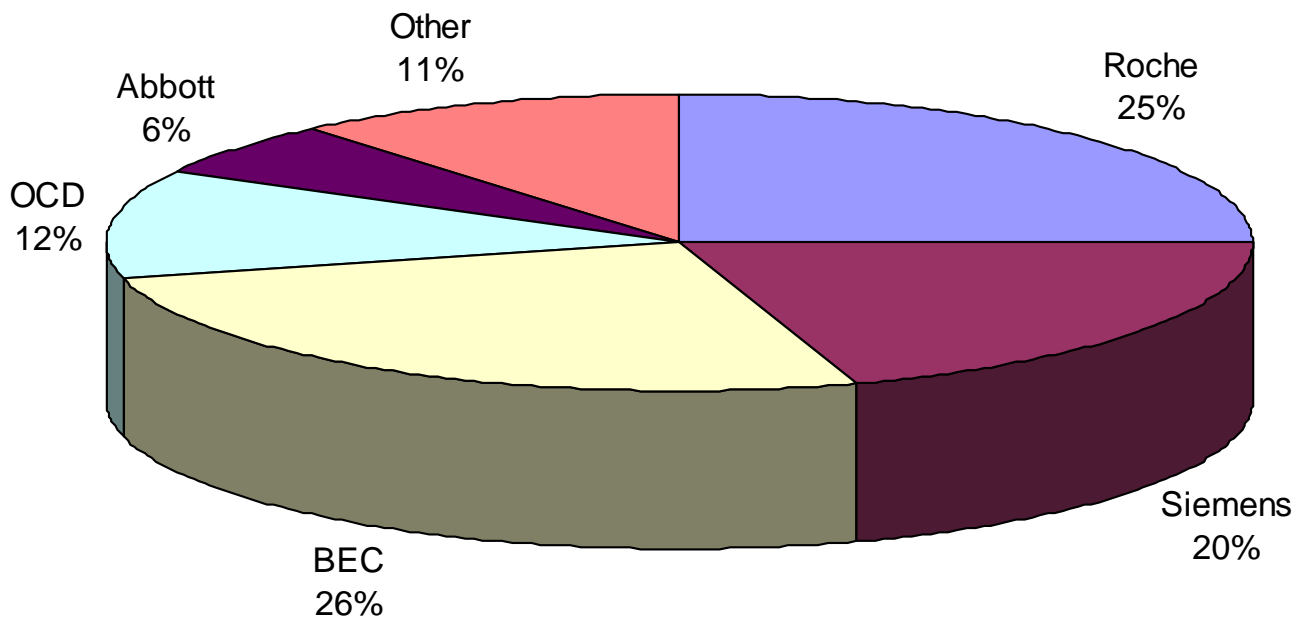


1981

Present

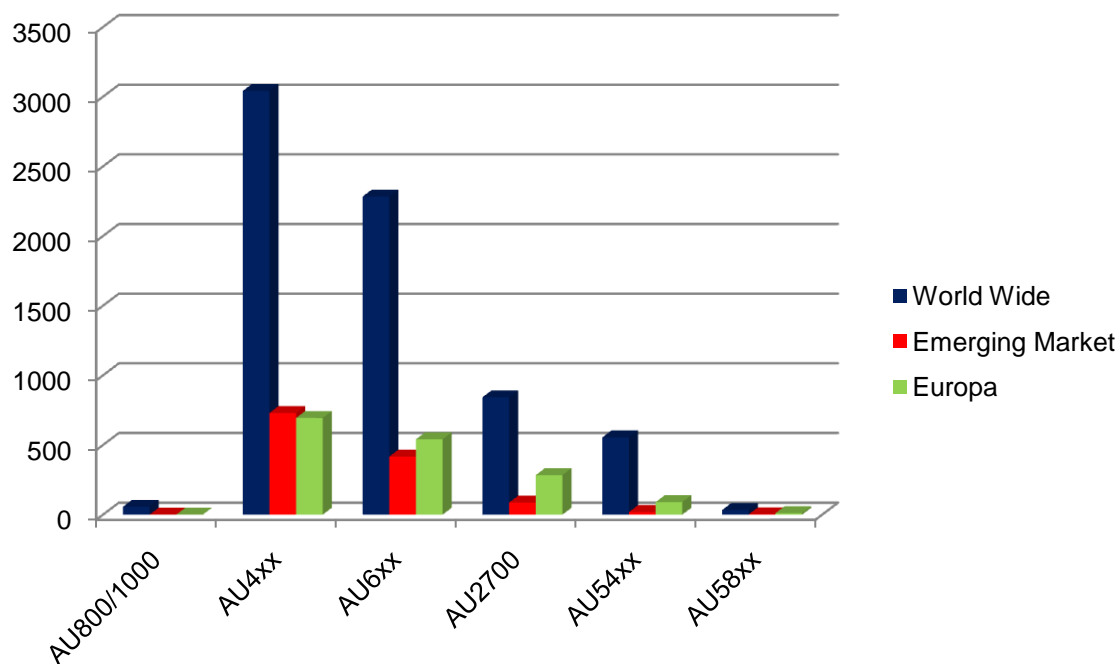
AU Clinical Chemistry Analyzer

Market Segmentation - Clinical Chemistry WW (2009)



AU Clinical Chemistry Analyzer

Installed Base September 2011



WW 6815
EM 1256
Europe 1620

**Systems older than
5 years are not
included**

AU Clinical Chemistry Analyzer

Flexible Throughput

- Scalable and unmatched throughput to meet all testing needs



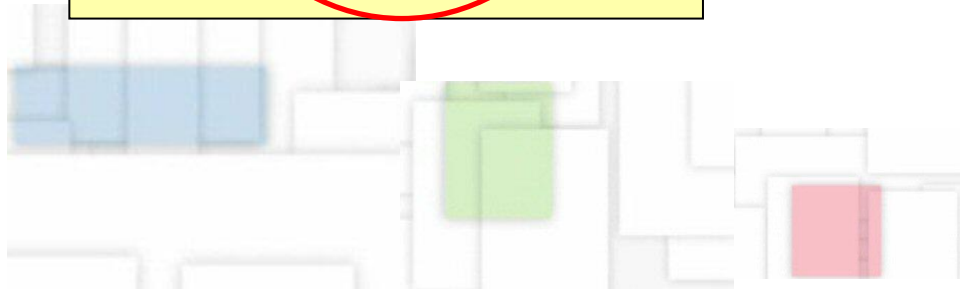
AU480
Up to 400 / 800
tests/hr / with ISE
Medium Hospital
Labs



AU680
Up to 800 / 1200
tests/hr / with ISE
Mid-High Hospital Lab



AU5811/AU5812
Up to 2000 tests/hr
2900 /3800 with ISE
Hospital Core Lab



AU Clinical Chemistry Analyzer

Flexible Throughput

- Scalable and unmatched throughput to meet all testing needs



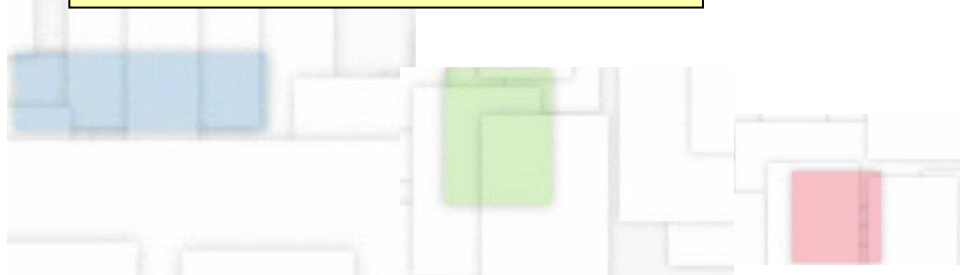
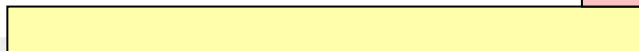
AU5821/5822
Up to 4000 tests/hr
4900 / 5800 with ISE
Hospital Core / High Throughput
Labs



AU5831/5832
Up to 6000 tests/hr
6900 / 7800 with ISE
High and Ultra-high Throughput
Labs



AU5841/5842
Up to 8000 tests/hr
8900 / 9800 with ISE
Ultra-high Throughput Labs



AU Clinical Chemistry Analyzer

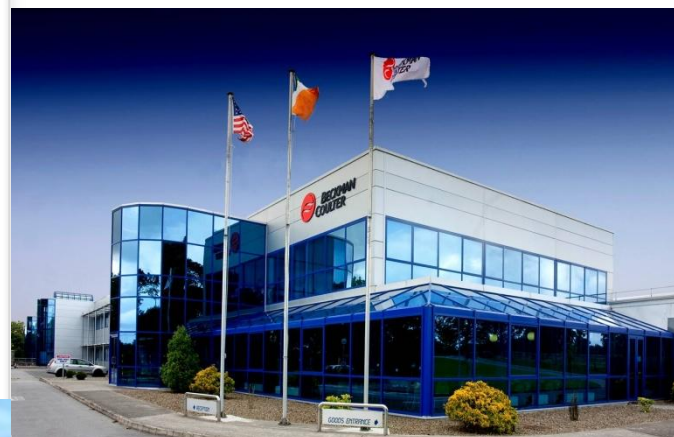
Flexible Throughput

	Pipetting Cycle	Probes/ Photometric System	Photometric Throughput
AU480	9 sec / 1 test	1	400 tests/hr
AU680	4.5 sec / 1 test	1	800 tests/hr
AU5810	3.6 sec / 2 tests	2	2000 tests/hr
AU5820	3.6 sec / 4 tests	4	4000 test/hr
AU5830	3.6 sec / 6 tests	6	6000 test/hr
AU5840	3.6 sec / 8 tests	8	8000 test/hr

AU Clinical Chemistry Reagents

**Beckman Coulter Ireland Inc
Lismeehan, O`Callaghan`s Mills
Co. Clare**

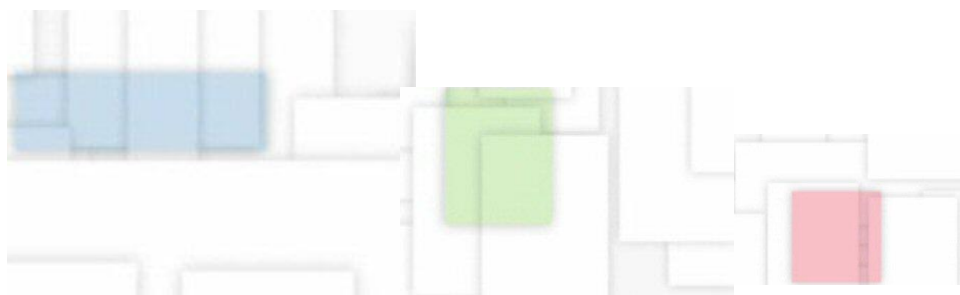
**Lot-Size: 200 to 20.000 l
35 to 40 Lots/Week**



