

TECHNICAL SPECIFICATION

System type	: Automated, Discrete, Random access Clinical Chemistry System
Throughput	: 640 tests/hour (with ISE) / 400 photometric tests/hour (without ISE)
On board tests	: Unlimited tests programming
Programmable Parameters	: Unlimited tests programming / Unlimited calculation items / Unlimited Storage
Analytical Methods	: 1-Point, 2-Point, Rate-A, Rate-B
Calibration	: Linear, Non-Linear, Multi Point, K Factor
Sample Disk	: Sample Tray Inner ring : 25 positions for routine patient samples Outer ring : 25 positions for routine patient samples (Any position can be used for STAT) Standard Tray Inner ring: 2 Blanks, 8 Controls, 2 ISE solutions (Optional), Outer ring: 20 positions each on Disk 1 & Disk 2 separately for Standard's
Sample Pipetting	: 2-70 μ l (adjustable in 0.2 μ l step) Capacitance probe with level sensing & vertical obstruction detection Clot detection facility
Sample Tubes / Cups	: Primary tubes of 5, 7 and 10 ml and sample cups
Barcode reader	: Both for sample and reagent trays (optional)
Reagent Tray	: 56 reagent positions with on board cooling (3 positions are reserved for diluents and wash solution)
Reagent Pipetting	: Two separate probes for Reagent 1 & 2 Reagent 1: 60-300 μ l (adjustable in 1 μ l step) Reagent 2: 0 or 10-300 μ l (adjustable in 1 μ l step) Capacitance probes with level sensing & vertical obstruction detection
Reaction tray	: 72 Hard Glass Cuvettes maintained at 37 ± 0.2 °C
Reading Volume	: 180 μ l
Quality control	: Levy Jennings Quality control program & twin plot
Utility programs	: Detergent / Reagent Wash, Probe Wash, Cuvette Skipping, Forbidden Pairs
Photometry	: Monochromatic and Bi-chromatic measurements with 12 wavelengths: 340, 376, 415, 450, 480, 505, 546, 570, 600, 660, 700 and 750 nm with multi-wavelength diffraction grating
OD range	: 0-2.5 Abs
Light source	: Halogen lamp (12V/20W)
Detector	: Static, Silicon photo-diodes
Water consumption	: Upto 13 ltrs per hour
System interface	: RS-232C bi-directional for PC Interface, Pentium IV or higher, 2 GB RAM
Power Requirement	: AC 110 V \pm 10%, 60 \pm 1 Hz or AC 220 V \pm 10%, 50 \pm 1 Hz (factory set) / 600 V (excluding PC/Printer/Monitor)
Dimensions	: Approximately 910 mm (W) X 780 mm(D) X 1160 mm(H)
Weight	: Approximately 200 kg

Note: As part of Product Improvement above specification subject to change without prior notice.



XL 640

Automated Random Access
Clinical Chemistry System



Technology Redefined
Technology Redefined

XL640 XL640

Automated Random Access Clinical Chemistry System

Empowered with High Turnaround

Ensures high degree precision with diffraction grating

Economical in use

Extensive Quality Control program

Easy to operate



TEST MENU*

- Substrates
- Enzymes
- Electrolytes
- DOAs
- TDM
- Immunospectrometric Assays

Albumin	LDL-Cholesterol	ACP	Chloride	Apo A1
Bicarbonate	Magnesium	ALP	Potassium	Apo B
Bilirubin total	Phosphate	α -Amylase	Sodium	ASO
Bilirubin direct	Phospholipid	ChE	Carbamazepine	C3
Calcium	Total Protein	CK	Digitoxin	CRP
Cholesterol	Triglycerides	CK-MB	Digoxin	IgA
Creatinine	Urea	GGT	Gentamicin	IgG
Glucose	Uric Acid	GOT (AST)	Phenytoin	IgM
HDL-Cholesterol	Microprotein	GPT (ALT)	Phenobarbital	Ferritin
Iron	Myoglobin	HBDH	Theophylline	HbA1c
Lactate	Microalbumin	LDH	Valproic Acid	NEFA-C
		Lipase		RF
				Transferrin



