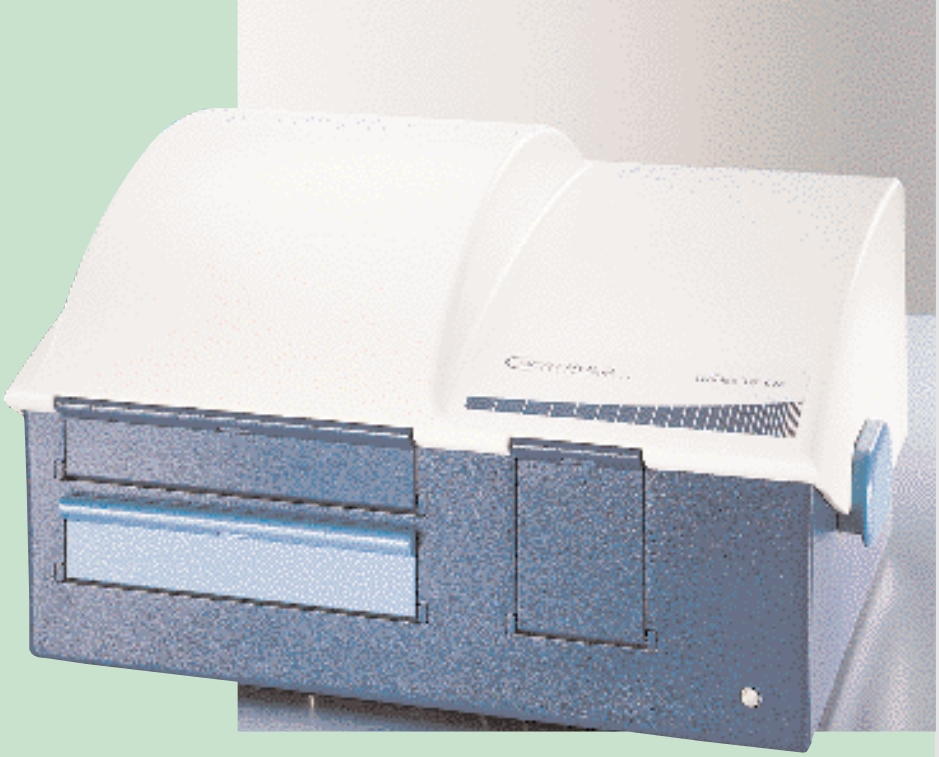
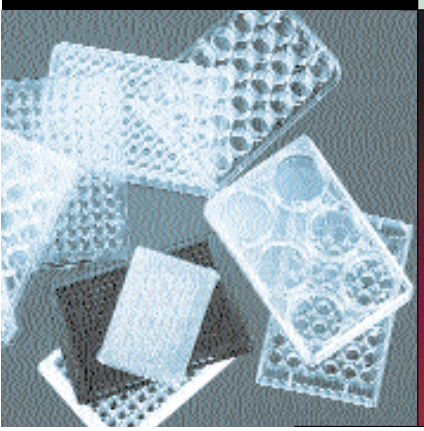


The dedicated fluorometer meeting your demands for highest sensitivity

Twinkle™ LB 970



BIOANALYTICAL INSTRUMENTS

BERTHOLD TECHNOLOGIES

Twinkle ™ LB 970

Twinkle ™ LB 970, the new dedicated fluorometer from Berthold Technologies, has been designed without compromise for a variety of measurement modes to support academic and industrial research centers.

Kinetics, scanning, dual ratio measurements plus top and bottom reading make Twinkle™ LB 970 a valuable instrument for any researcher using fluorescence in life science. Powerful software allows easy measurement of different plate formats, e.g. up to 864 well microplates, filters, petri dishes or Terasaki plates.

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Measurement Modes

Kinetics For slow kinetics the plate can be measured up to 99 times. Maximum delay between the measurements can be set to 10 x 600 s (=1h 40 min).

Scanning Especially in cell applications samples are heterogeneously spread in the well. To measure the complete area, several reading spots can be defined within the same well.

Dual ratio measurement You can define two excitation/emission filters for one label. The instrument will carry out the measurements sequentially by plate.