AU Clinical Chemistry Reagents

Quality Systems

- **FDA Quality System Requirement,**
- **IVDD**
- **Japanese Pharmaceutical Affairs Law (J Pal)**
- **ISO 13485**
- **ISO 14001 (environment)**



AU Clinical Chemistry Reagents

AU Reagents are:

- **Checked for Cross Contamination**
- **Ensure the quality of results due several checks i.e.**
 - ✓ **Dynamic range / Linearity**
 - ✓ **Reagent OD limit (Reagent contamination)**
 - ✓ **Min and Max OD check for Fixed and Rate methods**
 - ✓ **Calibration Factor range check**
 - ✓ **DataCeckParameters (Prozone Effect)**
- **Barcoded to avoid reagent mismatch**
- **LIH checked (test specific flagged by the AU systems)**



AU Clinical Chemistry Reagents

- **Same reagents are used for all AU platforms providing the same results**
 - Most are ready to use
 - Bar-coded
 - Concentrated format
 - Tests from 50 to 5000 test per bottle, appropriated size for each analyzer
 - Broad Menu (over 125 assays)
- **All analyzers can use 15 mL, 30 mL, and 60 mL bottles.**
 - 120 mL on AU680
 - Maximize on board stability
 - Long self life of the lots

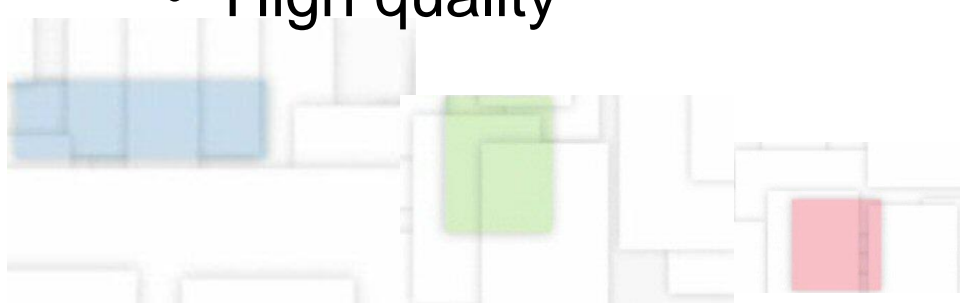
120mL & 180mL validation ongoing for AU5800



AU Clinical Chemistry Reagents

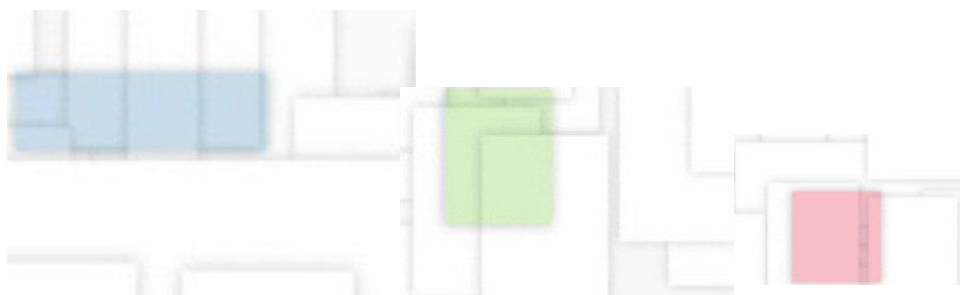
AU Reagents are:

- Highly concentrated (small packages)
- Available in different kit sizes
- Have a long shelf life
- Have a long onboard stability
- Most are ready to use (liquid stable)
- High quality










AU Clinical Chemistry Reagents

- AU Reagents are one or two shot reagents
- Reagents can be placed on the system without barcode (UDR / 3rd party reagents)
- Reagent load on the fly
Can load and unload reagents without stopping the analyzer



AU Clinical Chemistry Reagents

General Chemistry Albumin ALP ALT AST Amylase Calcium Arsenazo Calcium oCPC Chloride CO ₂ , Bicarbonate CK Creatinine Enzy. Creatinine Direct Bilirubin GGT Glucose Hydroxybutyrate Dehydrogenase LD Lipase Magnesium Phosphorus Potassium Sodium Total Protein Urea Uric Acid Urinary/CSF Protein	Hepatic Albumin ALP ALT AST GGT IgG IgA IgM Prealbumin Direct Bilirubin Total Bilirubin Total Protein	 Lipids Apo A1 Apo B Cholesterol HDL Cholesterol LDL Cholesterol Triglycerides	 Inflammatory Alpha-1-Acidglycoprotein Alpha-1-Antitrypsin C3 C4 Ceruloplasmin C-Reactive Protein Haptoglobin	TDMs Carbamazepine Digoxin Digoxin Gentamicin Phenobarbital Phenytoin Theophylline Valproic Acid	 Drugs of Abuse Amphetamines Barbiturate Benzodiazepine Cocaine Ecstasy Cannabinoid 20 ng (THC) Cannabinoid 50 ng (THC) EDDP Methadone Opiates 300 ng	
		Diabetes Direct HDL Cholesterol Direct LDL Cholesterol Glucose HbA1c Microalbumin Triglycerides Urinary/CSF Protein	 Nutritional Assessment Albumin Prealbumin Ferritin	Toxicology Acetaminophen (Paracetamol)		
		Renal Albumin Beta-2 Microglobulin Calcium Arsenazo Calcium oCPC Creatinine Enzy. Creatinine Glucose Phosphorus Potassium Sodium Total Protein Urea	 Cardiac CK CK-MB Activity Digoxin Myoglobin High-sensitivity CRP	 Autoimmune Anti-Streptolysin O C-Reactive Protein High-sensitivity CRP Rheumatoid Factor (RF)	Tumor Markers Beta-2 Microglobulin	
			Esoterics D-Dimer	 Anemia Ferritin Haptoglobin Iron Transferrin UIBC	Specialty Cholinesterase Lactate p-Amylase*	

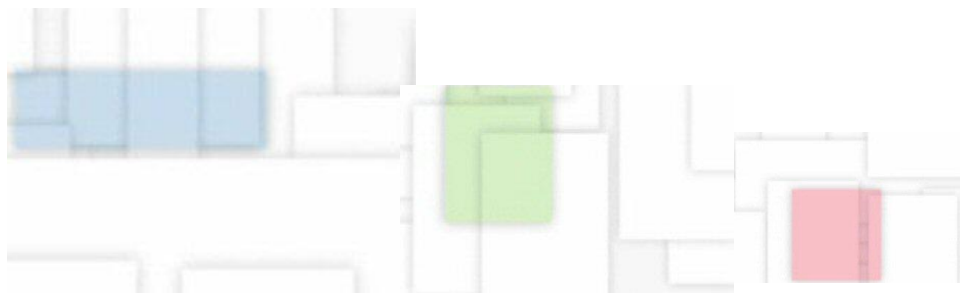
* User Defined Reagent



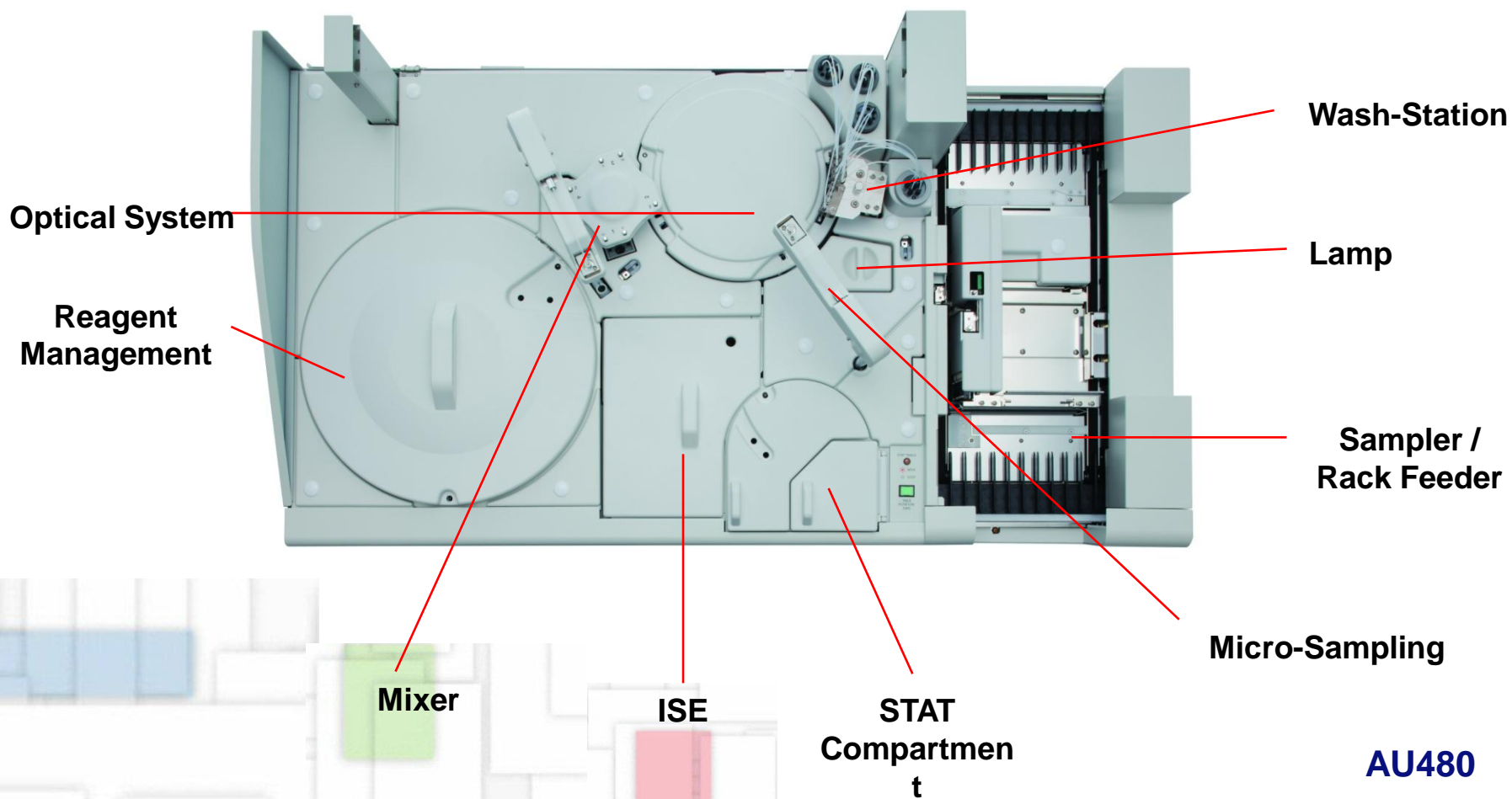
- Same reagents are used for all AU platforms providing
- Variable Kit size for optimal on board capacity