Throughput of 640 tests per hr. with ISE (Na/K/Cl/Li)

Permanent Hard glass Cuvettes

Reading volume of 180 μ l

56 on board reagent positions

Direct ISE measurements Na/K/Cl/Li

Clot Detection

Vertical Obstruction Detection

Capacitance probes with liquid level detection

Auto Dilution and Auto Rerun

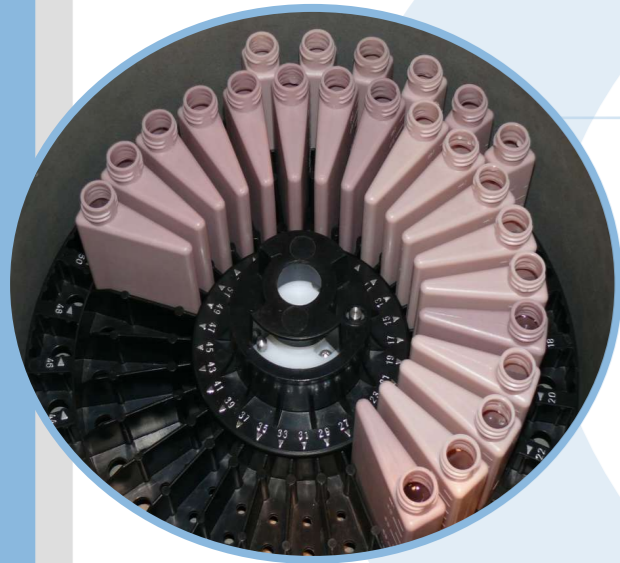
Bidirectional Connectivity

Unlimited Test Programmes / Unlimited Profiles

* All chemistries may not be available from ERBA.

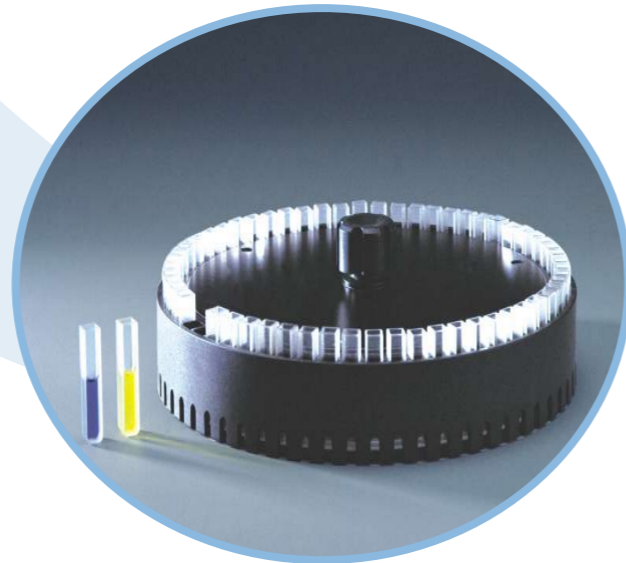
XL 640

- 50 position sample tray
- STAT samples can be loaded at any position
- Facility to use Primary tubes of 5ml, 7ml, 10ml & sample cups



- 56 reagent positions with on-board cooling
- 50ml & 20 ml reagent bottles
- Online inventory management
- Multiple reagent positions

- 72 long life Hard Glass cuvettes
- On-board washing station for better precision & accuracy
- Individually replaceable cuvettes