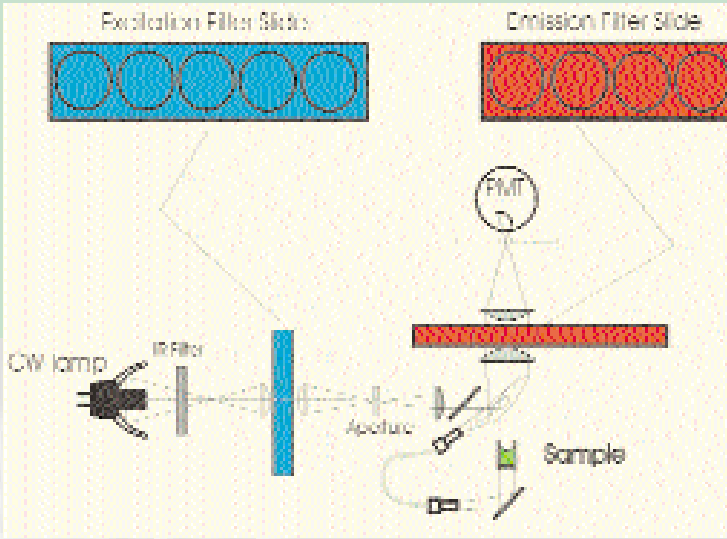
Top and Bottom reading The fluorescence reading can be taken from the bottom or top. The top reading is the most efficient way when no lid is used because no plastic surface has to be penetrated. Adherent cells and lids bring forward the need of bottom reading to achieve the most efficient detection. The switch between top and bottom is very simple and can be done easily several times a day. No service or readjustment is required.

Optics

Excitation Tungsten-halogen lamp, 75 W, lifetime typically > 300 h, spectral range 340-700 nm.

Filter slides Excitation filter slide with 5 filter positions. Comes with high quality interference filters, center wave length (bandwidth) 355 (30) nm and 485 (15) nm. Emission filter slide with 4 filter positions. Comes with high quality interference emission filters at 460 (30) nm and 535 (30) nm.
Other filters are available upon request.

Detector State of the art low noise/ high sensitivity photon counting system.



Applications

- **Cell Based: cytotoxicity, cell viability, cell quantification, cell proliferation, cell adhesion, reporter gene assays, phagocytosis**
- **Binding Studies: immunoassays, receptor assays**
- **Enviromental Toxins**
- **Kinetics: enzyme activity**
- **Molecular Biology: hybridization, DNA quantification, gene expression, PCR product quantification**
- **Quantifications: Protein, ssDNA, dsDNA, cells, bacteria, cytokines**
- **Toxicology**
- **Drug Screening**

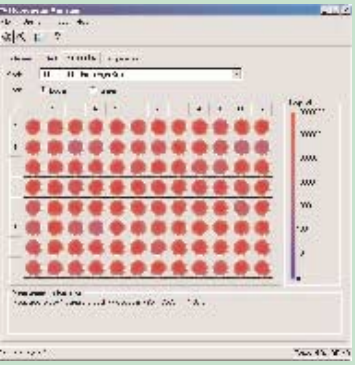
Software

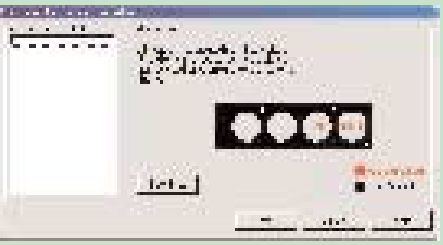
Windows Workstation Software

The Twinkle™ LB 970 user interface is easy to use and learn. It provides the level of reliability expected from 32-bit Windows software. Communication with the PC is achieved via a standard RS 232 interface.

Operating Features

- Built-in help
- Factory set protocols, labels, plates and filters - ready-to-use immediately
- Protocol explorer for quick and easy setting and editing
- Easy to add and remove filters
- One-click operation to start your run
- Automatic or manual text or Microsoft® Excel filing and exporting with auto-naming facility
- Microsoft® Access compatible database





Specifications LB 970

Excitation	Tungsten halogen lamp (340-700 nm), life time > 300 h.
Filter slides	Excitation filter slide with 5 filter positions. Emission filter slide with 4 filter positions.
Filters	Comes with high quality interference filters for excitation at 355 nm and 485 nm. Comes with emission filters at 460 nm and 535 nm.
Detector	State of the art low noise/high sensitivity photon counting system. 6 to 864 well microplates; Petri dishes, slides, filters, Terasaki plates. Outer dimensions for microplates: 86 mm x 128 mm, height 14 - 25 mm.
Scanning	Max 100 points per well; minimum step size of 0.1 mm.
Shaking	Three shaking modes: linear, orbital and double orbital.
Dimensions	280 mm x 465 mm x 406 mm (HxWxD)
Software	Instrument program runs on a Windows® 95/ 98 or Windows NT compatible computer, minimum 16 MB memory, CD- ROM,
Super VGA display with minimum resolution 800 x 600 pixels and 256 colours.	
Ordering Information	34940-30 Fluorometer Twinkle™ LB 970 34940-33 Fluorometer with top and bottom reading and temp. control

BERTHOLD TECHNOLOGIES

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