AU480

- AU 480 – Features
- AU 480 – ISE
- AU 480 – Software
- AU 480 – Maintenance



AU 480 – Features



AU 480 – Features

Sample Probe

➤ Sample Clot Detection

- ✓ Attempts to clear and continues to sample

➤ Level Detection

- ✓ Verifies sample and reagent availability

➤ Crash Detection

➤ Micro Sampling

- ✓ Small sample volumes (1.0 μ l)
 - Ideal for pediatric, veterinary samples

➤ Sample Probe Cleaner on STAT table

➤ Easy Access

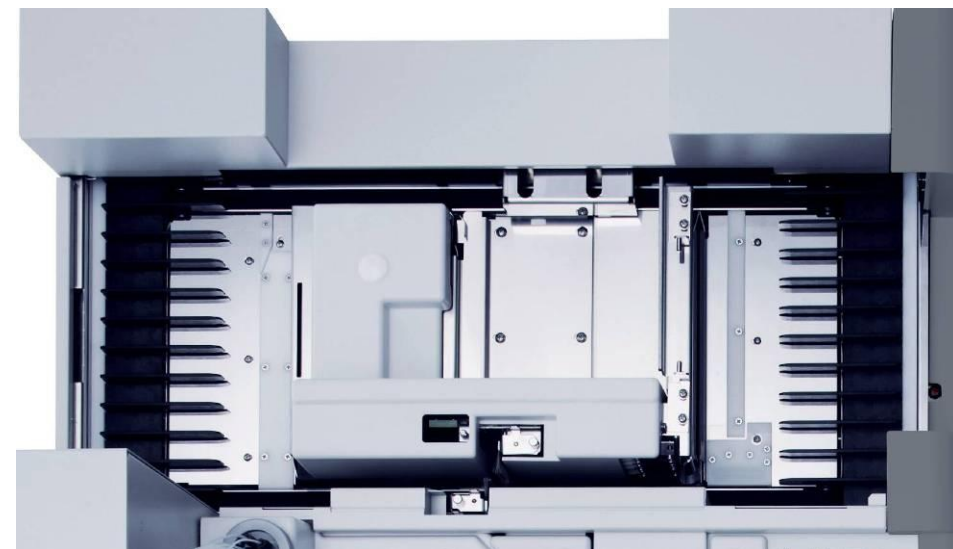
- ✓ Easy to Replace, no tools required



AU 480 – Features

Sample Loading

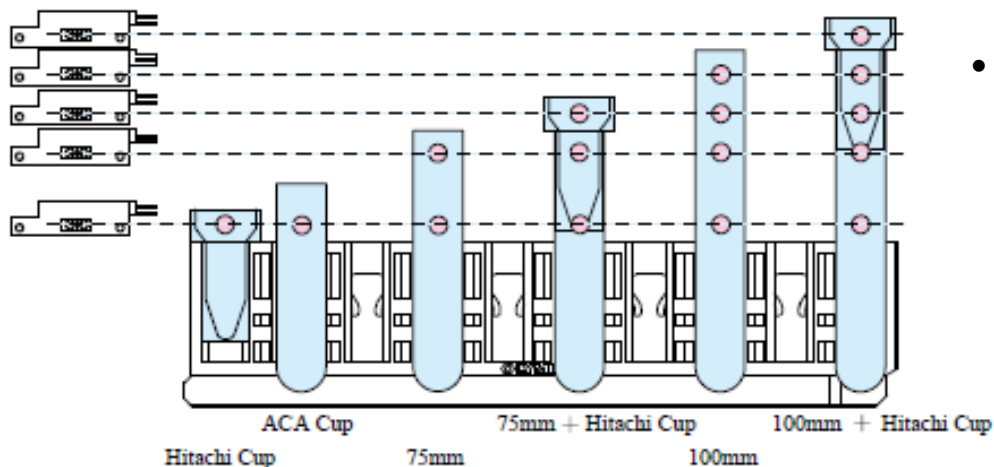
- **Continuous Loading**
- **Auto Repeat / Dilution**
- **Initial Capacity**
 - ✓ More than 100 samples with continuous loading
- **Flexible Racks**
 - ✓ 10 position racks
 - ✓ Variety of tube sizes and tube heights can be loaded into the same rack
- **Barcode Capability**
 - ✓ Mixed barcode types and digit lengths can be processed simultaneously



AU 480 – Features

Sample Racks

Improved Cup-detection

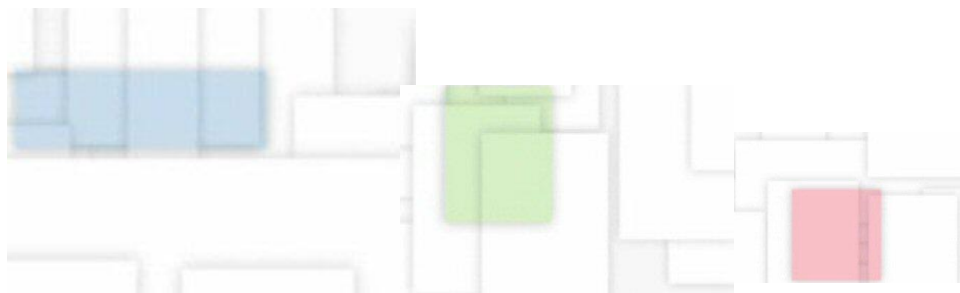


- **Five different LED's for Cup detection**
 - ✓ Usage of “Nested cups”
 - ✓ Special Down stroke for each LED – customer specific adjustments – less dead volume.

AU 480 – Features

Reagent Compartment

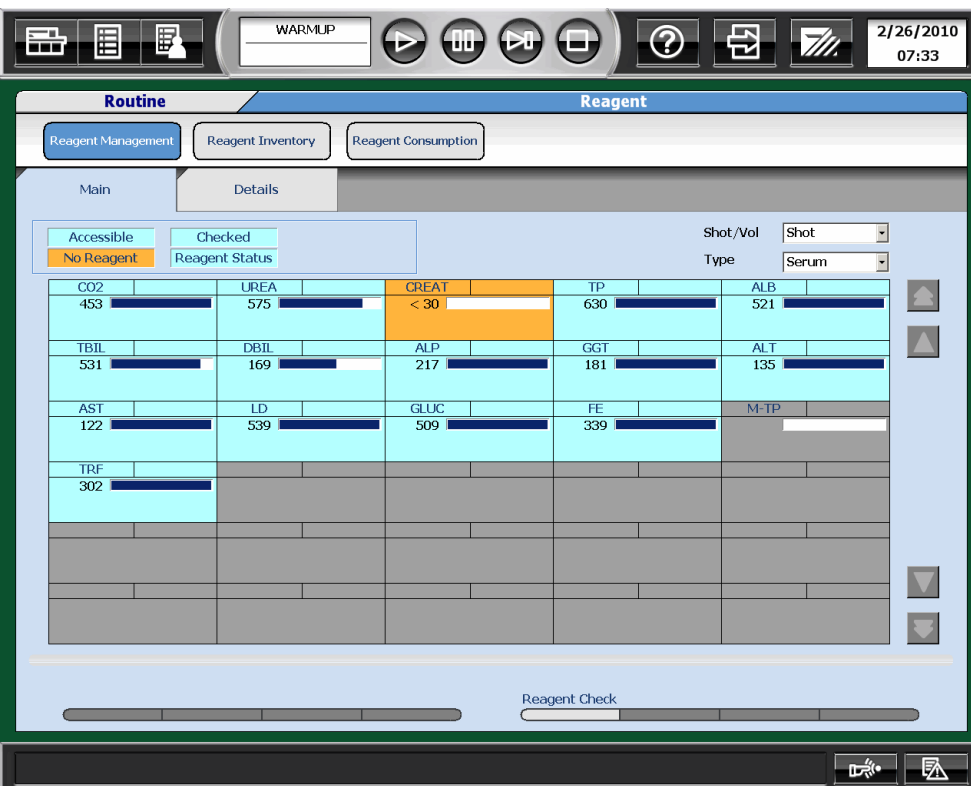
- 76 Reagent positions
- Reagent compartments are refrigerated (4 - 12°C)
- Barcode identification and liquid level detection provides: shots per bottle, Lot and bottle number, expiring date
- One dilution bottle (for sample pre dilution) in front of the reagent compartment



AU 480 – Features

Reagent Management - Display

Complete reagent inventory on one view



WARMUP 2/26/2010 07:33

Routine **Reagent**

Reagent Management Reagent Inventory Reagent Consumption

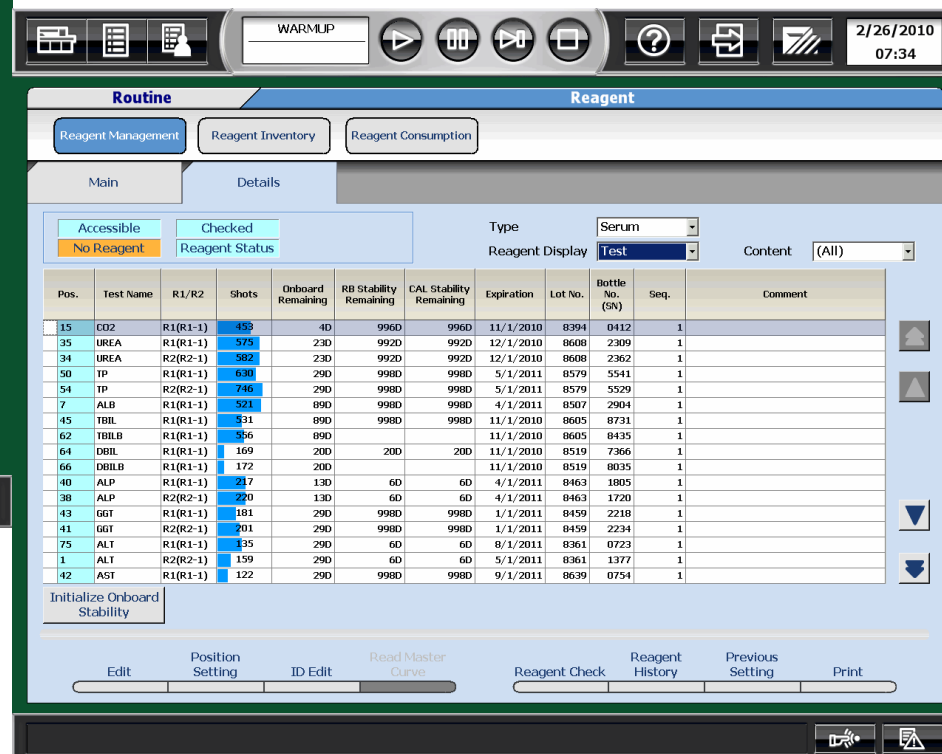
Main Details

Accessible No Reagent Checked Reagent Status

Shot/Vol Shot Type Serum

CO2	UREA	CREAT	TP	ALB
453	575	< 30	630	521
TBIL	DBIL	ALP	GGT	ALT
531	169	217	181	135
AST	LD	GLUC	FE	M-TP
122	539	509	339	
TRF				
302				

