



**Programmable MTP Reader Mod.  
DV 990 BV4 & BV6**  
performs Auto-immune and Allergy tests  
for quantitative and cut-off method  
readings with Elisa Methods

**Main Specification**



- Rack holder for 96 wells microplates
- Wavelength range 380-720nm.
- Automatic filter selection supplied with narrow band interference filters:
- B/4 four filters (405-450-492-620 nm) or other wavelength on request in the range 380-720nm.
- B/6 six filters (405-450-492-550-620 670nm) or other wavelength on request in the range 380-720nm.
- Readings single wavelength, double wavelength (A-B), or multiple (dual wavelength) for measurement range expansion
- Fast reading single double wavelength 8" / trichromatic14"
- Plate shaking before readings
- Measurement range 0-3A or 0-9A in dual wavelength mode.
- Linearity  $\pm 1\%$
- LCD back-lit 4 lines display (English language)
- 24 keys membrane keyboard with 42 functions.
- Bi-directional RS232 interface
- Parallel output for printer
- 30 storable programs
- Blank and standard assignments.

**METHODS**

**CUT OFF:** print out of 96 wells absorbance values with P or N marker for each well in matrix or one line each sample format.

**QUANTITATIVE:** up to 7 standards in single or duplicate. Print out four parameters or polygonal regression curve in linear or logarithmic scale; prompt for eventual aberrant curve points' modification. Absorbance and concentration print out in matrix or one line each sample format.

**Print data**




**In both methods standard and controls can be memorized**

**Options:**

**System 990**

**DV990Win5**

**DV990Win6**

**Plate Kit**  for instrument validation with software

Windows™ Software for analyses quantitative, cut-off.

Quantitative, cut-off and kinetics. Windows™ Software with flexible data handling, using a scheme structure of the microplate

DV 990BV READER is a stand-alone programmable system:  
printing-data with printer EPSON LQ300 -LX300, DeskJet 920 HP or 940HP

DV 990BV READER can be connected to PC with the software DV990Win5, DV990Win6.

## SOFTWARE DV990win6



- Programs for qualitative, quantitative and kinetics analysis
- Scheme of the microplate.
- Results saved on files to be utilized with additional programs
- Readings: single wavelength, double wavelength (A-B), or multiple
- Memorization of standard
- Easy data entry.
- Replicates

### Cut-off

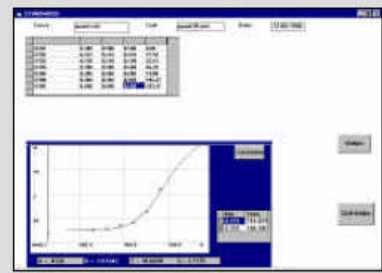


- Flexible wells assignment of blanks and controls.
- 8 cut off levels subordinate to controls absorbance values signed with **P** or **N** marker -8 validation formulas with error signal
- Printed results: in matrix or one line each sample format.

### Quantitative



- 2/7 standards
- Regression curve: stray line, polygonal, spline and 4 parameters
- Graphic scale: linear or logarithmic.
- Printed results: in matrix or one line each sample format. 2 a 7 standard;
- Curve presentation lin - lin and lin-log.



### Kinetic



- Number and time programmable
- Calculation in quantitative mode

#### HARDWARE SPECIFICATIONS

OPTICAL SYSTEM	8 MEASURING CHANNELS+1 FOR LAMP AUTO-CALIBRATION
READING TIME	SINGLE WAVELENGTH: 8 DOUBLE WAVELENGTH: 8 TRICHROMATIC WAVELENGTH: 14
ABSORBANCE RANGE	0 - 3A IN SINGLE WAVELENGTH 0 - 9A IN TRICHROMATISM
ACCURACY	1A (OD) ± 0,02 OD
LINEARITY	± 1%
REPEATABILITY	1,0 A (OD) ± 0,01 A (OD)
RESOLUTION:	0.001 A
SPECTRAL RANGE:	380 - 750 NM.
FILTERS:	NARROW BAND INTERFERENTIAL AUTOMATICALLY SELECTED
SOURCES:	HALOGEN LAMP
DISPLAY	LIQUID CRYSTALS
KEYBOARD	ALPHANUMERIC 24 KEYS 46 FUNCTIONS
DATA HANDLING	INTERNAL SOFTWARE OR PC SOFTWARE
INTERFACES	PC: RS-232C PRINTER: PARALLEL OUTPUT
ELECTRIC REQUIREMENTS	220 V 50 HZ 300 W OR 110V/60 HZ
WEIGHT:	11KG
DIMENSIONS:	40 X 35 X 15 (H) CM

#### INTERNAL SOFTWARE SPECIFICATIONS

CAPITULATES	30 STORABLE CAPITULATES
READINGS	SINGLE WAVELENGTH DOUBLE WAVELENGTH (A-B OR B-A) DUAL WAVELENGTH (RANGE EXPANSION)
BLANKS	SINGLE OR DUPLICATE
STORAGE OF CALIBRATION CURVES AND CUT OFF	POSSIBILITY TO USE STANDARDS AND CONTROLS OF PRECEDING RUNS AND EVENTUALLY OF CURVES MODIFICATION ON THE BASE OF WELLS USED AS CONTROL;
CUTOFF METHODS	CUTOFF CALCULATION
DATA HANDLING	P O N MARKER FOR EACH WELL ACCORDING TO THE CAPITULATE
QUANTITATIVE METHODS DATA HANDLING	2 TO 7 STANDARDS, IN SINGLE OR DUPLICATE SAMPLES IN SINGLE OR DUPLICATE REGRESSION CURVE : 4 PARAMETERS OR POLYGONAL CURVE PRINTOUT IN LINEAR OR LOGARITHMIC SCALE.
PRINTOUT	PRINTOUT RESULTS IN ABSORBANCE AND CONCENTRATION SEQUENTIAL OR IN MATRIX FORMAT
CONFORMITY	IEC 61010-L ELECTROMAGNETIC COMPATIBILITY 89/336/EEC- CE marking