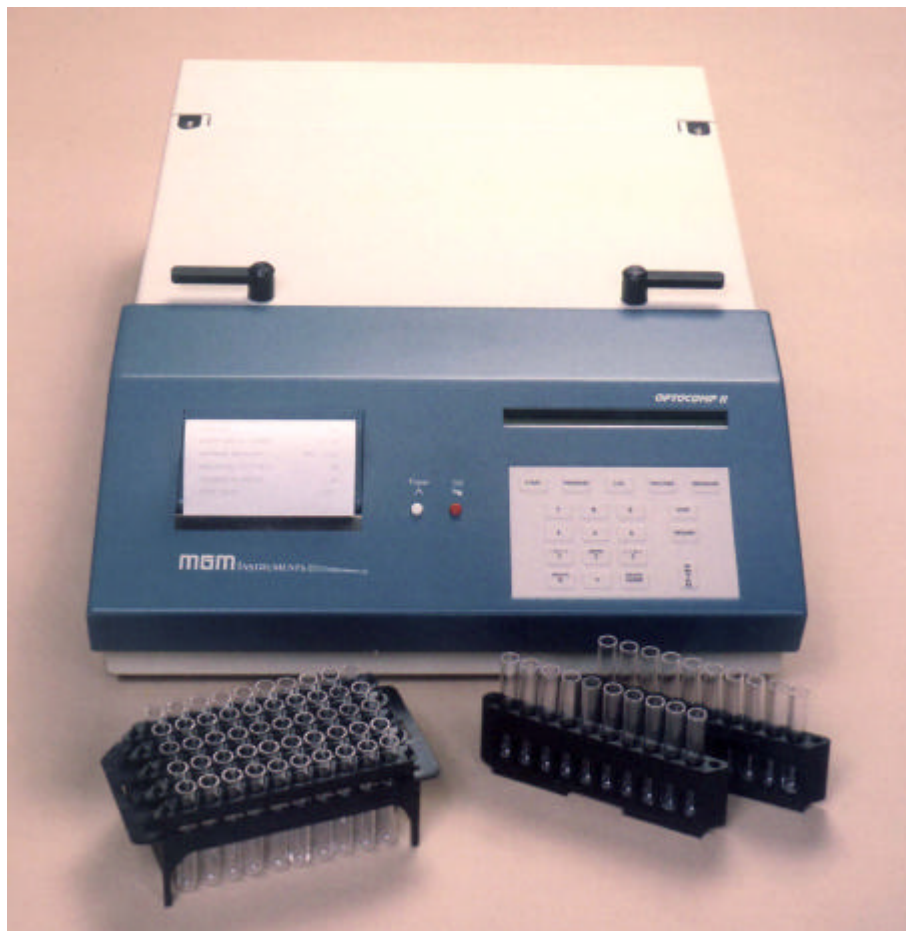


# ***OPTOCOMP II***

Photon Counting Automated Luminometer



- **PHOTON COUNTING FOR HIGHEST SENSITIVITY**
- **AUTOMATIC, PRECISE INJECTORS**
- **FULL DATA REDUCTION CAPABILITIES**
- **EASY TO USE, MENU DRIVEN SOFTWARE**
- **SIMPLE AUTOMATIC OPERATION**

# OPTOCOMP II Automated Luminometer Technical Specifications

## HARDWARE SPECIFICATIONS

**Detector:**

Low background, high sensitivity photomultiplier tube, operated in photon-counting mode.

**Spectral Response:**

Approximately 300-600 nm (at least 10% of peak sensitivity).

**Background:**

Less than 40 RLU/second at 20° C.

**Maximum Count Rate:**

$1.5 \times 10^6$  RLU/second; linear to approximately  $1 \times 10^6$  RLU/second.

**Printer:**

Thermal graphics printer (40 characters per line) automatically provides hard copy documentation, including plotting standard curves.

**Display:**

Prompts, menus and results are displayed on a 40 character by two line liquid crystal (LCD) display, backlit for increased visibility.

**Controls:**

Sealed membrane keyboard.

**Injectors:**

Solenoid operated (50 to 300 $\mu$ l). All parts that come in contact with reagents are constructed of Teflon™ or PEEK, and are inert.

**Computer Interface:**

Bi-directional RS-232 serial port included for interfacing to external personal computer.

**Power:**

100-135 or 220-270VAC, 50/60Hz (selectable), 60 watts.

**Size:**

18 in. (46 cm) wide by 26¼ in. (67 cm) deep by 6¼ in. (16 cm) high.

**Weight:**

44 lb. (20 kg).

## MGM INSTRUMENTS, Inc.

925 Sherman Avenue  
Hamden, CT 06514 USA

© Copyright 1999 MGM Instruments, Inc.  
March 1999  
Revision 3 032599

**Sample Format:** Available in two configurations; The Optocomp II accepts 250 standard 12mm x 75mm test tubes; The Optocomp IIM accepts 400 micro-tubes. Micro-tubes are available packaged in a rack, in the same 8 by 12 format as 96 well microtiter plates. Allowing use of multi-position pipettors and microtiter plate sample preparation equipment.

## SOFTWARE SPECIFICATIONS

**Operating Parameters** are easily programmed and permanently saved in non-volatile memory. Up to 30 user programmed protocols can be stored. Reagent injection timing is programmable.

**Data Reduction** methods included:

Raw Data.

Kinetic: plotting sample light output vs. time.

Cutoff: qualitative assay with **NEGATIVE**, **EQUIVOCAL** and **POSITIVE** sample determinations.

Luminescence ImmunoAssay: for quantifying analyte concentration, with a range of sophisticated curve-fitting methods available.

**Test Print-outs** include date and time, operator identification, protocol number, identification and type, reagent lot number, count time, and assay quality control data appropriate for the protocol type. Curve fitting data reduction methods include a plot of the standard curve. The print-out identifies each tube by tube type and replicate. For multiple replicates, the mean and coefficient of variation is reported. Replicates and means are also flagged, as appropriate, for conditions such as extrapolation, etc.

**Test Results** are also transmitted through the integral RS-232 serial port in a format which can be easily imported into popular spreadsheet programs. When using a personal computer to record results the printer can be easily turned off, to conserve paper.

**Quality Assurance** protocol is built-in, allowing calibration using a Tritium standard.

## ORDERING INFORMATION:

Catalog number: 121-1 OPTOCOMP II Luminometer

### To place an order, or for information:

Toll free in the U.S.: (800) 551-1415  
Outside the U.S., or local: (203) 288-3523  
Telefax: (203) 288-2621  
E-mail: gem@gem-mgm.com