Reagent Check



WARMUP 2/26/2010 07:34

Routine **Reagent**

Reagent Management Reagent Inventory Reagent Consumption

Main Details

Accessible No Reagent Checked Reagent Status

Type Serum Reagent Display Test Content (All)

Pos.	Test Name	R1/R2	Shots	Onboard Remaining	RB Stability Remaining	CAL Stability Remaining	Expiration	Lot No.	Bottle No. (SN)	Seq.	Comment
15	CO2	R1(R1-1)	453	40	9960	9960	11/1/2010	8394	0412	1	
35	UREA	R1(R1-1)	575	230	9920	9920	12/1/2010	8608	2309	1	
34	UREA	R2(R2-1)	582	230	9920	9920	12/1/2010	8608	2362	1	
50	TP	R1(R1-1)	630	290	9980	9980	5/1/2011	8579	5541	1	
54	TP	R2(R2-1)	746	290	9980	9980	5/1/2011	8579	5529	1	
7	ALB	R1(R1-1)	521	890	9980	9980	4/1/2011	8507	2904	1	
45	TBIL	R1(R1-1)	531	890	9980	9980	11/1/2010	8605	8731	1	
62	TBILB	R1(R1-1)	536	890			11/1/2010	8605	8435	1	
64	DBIL	R1(R1-1)	169	200	200	200	11/1/2010	8519	7366	1	
66	DBILB	R1(R1-1)	172	200			11/1/2010	8519	8035	1	
40	ALP	R1(R1-1)	217	130	60	60	4/1/2011	8463	1805	1	
38	ALP	R2(R2-1)	220	130	60	60	4/1/2011	8463	1720	1	
43	GGT	R1(R1-1)	181	290	9980	9980	1/1/2011	8459	2218	1	
41	GGT	R2(R2-1)	201	290	9980	9980	1/1/2011	8459	2234	1	
75	ALT	R1(R1-1)	135	290	60	60	8/1/2011	8361	0723	1	
1	ALT	R2(R2-1)	159	290	60	60	5/1/2011	8361	1377	1	
42	AST	R1(R1-1)	122	290	9980	9980	9/1/2011	8639	0754	1	

Initialize Onboard Stability

Edit Position Setting ID Edit Read Master Curve Reagent Check Reagent History Previous Setting Print

AU 480 – Features

STAT Sample

Improved Turnaround Time

- ✓ **22 user-defined positions:**
 - Calibration & QC material
 - STAT samples
 - STAT repeats

- ✓ **Fix Positions for**
 - ISE cleaning and calibration
 - Reagent blank 1 & 2

- ✓ **Cooled compartment**
 - **Store onboard Cals & Controls**



AU 480 – Features

STAT Compartment

- ✓ **22 Positions** for the STAT Samples or Calibrators or Controls



AU 480 – Features

Cuvette Wash Station



Cuvette wash – 8 Probes (left to the right)

2 x wash with diluted Detergent

4 x wash with hot water

1 x Aspiration

1 x Drying

AU 480 – Features

Mixer

2 Mixer

(mixing after R1
dispensing)

2 Mixer

(mixing after **Sample**
dispensing)

2 Mixer

(mixing after R2
dispensing)



AU 480 – Features

Mixer

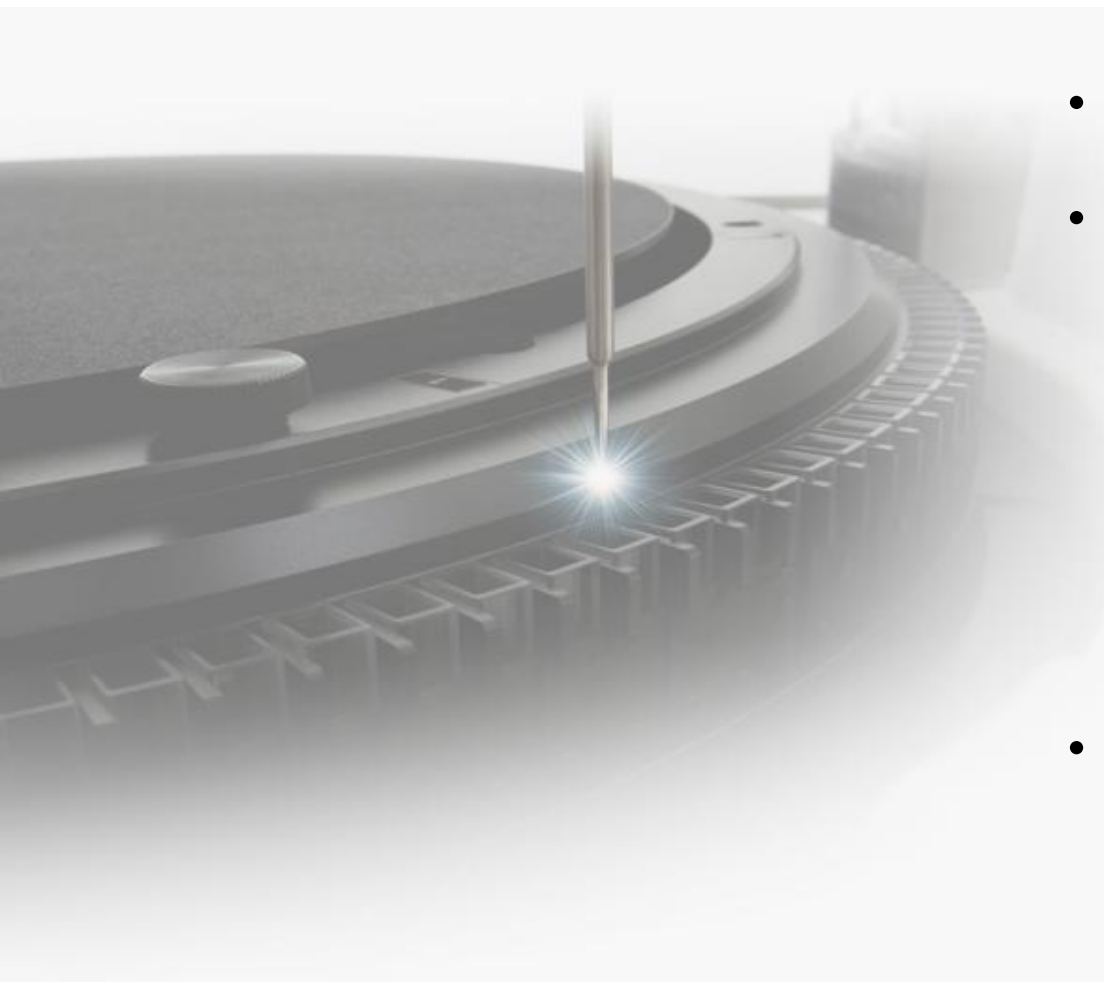
AU480
Spiral Mixer
for R1 and
Sample



AU480
Straight Mixer
for R2

AU 480 – Features

Reaction Carousel



- **Excellent optical system**
- **Cuvette Wheel**
 - ✓ **88 Permanent**, continuously cleaned, glass cuvettes
 - ✓ Reduces Maintenance -Lowers Inventory Cost
 - ✓ Minimizes Waste Cost
- **Dry Bath Technology**
 - ✓ **No water bath**
 - ✓ Reduces Maintenance

AU 480 – Features

LIH – Serum Index

- **Sample integrity** for Hemolysis, Lipemia and Icterus will be measured: i.e. Hemolysis ++ , Lipemia +, Icterus n
- The LIH results will be cross linked to results so that assays sensitive to LIH are appropriately flagged, **thus ensuring that correct decisions are made.**

Lipemia



Icterus

Hemolysis



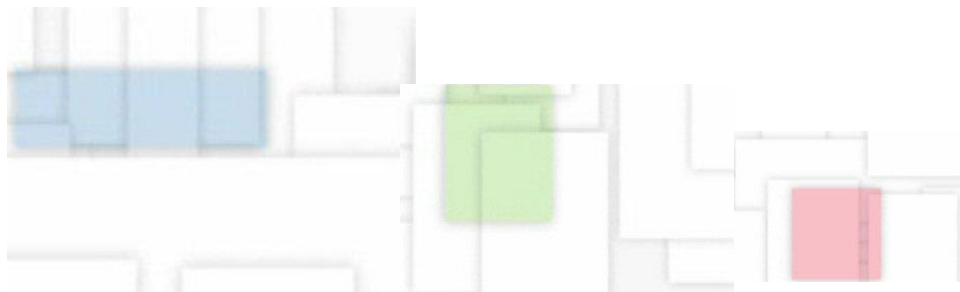
AU 480 – Features

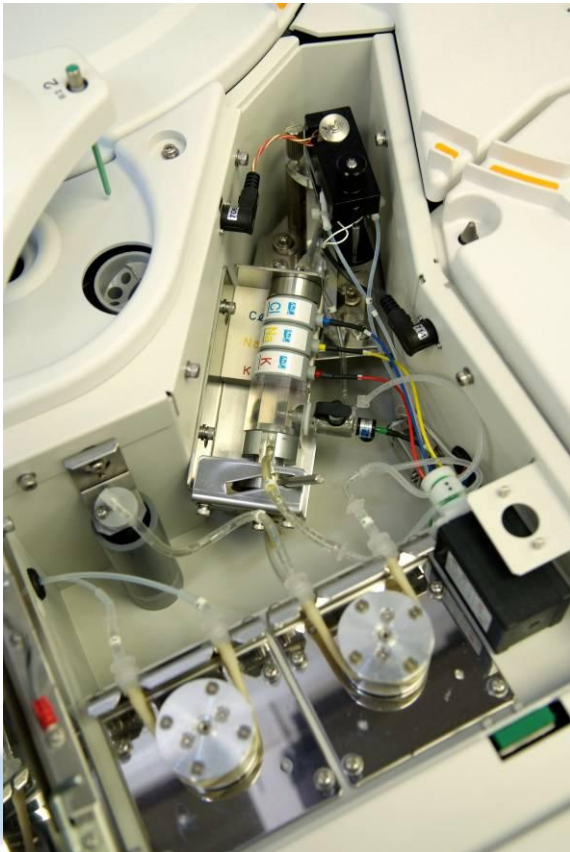
LIH – Serum Index

	Approximate Concentration of Chromatic Substance		
Flag	LIP (mg/dL Intralipid)	ICT (mg/dL Bilirubin)	HEM (mg/dL Haemoglobin)
N	< 40	< 2.5	< 50
+	40 – 99	2.5 – 4.9	50 – 99
++	100 – 199	5.0 – 9.9	100 – 199
+++	200 – 299	10 – 19.9	200 – 299
++++	300 – 500	20 – 40	300 – 500
+++++	> 500	> 40	> 500

AU480

- AU 480 – Features
- **AU 480 – ISE**
- AU 480 – Software
- AU 480 – Maintenance





✓ Same Electrodes for all AU Systems

- Na, K, Cl – ready to use
- Separated electrodes – Less costs
- Long life – up to **6 months**