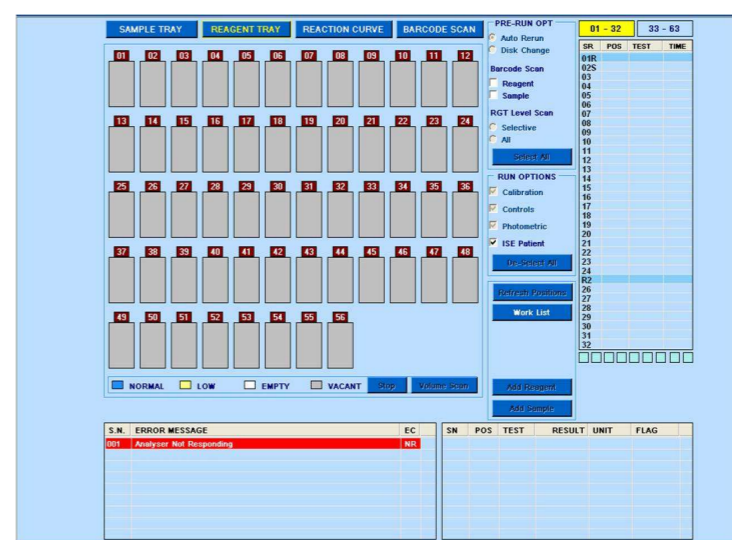


XL 640

CALIBRATION



REAGENT VOLUME SCREEN

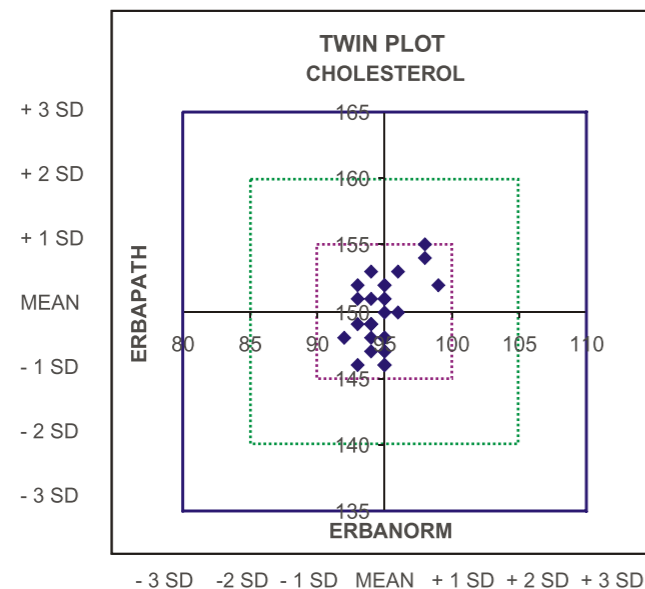
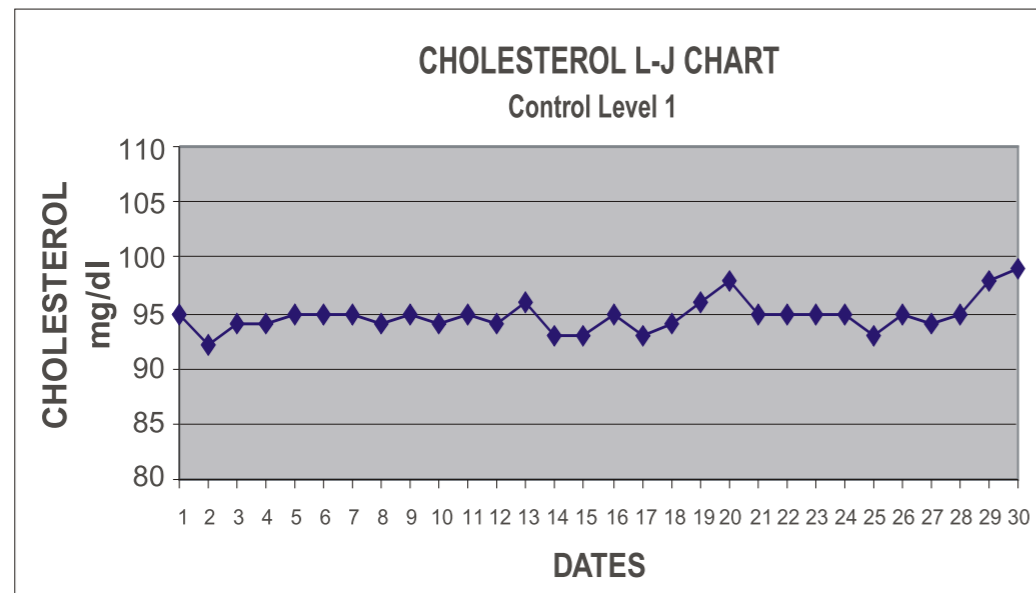


- NORMAL** (Green square) → Reagent volume sufficient to perform tests mentioned on screen
- EMPTY** (Red square) → Empty reagent bottle
- FREE** (Orange square) → Free reagent position
- LOW** (Pink square) → Inadequate Reagent Volume

QUALITY CONTROL

XL 640 - provides option for both Levey-Jennings and Twin plot quality control charts in its software; thereby providing an added advantage to simultaneously monitor two level of controls for better quality management.

