

# DIAsource ELISA Reader

## DIA2000 – Technical Specifications

### Description

The **ELISA PLATE READER** is a user friendly micro plate Analyser. It is compact & lightweight. It is designed to measure and interpret enzyme immunoassay results, both monochromatically and Bi-chromatically. It is intended for in vitro diagnostics.

### Special Features

The **ELISA READER** can accommodate a flat bottom as well as a round configuration. The carriage is designed in a way that the plate automatically moves smoothly and positions itself accurately in the optical measurement path. Readings are taken continuously. The average value is calculated and results are presented according to the option selected.

The **ELISA READER** operates on a WIDE voltage (90-270 volt) :This eliminates the need for an external voltage stabilizer.

The **ELISA READER** has a special provision, which allows it to be used even when a printer is not available. Readings can be conveniently noted down manually.

The other special features of **ELISA READER** are as follows:

- Option of Lamp saving mode.
- Selection of both primary and secondary filters.
- Latest technology with battery back-up for 250 tests with QC, more than 2500 result.
- Robust built in 52-column thermal printer with 384 stationary heads.
- Unique circuitry for long lamp life.
- Alphanumeric Patients ID entry.
- Editing of saved tests.
- Human machine user interface: Touch panel, Keypad
- Multi-standard curve up to 12 standard calibrations with one blank optional.
- Access to test by touch of key.
- Capability to connect to 80-column printer for direct report printout.
- Blank is optional.
- Setting of the Date and Time.
- Capable of storing, deleting and recalling tests.
- Multiple calibrator modes.
- Selection of duplicates for both calibrators and samples.
- Extensive software for cut off mode.
- Selection of Positive, Equivocal, Negative cut-off.
- Several pre-programmed calculation modes will help to facilitate data processing of enzyme immunoassays. These are menu driven modes for simple and error free operations.
  - ✓ Absorbance mode
  - ✓ Cut-off mode
  - ✓ Multi-standard mode (full calibration mode)
  - ✓ Single calibration mode
  - ✓ % absorbance mode
  - ✓ Uptake and Kinetic mode



## Technical Specification

<b>Human Machine Interface</b>	TOUCH PANEL / KEYPAD
<b>Linear measurement range</b>	0.000 to 3.000 Absorbance Units (A)
<b>Photometric Accuracy</b>	± 2% or 0.007 whichever is higher, from 0 to 1.5 A ± 3% from 1.5 A to 3.0 A
<b>Drift</b>	<0.005 A/hr
<b>Photometric Linearity</b>	2.5 A
<b>Optical measurement</b>	8 Channel
<b>Filters</b>	
<b>Type of filter</b>	Narrow band Interference
<b>Wave Length</b>	405nm, 450nm, 492nm, 630nm, 560nm
<b>Half Bandwidth</b>	10nm ± 2nm
<b>Selection</b>	Automatic by Stepper Motor
<b>Light Source</b>	Tungsten halogen lamp, 20 Watts
<b>Display</b>	6" Graphics LCD, Negative Blue, STN
<b>Curve Plotting</b>	Graphical Representation on Printer
<b>Printer</b>	Built in Thermal Printer 52 columns
<b>Analysis Mode</b>	Absorbance Single Standard Cut-off Multi-Standard % Absorbance Uptake Kinetic
<b>Connectivity / RS232 Serial Port / USB</b>	9600 baud, 8 data, 1 stop, no parity bits / USB
<b>Size (cm)</b>	36 x 36 x 22 (lxbxh)
<b>Weight (Approx.)</b>	10 Kgs