✓ Easy to maintain

- No special tools
- Easy to replace electrodes

✓ Indirect Measurement

- Excellent precision and extended calibration **stability of 24 hours**

ISE – Calibration Monitor

Maintenance
Calibration
Slope Chart
Selectivity Check
CRS Calibration

Cell 1 2 ISE Status UNCONNECT Electrode Status Na K Cl Reagent Status REF MID Buffer

Type Serum Date Range 5/16/2011 14:57 - 5/24/2011 10:18

Min Slope

Na	0.0	Na	57.1
K	0.0	K	54.6
Cl	0.0	Cl	-53.0

Maintenance
Calibration
Slope Chart
Selectivity Check
CRS Calibration

Cell 1 2 ISE Status UNCONNECT Electrode Status Na K Cl Reagent Status REF MID Buffer

< Result >

Date/Time	Serum						Urine					
	Slope			MID Solution Factor			Slope			MID Solution Factor		
	Na	K	Cl	Na	K	Cl	Na	K	Cl	Na	K	Cl
Last Result	55.6	53.8	-52.1	0.980	1.025	0.969						
5/24/2011 10:18	55.6	53.8	-52.1	0.980	1.025	0.969						
5/23/2011 09:23	54.6	53.7	-51.2	0.980	1.024	0.968						
5/22/2011 09:16	55.3	53.4	-51.5	0.981	1.026	0.974						
5/20/2011 09:11	55.7	54.1	-51.8	0.983	1.028	0.977						
5/19/2011 09:49	57.1	54.6	-53.0	0.990	1.037	0.983						
5/19/2011 09:37	0.0	0.0	0.0	0.000	0.000	0.000						
5/18/2011 11:16	55.7	53.6	-51.8	0.978	1.023	0.972						
5/17/2011 11:57	55.4	53.3	-51.4	0.985	1.031	0.982						
5/16/2011 15:06	56.5	54.1	-52.5	0.977	1.023	0.972						
5/16/2011 14:57	54.4	53.4	-51.6	0.969	1.013	0.961						

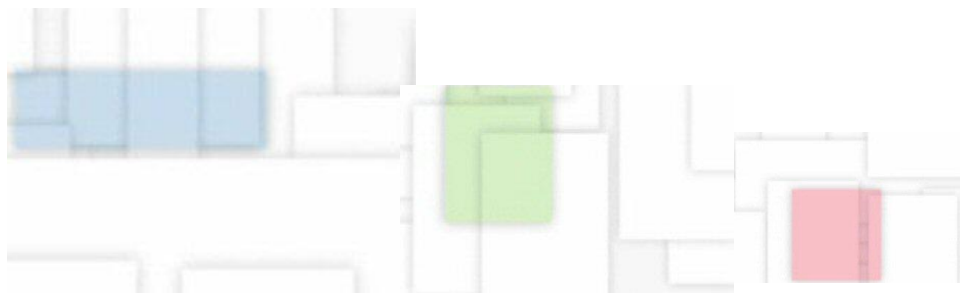
< Normal Range >

	Na	K	Cl	Na	K	Cl	Na	K	Cl	Na	K	Cl
High	68.0	68.0	-38.0	1.200	1.200	1.200	68.0	68.0	-38.0	1.200	1.200	1.200
Low	38.0	38.0	-68.0	0.800	0.800	0.800	38.0	38.0	-68.0	0.800	0.800	0.800

Serum Start
Urine Start
Serum/Urine Start

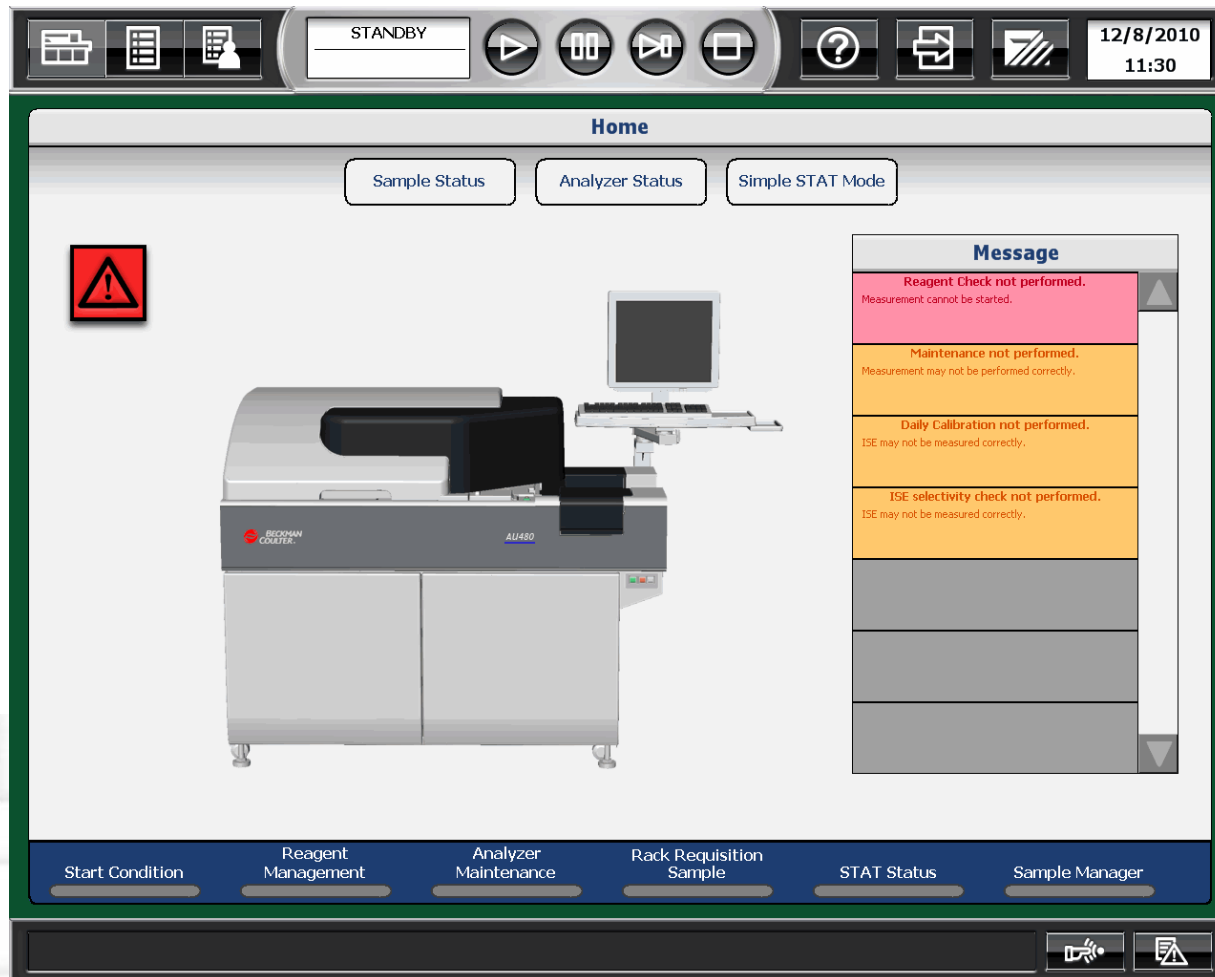
AU480

- AU 480 – Features
- AU 480 – ISE
- **AU 480 – Software**
- AU 480 – Maintenance

