

RADIANT



Semi Automated Clinical Chemistry Analyser

- Robust and reliable diagnostics solution
- Consistent performance and easy operation



RADIANT

RB-48 is a curious fusion of reliability and performance. Its versatility improves productivity of modern labs through its robust design, intuitive software and hassle free operation.

FLEXIBLE

- Programmed to analyse endpoint, fixed time and kinetic assays
- Storage for 200 user programmable test methods and 10000 test results
- Create up to 10 customised test profiles
- Open System (Any reagents can be used)

ECONOMICAL

- Low reagent consumption
- High quality surface coating ensures long Filter life
- Extended lamp life

ROBUST

- Low maintenance
- Consistent and reliable results
- Indian design and manufacturing

OPTIMISED OPTICAL DESIGN

High sensitivity measurements for kinetic and turbidimetric assays (RF, ASO, CRP etc)



LIGHT SOURCE

Halogen Quartz tungsten lamp
(6V, 10Watt)
Lamp life saving mode
(programmable sleep interval)
Unique Lamp life enhancing
circuit



ASPIRATION

High precision peristaltic pump
Non corrosive tubing ensures long life and
accurate aspiration
Aspiration air gap and auto empty function
after each sample run
Minimal chances of carry over

ONE TOUCH ACCESS TO DEDICATED ASSAYS

48 direct access assays

ACP	ALP	Apo-A	ASO
ALB	AMY	Apo-B	BUN
Bil-D	Cat	CK	Cl
Bil-T	CHOL	CK-MB	CREA
CRP	GGT	GLB	Hb
Fe	GLU	GLDH	HbATC
HbD-H	HDL-g	LDH	Lp(a)
HCO ₃	K	LDL-g	LPS
Mg	NH ₃	RF	S-GOT
Ni	PHOS	TBA	S-GPT
TG	TP	URIC	uALB
TIBC	UREA	Zn	uPRO

PRINTABLE REAL TIME GRAPH

Real time graph is displayed on screen and can
be printed

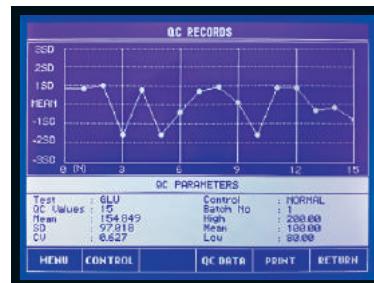
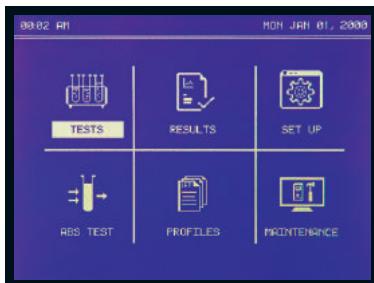


EASY MAINTENANCE

Self-diagnosis and system health reporting are an integral part of RB-48
Easily set photometer gain and perform pump calibration.

SOFTWARE FEATURES

RB-48 software is designed to simplify daily laboratory routine. It's simple and intuitive work flow enhances user efficiency and productivity.

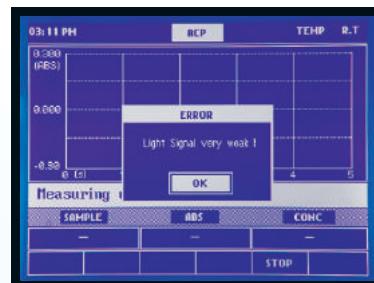
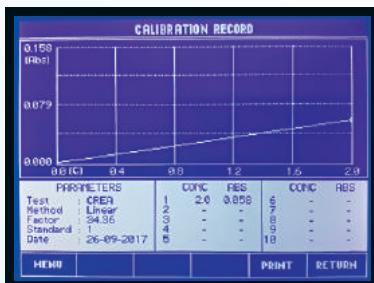


INTUITIVE USER INTERFACE

- Six informative screens control operations
- Easy navigation through submenus
- Requires minimal training

QUALITY CONTROL

- Mean, SD, % CV and R calculated for each assay
- Levey-Jennings control chart
- 3 levels per assay
- Westgard Rules



CALIBRATION

- Factor, one-point, point to point and Log-Logit
- Non linear multi point calibration
- Up to 3 replicates per point
- Up to 10 calibration points

ERROR DETECTION

- Early detection and reporting of errors on screen
- Saves time and avoids faulty test runs which saves reagents

ANALYSIS MODES

Absorbance	Kinetic with factor and linearity check
Immunoturbidimetry	End Point with factor, standard or multiple standards with or without reagent/sample blank
Bichromatic mode	Fixed time with standard, factor or multiple standards, with or without reagent blank

Technical Specifications

PHOTOMETRIC MODULE

- Seven Narrowband Interference Filters
- Filter Wavelengths: 340, 405, 505, 546, 578, 630 and 670nm (1 open position for optional filter)
- IAD process ensures long filter life
- Wavelength Accuracy : $\pm 2\text{nm}$
- Silicon Photo Diode detector
- Absorbance Range : 0.0–3.0 A
- Resolution : 0.0001 Absorbance Units
- Photometric Drift : <5 mAbs/30min
- CV : <1%

TEMPERATURE OF FLOW CELL/CUVETTE

- 25°C, 30°C, 37°C
- Temperature Stability : $\pm 0.2^\circ\text{C}$

DISPLAY

- 5.7 Inch LCD display screen
- High Contrast Display

KEYBOARD

- Tactile touch QWERTY keypad
- Visual indication on keypad during aspiration

PRINTER

- Internal 57mm thermal printer with full graphics printing

MEASURING MODULE

- Dual mode (Flow cell & Cuvette)
- High quality Quartz flow cell for precise measurements
- 30 μl Flowcell volume
- Peltier-controlled reaction temperature
- External cuvettes (10mm path length)

UNITS

- 15 pre-defined measurement units

REACTION VOLUME

- Minimum aspiration volume - 300 μl
- Maximum aspiration volume - 5ml

DIMENSIONS

- | | | | |
|----------|-------|----------|-------|
| Length : | 422mm | Height : | 176mm |
| Width : | 324mm | Weight : | 6.5kg |

ISO 9001-2015 certified | ISO 13485 certified

ANALYSIS METHOD

- Endpoint, Fixed time and Kinetic
- Sample blanking and Reagent Blank
- Direct Absorbance measurement mode
- Coagulation Mode (PT / APTT / TT)

TEST PROFILES

- User defined 10 Test Profiles
- 10 tests can be added in each profile

TEST CHANNELS

- 48 dedicated assays
- Direct access keys for dedicated assays
- Open channel capability
- 200 programmable channels

DATA MANAGEMENT

- Storage of up to 10,000 test results
- Stores 30 days QC for each Assay
- Reagent Blank storage

REPORTS

- Search by date, sample ID or Test Name
- Calibration Reports, QC results

INTERNAL INCUBATOR

- Positions : 7
- Temperature : 37 Degree

QC AND CALIBRATION

- Daily and monthly QC with data archiving.

INTERFACE

- RS 232 Port
- USB Port
- PC Connectivity (optional)

POWER

- Input Voltage Range : 88 - 264 VAC
- Frequency Range : 47 - 63 Hz
- Power consumption : 75 W max



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