The Levey-Jennings chart is used to monitor performance of a single control level.



Youden Plots (Twin plot) is a quality chart that involves usage of both normal and abnormal controls and graphically helps to differentiate between systematic and random errors.

ERBA SYSTEM PACKS

FOR FULLY AUTOMATED BIOCHEMISTRY ANALYSERS



S.NO.	PRODUCT CODE	PRODUCT NAME	METHOD	LINEARITY	PACK SIZE
1	XSYS001	ALBUMIN	BCG	6 g/dl	10 X 44 ML
2	XSYS002	ALP	IFCC, AMP	700 U/L	R1-2 X 44 ML : R2-2 x 11 ML
3	XSYS003	AMYLASE	CNPG3	1500 U/L	5 X 22 ML
4	XSYS028	BID	DIAZO	25 mg/dl	R1-6X 44ML : R2-3 X 22ML
5	XSYS023	BIT	DIAZO	25 mg/dl	R1-6X 44ML : R2-3 X 22ML
6	XSYS007	CALCIUM (A)	ARSENAZO	16 mg/dl	10 x 12 ML
7	XSYS008	CHLORIDE	MERCURIC THIOCYANATE	130 mEq/L	10 X 12 ML
8	XSYS009	CHOLESTEROL	CHOD POD	750 mg/dl	10 X 44ML
9	XSYS022	CK	DGKC & IFCC	1000 U/L	R1-2 X 44 ML : R2-2 x 11 ML
10	XSYS029	CK MB	IMMUNOINHIBITION	1000 U/L	R1-2 X 44 ML : R2-2 x 11 ML
11	XSYS024	CREATININE	ALKALINE PICRATE	20 mg/dl	R1-5 X 44 ML : R2-5 X 11ML
12	XSYS011	GGT	SZASZ	500 U/L	R1-2 X 44 ML : R2-2 x 11 ML
13	XSYS012	GLUCOSE	GOD POD (with mutarotase)	500mg/dl	10 X44 ML
14	XYSY043	HDL DIRECT	Modified PEGME	184.8 mg/dl	R1-4 x 30 ML : R2-4 x 10ML
15	FBCEM0075	HDL/LDL Calibrator	N.A	N.A.	2 X 1ML
16	XSYS013	LDH-P	DGKC	1000 U/L	R1-2 X 44 ML : R2-2 x 11 ML
17	XSYS044	LDL DIRECT	IMMUNOINHIBITION	250mg/dl	R1-2 X 30ML : R2-2 X 10ML
18	XSYS040	MAGNESIUM	Calmagite	4 mg/dL	2x44 ML
19	XSYS027	MICROPROTEIN	PYROGALLOL RED	400mg/dl	10 X 12 ML
20	XSYS015	PHOSPHORUS	UV PHOSPHOMOLYBDATE	15mg/dl	10 X12 ML
21	XSYS016	SGOT	MODIFIED IFCC	240U/L	R1-6X 44ML : R2-3 X 22ML
22	XSYS017	SGPT	MODIFIED IFCC	240U/L	R1-6X 44ML : R2-3 X 22ML
23	XSYS018	TOTAL PROTEIN	BIURET	16g/dl	10 X 44 ML
24	XSYS041	TRIGLYCERIDES-SR	GPO	600 mg/dL	10 x 44 ML
25	XSYS020	UREA	UREASE GLDH	300mg/dl	R1-5 X 44 ML : R2-5 X 11ML
26	XSYS042	URIC ACID - SR	URICASE	25 mg/dl	10 x 44 ML
27	REKT901	ERBA NORM	NA	NA	4 x 5 ML
28	REKT902	ERBA PATH	NA	NA	4 x 5 ML
29	REKT910	ERBA XL WASH	NA	NA	4 x 100 ML
30	XSYS034	XL MULTICAL	NA	NA	4 X 3 ML