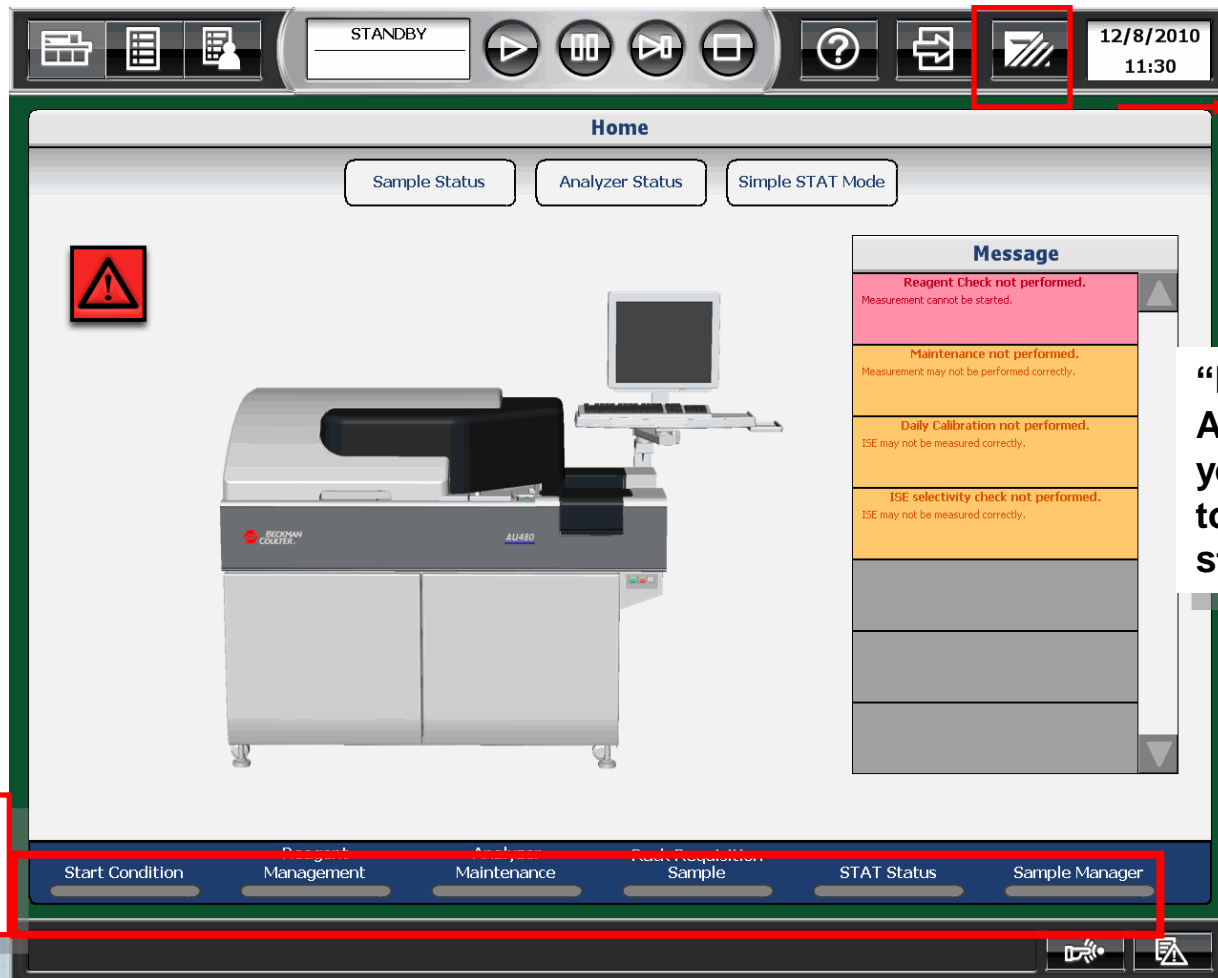


AU 480 – Software

AU480 Improved - Touch Screen User Interface



AU 480 – Software



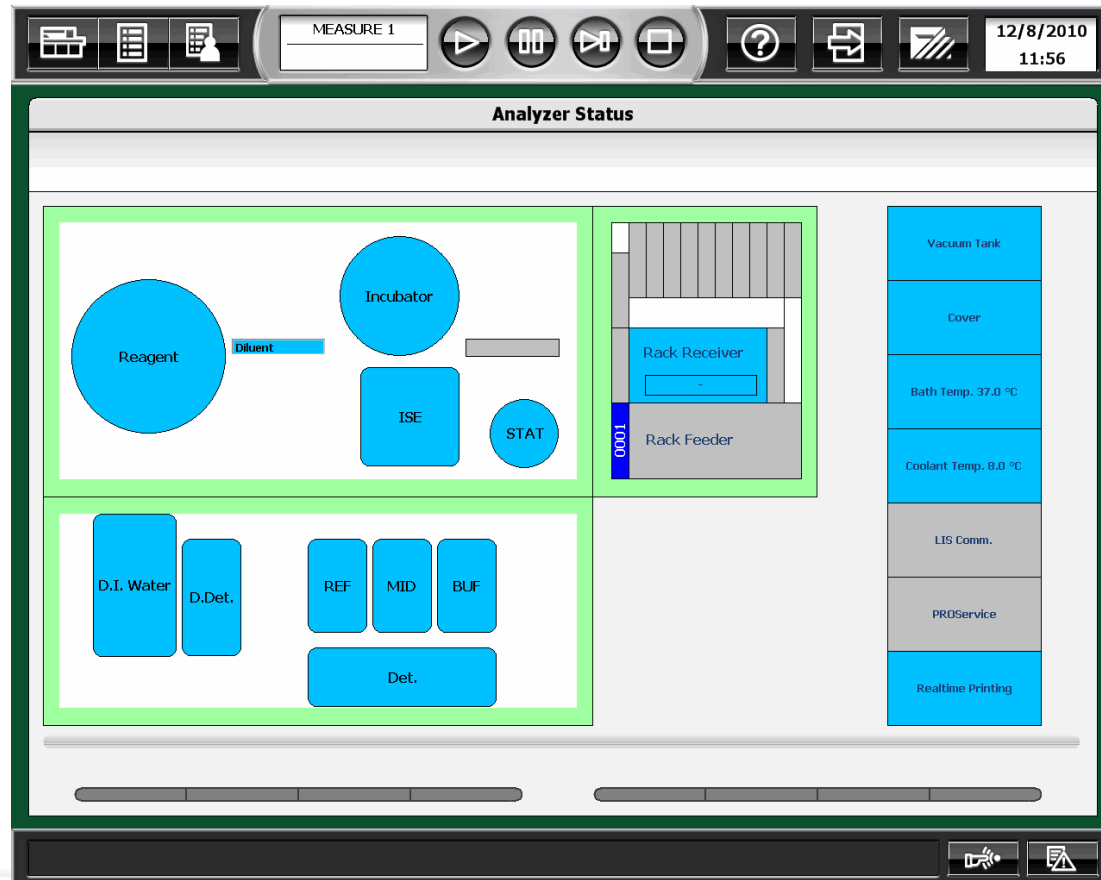
“End” button
on the home
screen

“NEW” Message-Area:
Appears in green,
yellow, orange, or red
to indicate system
status.

Short cut
“Jump”
buttons

• Analyzer Status

- Analyzer Status with rack tracking
- Volume display for dilution bottle and sample probe cleaner



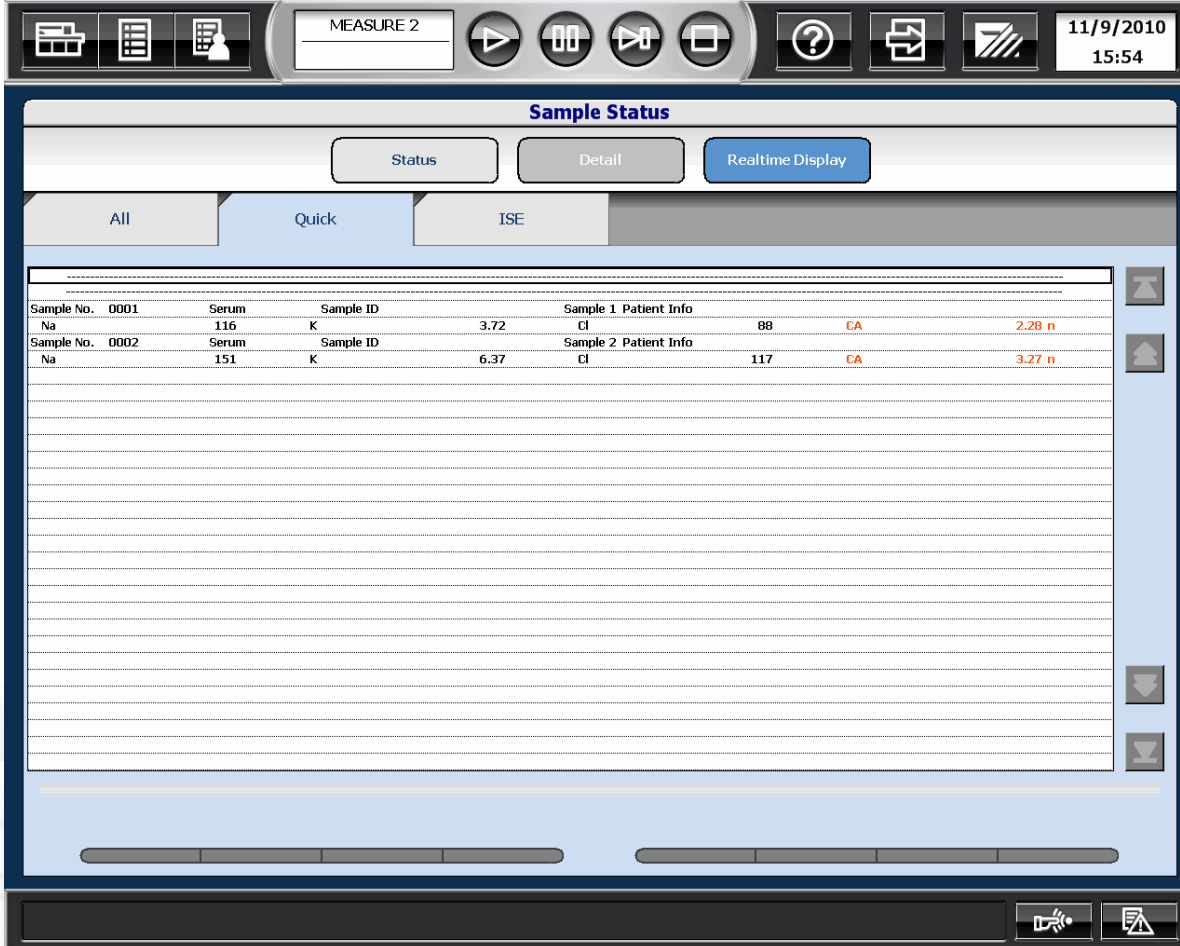
AU 480 – Software

Sample Status						
Status Detail Realtime Display						
Sample No.	Cup Position	Sample ID	Order	Status	Results	
Q001	0002-01		09:16	Done	Error	
Q001	0002-02		09:16	Done	Error	
0001	0015-01	63542	09:17	In Process	09:33	
0002	0015-02	63543	09:17	In Process	09:33	
0003	0015-03	63544	09:17	In Process	09:34	
0004	0015-04	63545	09:17	In Process	09:34	
0005	0015-05	63546	09:17	In Process	09:34	
0006	0015-06	63547	09:17	In Process	09:34	
0007	0015-07	63548	09:17	In Process	09:35	
0008	0015-08	63549	09:17	In Process	09:35	
0009	0015-09	63550	09:17	In Process	09:35	
0010	0015-10	63551	09:17	In Process	09:35	
E001	0003-01	12345	09:18	Done	Error	
E002	0003-02	12345	09:18	Done	Error	
E003	0003-03	12345	09:18	Done	Error	

Stop Scroll Sample Manager Reaction Monitor ISE Maintenance

AU 480 – Software

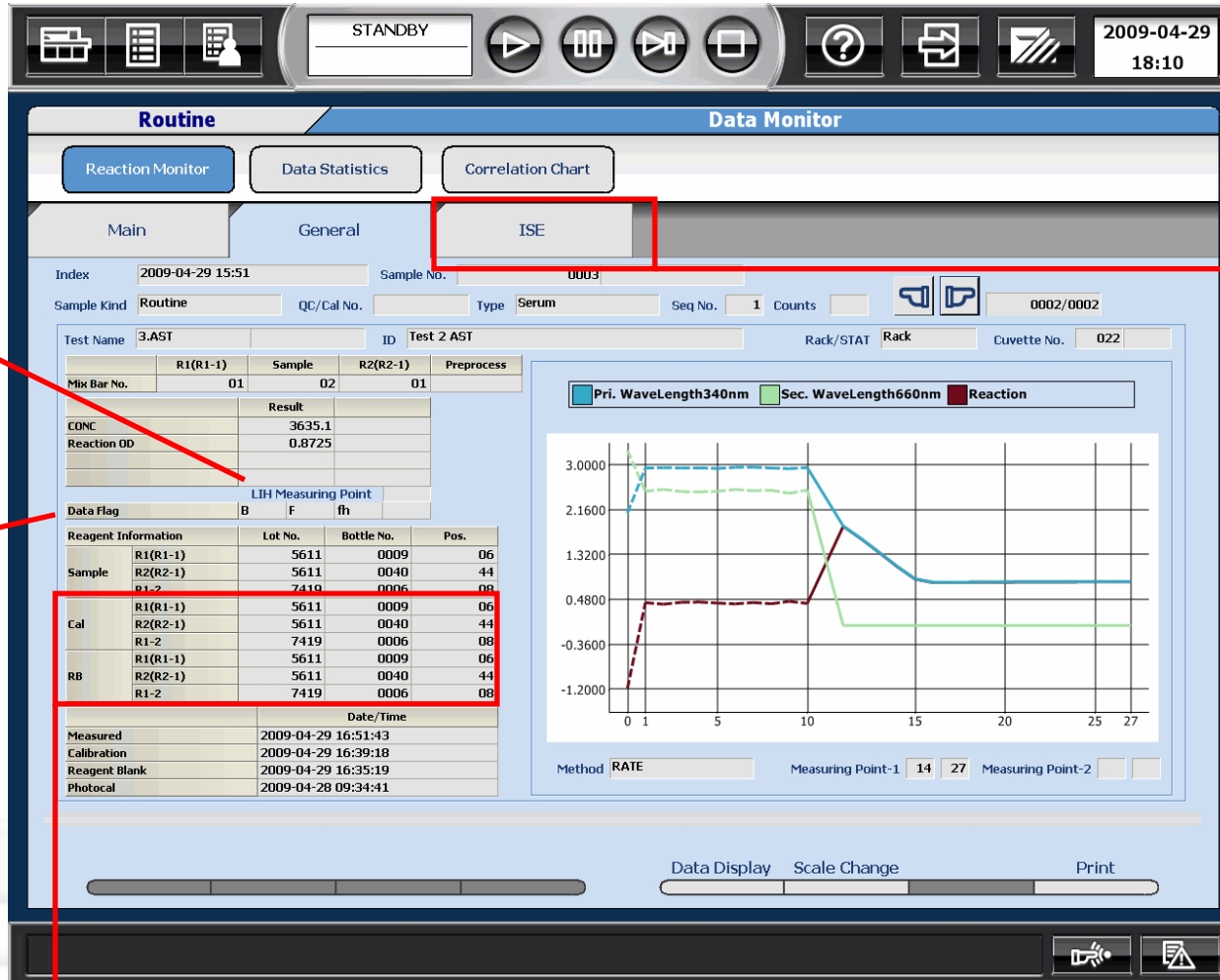
Results can be displayed, printed and transmitted as soon as the result is calculated



