TULIP DIAGNOSTICS (P) LTD.

BornSafe™
NBS Lab

Microplate Reader

BornSafe ™ NBS LAB Microplate reader is a microprocessor–controlled, general purpose photometer system designed to read and calculate the result of assays which are read in microtiter plate.

KEY FEATURES

- Open System
- Optical system: 8 independent photometric channel -Reads Fast & accurate within 5s*
- Data reduction options are available: Absorbance, Cut-Off, One point calibration, % ABS, Non linear regression, Linear regression, Log-Log regression, Power regression, Exponential regression, Percent Logarithm, Cubic equation Regression, Four parameter regression, Quadratic Regression.
- Strip Management system helps to Read Multiple assays in one plate**
- Programmable shaking facility available.
- Customized user defined templates facility available which provide flexibility to set Blank position, control position, sample position including various standard positions any place in Microplate manually.
- IMS*** options are available which helps to maintain internal department database, doctor database, reagent administration and work statistics, etc. in the system
- Q.C. solution with Westgard rules.
- Windows based Data Management Software which facilitates Storage of 100 program locations.
- Data Interface facility available with RS-232C serial interface.Multiple results reporting formats are available like Raw Absorbance, Cut-off, Limit, Concentration, Curve-fit result types etc.

TECHNICAL SPECIFICATIONS

Calculation mode	Absorbance, Cut-Off, One point calibration, % ABS, Non linear regression, Linear regression, Log-Log regression, Power regression, Exponential regression, Percent Logarithm, Cubic equation Regression, Four parameter regression, Quadratic Regression.
Report Types	Report by test, Report by program, Report by patient detail, Report by blood bank workstation.
Memory	Windows based Data Management Softer which facilitates unlimited storage of results with of 100 program location.
Self- Test	Yes, check filter disk, plate transport, and lamp and PC connection.
Warm-up time	Upto 90 seconds

Reading speed:	
Continuous mode : Single Dual	5 seconds 0 seconds
Step mode : Single Dual	15 seconds 30 seconds
Mixing Capability	3- speed programmable
Programmable time	0-60 seconds
Compatible plates	Polystyrene flat U & V bottom plates & 8 or 12- well strip plate
Optics:	
Spectral range Photometric methods Filter capacity Standard Filter Photo- detectors Light source	400 – 700 nm Single & Dual 8 interference filter, 5 Filter installed free & 3 Optional 405,450,492, 550 & 630nm 8 silicon photodiode detectors for measurement Tungsten Halogen,6V/20W
Technical:	
Measurement range Linear Measurement range Resolution Accuracy Precision Linearity	0.000 to 4.000 0.000 to 2.000 0.001 OD ±1.0% for 0.0-2.0 or ±0.007A ±0.5% for 0.0-2.0 or ±0.005A ±2.0% or ± 0.007A
Software:	
Software Name Special Features Information system Database back-up Printer/Interface/Display	Management Software Dedicated Q.C Program with West-guard rule Sample ID with Alphanumeric Management Yes Yes External Printer, RS – 232 serial interface. Bi-directional communication, Windows based operating system.
Power Supply	110V-220V,50-60 Hz
Operating Conditions	Temperature: 0° C – 40°C, Humidity ≤ 85%
Dimensions	46 cms x 34 cms x 19 cms
Weight	7.5 kgs

LIST OF STANDARD ACCESSORIES SUPPLIED ALONG WITH THE INSTRUMENT

Components	Qty	Components	Qty
Power Cable	1 No.	RS-232 Cable	1 No.
USB to Serial Converter	1 No.	Fuses (3.15A)	2 Nos.
Software converter	1 No.	Dust Cover	1 No.
User Manual	1 No.		