The screenshot displays the AU 480 software interface. At the top, there is a toolbar with icons for home, list, and help, followed by a 'MEASURE 2' label and several control buttons (play, stop, refresh, etc.). The date and time '11/9/2010 15:54' are shown in the top right. Below the toolbar is a 'Sample Status' section with buttons for 'Status', 'Detail', and 'Realtime Display'. Underneath are tabs for 'All', 'Quick', and 'ISE'. The main area contains a table with two rows of data. The table has columns for Sample No., Serum, Sample ID, Sample 1 Patient Info, and Sample 2 Patient Info. The first row shows Sample No. 0001, Serum 116, Sample ID K, Sample 1 Patient Info Cl 88, and Sample 2 Patient Info 117. The second row shows Sample No. 0002, Serum 151, Sample ID K, Sample 1 Patient Info Cl 88, and Sample 2 Patient Info 117. The table also includes numerical values (3.72, 6.37) and units (n) for each sample.

Sample No.	Serum	Sample ID	Sample 1 Patient Info	Sample 2 Patient Info
0001	116	K	Cl 88	117
Na				
0002	151	K	Cl 88	117
Na				

AU 480 – Software



Routine **Data Monitor**

Reaction Monitor | Data Statistics | Correlation Chart

Main | General | **ISE**

Index: 2009-04-29 15:51 | Sample No.: 0003

Sample Kind: Routine | QC/Cal No.: | Type: Serum | Seq No.: 1 | Counts: 0002/0002

Test Name: 3.AST | ID: Test 2 AST | Rack/STAT: Rack | Cuvette No.: 022

Mix Bar No.	R1(R1-1)	Sample	R2(R2-1)	Preprocess
	01	02	01	

Result

CDNC: 3635.1

Reaction OD: 0.8725

LIH Measuring Point

Data Flag	B	F	fh

Reagent Information	Lot No.	Bottle No.	Pos.
Sample R1(R1-1)	5611	0009	06
R2(R2-1)	5611	0040	44
R1-2	7419	0006	08
Cal R1(R1-1)	5611	0009	06
R2(R2-1)	5611	0040	44
R1-2	7419	0006	08
RB R1(R1-1)	5611	0009	06
R2(R2-1)	5611	0040	44
R1-2	7419	0006	08

Date/Time

Measured	2009-04-29 16:51:43
Calibration	2009-04-29 16:39:18
Reagent Blank	2009-04-29 16:35:19
Photocal	2009-04-28 09:34:41

Graph: Pri. WaveLength340nm, Sec. WaveLength660nm, Reaction

Method: RATE | Measuring Point-1: 14 | 27 | Measuring Point-2: |

Data Display | Scale Change | Print

ISE data are displayed

LIH Measuring point

4 instead of 2 flags are displayed

Calibration and RB details

AU 480 – Software

STANDBY 5/27/2010 17:22

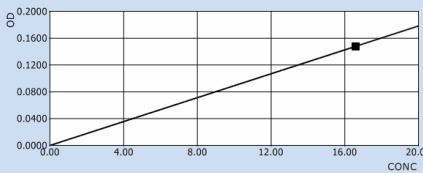
Calibration Calibration Monitor

Status RB History RB Detail Calibration History Calibration Detail

Test Name: 2.UREA Type: Serum

Date/Time: 4/15/2010 09:44 Passed

Reagent Lot No. Bottle No.
 R1(R1-1) 8608 0683
 R2(R2-1) 8608 0705



Sequence:
 Cal Expiration Date: 1/8/2013 09:44
 Reagent Blank: 4/15/2010 09:43
 Cal Type: AB
 Measure Type: Rack
 Formula: Y=AX+B
 Factor:
 A = 1.1218E002
 B = 0.0000E000

Cal No.	CONC	OD
1	16.60	0.1480

Comment:

Lot to Lot Calibration RB/CAL Selection Data Select Comment Graph Scale Print

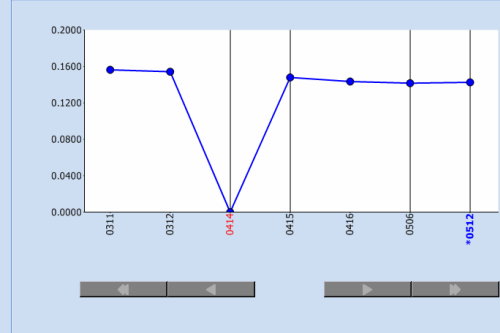
STANDBY 5/27/2010 17:18

Calibration Calibration Monitor

Status RB History RB Detail Calibration History Calibration Detail

Test Name: 2.UREA Type: Serum

Date/Time: 5/12/2010 12:23



Cal No.	CONC	OD
1	16.6000	0.1426

Reagent Lot No. Bottle No.
 R1(R1-1) 8608 0684
 R2(R2-1) 8608 0708

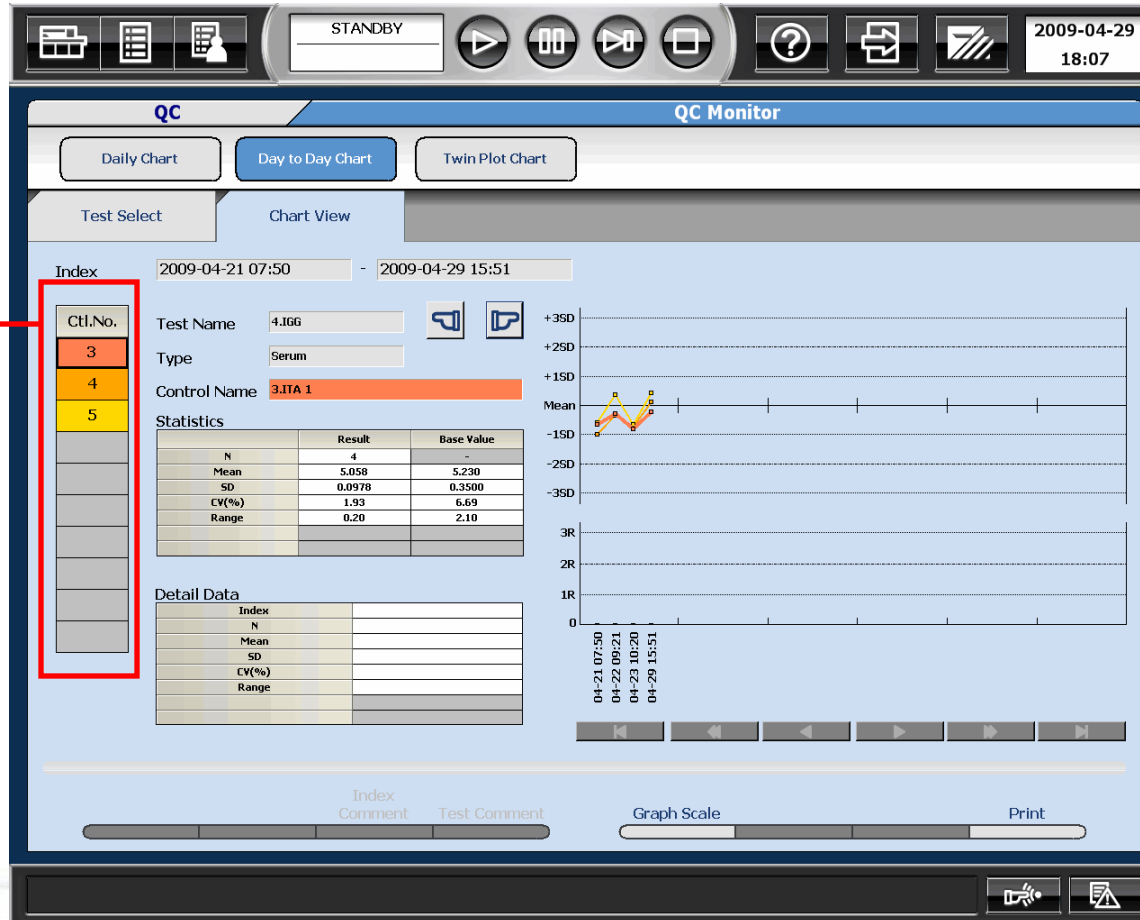
Comment:

Data Select Comment Graph Scale

AU 480 – Software

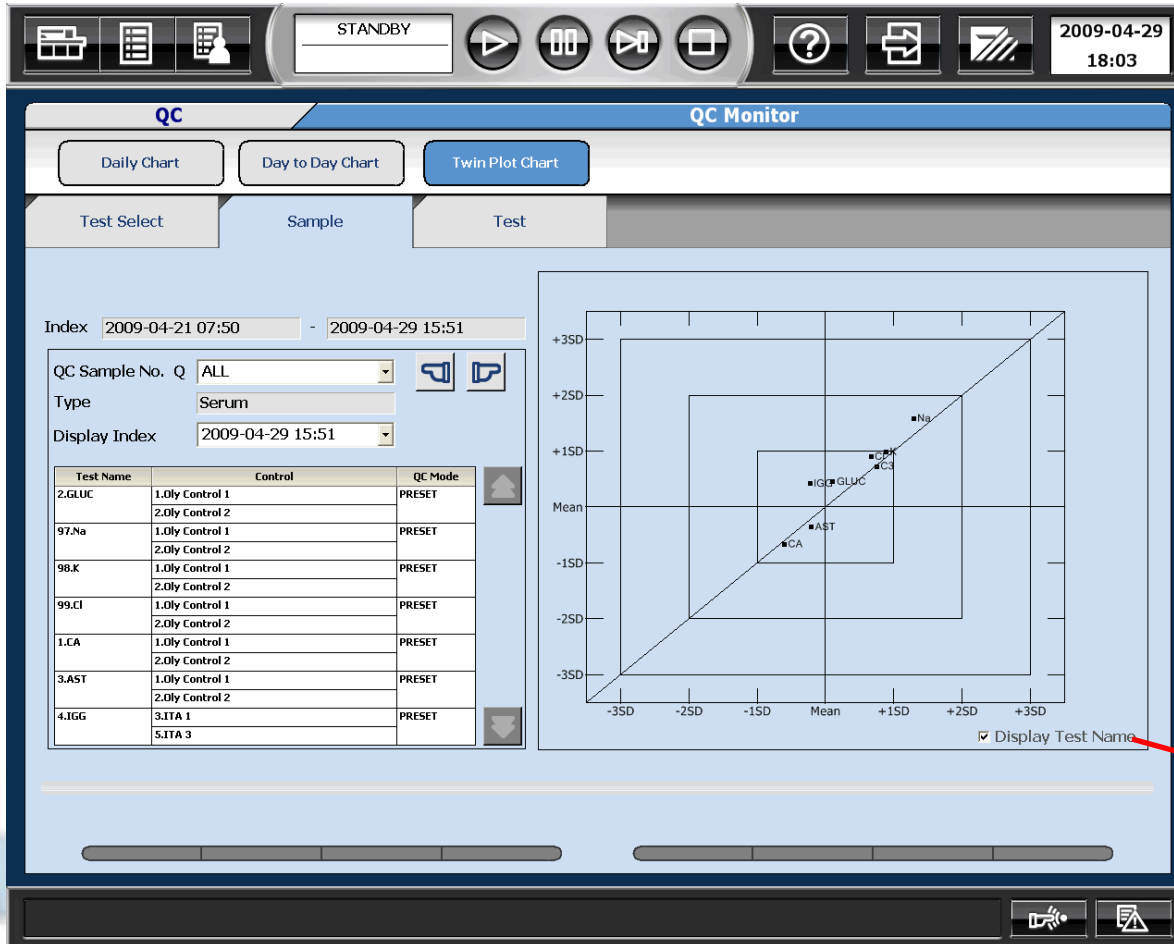
- 10 controls / test

- To view the statistics select the Ctl.No



All QC samples displayed in one graph

AU 480 – Software



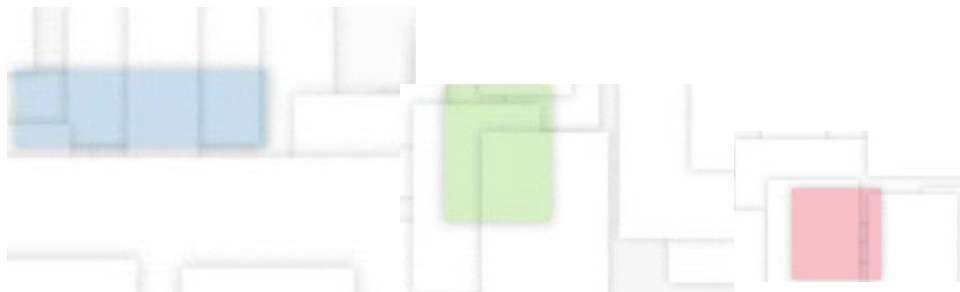
Twin Plot display:

- All QC samples in one Plot
- Selective QC sample
- Tests

Test Name display

AU 480 – Software

- Increased Data Storage on Harddrive
 - Samples up to 100,000
 - Reaction Monitors up to 200,000 (max 10,000 per index)
 - Indexes up to 300
 - Samples per Index up to 9999
- External Data Management
 - Floppy Disk, CD and Memo stick
 - Storage as csv files (easy to import in Excel)



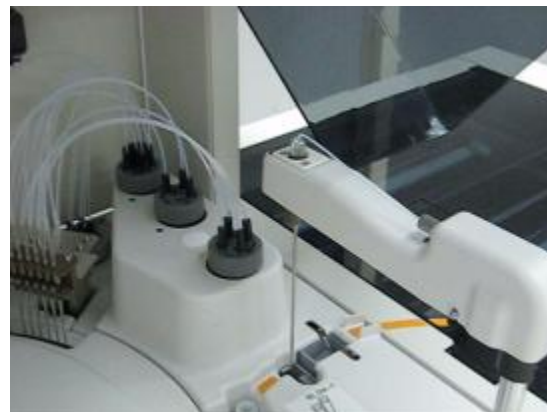
AU480

- AU 480 – Features
- AU 480 – ISE
- AU 480 – Software
- **AU 480 – Maintenance**



AU 480 – Maintenance

- **3 x 60 = Simplifies Operator Interaction**



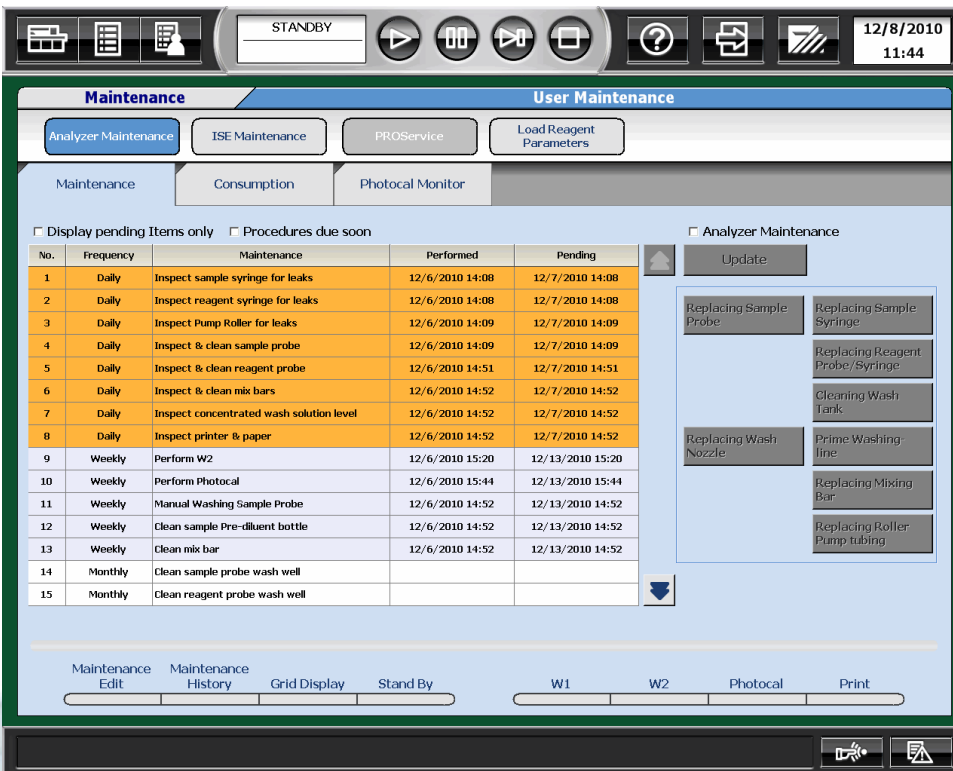
- ✓ No more than **3 steps**
- ✓ No longer than **60 seconds**
- ✓ **No Tools**

AU 480 – Maintenance

All user maintenance tasks are combined in the **USER MAINTENANCE MENU**

Improved and interactive Maintenance schedule

- Outstanding maintenance is highlighted in the table and appears on the home screen message area.
- Day of performance and next date of execution is shown in one table.
- If a maintenance is selected in the table, the corresponding maintenance task (on the right side i.e. Total prime) will be active.
- System start can be inhibit, when a maintenance task is outstanding.



The screenshot shows the 'User Maintenance' menu in the AU 480 software. The interface includes a top navigation bar with 'Analyzer Maintenance', 'ISE Maintenance', 'PROService', and 'Load Reagent Parameters'. Below this, there are tabs for 'Maintenance', 'Consumption', and 'Photocal Monitor'. A table displays maintenance tasks with columns for 'No.', 'Frequency', 'Maintenance', 'Performed', and 'Pending'. The table is filtered to show 'Display pending Items only' and 'Procedures due soon'. The table contains 15 rows of tasks, with the first 8 rows highlighted in orange. To the right of the table, there is a list of maintenance tasks with corresponding icons, such as 'Replacing Sample Probe', 'Replacing Sample Syringe', 'Replacing Reagent Probe/Syringe', 'Cleaning Wash Tank', 'Replacing Wash Nozzle', 'Prime Washing line', 'Replacing Mixing Bar', and 'Replacing Roller Pump tubing'. The bottom of the screen features a status bar with 'Maintenance Edit', 'Maintenance History', 'Grid Display', 'Stand By', 'W1', 'W2', 'Photocal', and 'Print' buttons.

No.	Frequency	Maintenance	Performed	Pending
1	Daily	Inspect sample syringe for leaks	12/6/2010 14:08	12/7/2010 14:08
2	Daily	Inspect reagent syringe for leaks	12/6/2010 14:08	12/7/2010 14:08
3	Daily	Inspect Pump Roller for leaks	12/6/2010 14:09	12/7/2010 14:09
4	Daily	Inspect & clean sample probe	12/6/2010 14:09	12/7/2010 14:09
5	Daily	Inspect & clean reagent probe	12/6/2010 14:51	12/7/2010 14:51
6	Daily	Inspect & clean mix bars	12/6/2010 14:52	12/7/2010 14:52
7	Daily	Inspect concentrated wash solution level	12/6/2010 14:52	12/7/2010 14:52
8	Daily	Inspect printer & paper	12/6/2010 14:52	12/7/2010 14:52
9	Weekly	Perform W2	12/6/2010 15:20	12/13/2010 15:20
10	Weekly	Perform Photocal	12/6/2010 15:44	12/13/2010 15:44
11	Weekly	Manual Washing Sample Probe	12/6/2010 14:52	12/13/2010 14:52
12	Weekly	Clean sample Pre-diluent bottle	12/6/2010 14:52	12/13/2010 14:52
13	Weekly	Clean mix bar	12/6/2010 14:52	12/13/2010 14:52
14	Monthly	Clean sample probe wash well		
15	Monthly	Clean reagent probe wash well		

AU 480 – Summary

- Small footprint and **Large TEST MENU (FDA Approved)**
- Through put: **800 tests per hour**
- ISE with **24 hours Calibration Stability.**
- Automatic Calibration and QC from **on board tubes**
- Sample Capacity: **More than 100 samples** (Continuous Loading)
- Reagent Positions: **76 Reagent**
- Reagent Load / Unload **without Stop.**
- Mixers, **seperate for Sample and reagent**
- High-precision micro sampling (**min 1 µl**) – Ideal for pediatric,
- 88 **Permanent Cuvettes** with automatic washing and Drying.
- Less Maintenance – **No Water Bath.**
- All-In-One PC on a swing arm. Data storage on external memory device
- On Board **Maintenance Log.**



Questions ?

