

**COMPANY PROFILE**

Mecasys was established in 1994, an CE, ISO 9001: 2000, EC certified Technology Company which designs, develops and manufactures Analytical Instruments and offers high-end solutions in the field of Analytical Instruments, Embedded Systems and Application Software Development.

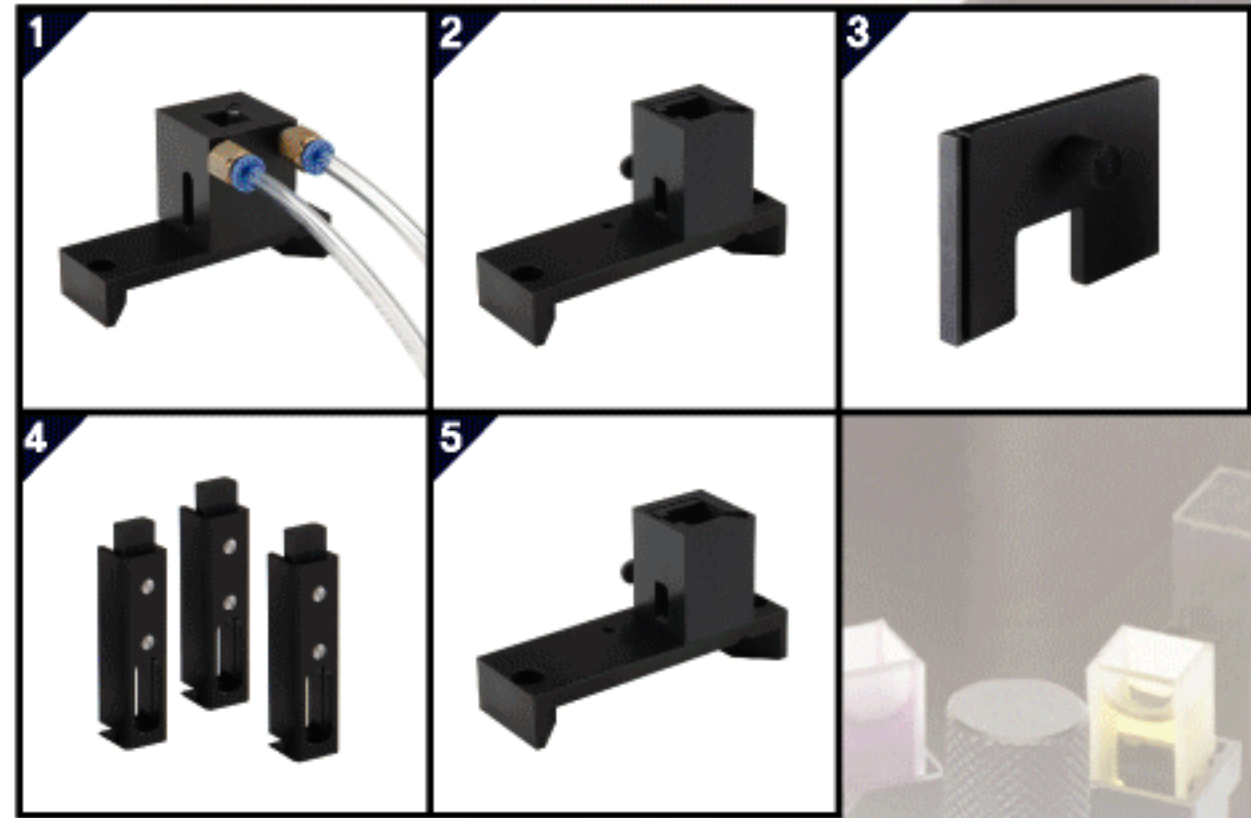
Analytical Instruments (Design & Manufacture)

Blood-chemistry.  
Water quality.  
Fluorescence, UV-Vis, Visible, etc.  
and Fully automated nucleic acid preparation.

Universities and Research establishments — Best use

- Food & Beverages
- Diagnostic kits
- Department of agriculture
- Clinical laboratories
- Hospitals use:  
Blood chemical analyzer,  
RNA/DNA analyzer
- Pharmaceutical
- Pollution control
- Ocean science
- Water quality analyzer
- Mines & Geology

**ACCESSORIES**



1. Temperature cell holder  
Temperature range : -10°C ~ 80°C
2. Micro volume cell holder  
≤ 1000µl Single cell holder  
- Pathlength : 10mm, Center height : 8.5mm
3. Film cell holder-Wide  
Sample limit : Thickness - 5mm / w X h : 100mm X 70mm
4. Film cell holder-Small  
Sample limit : Thickness - 2mm / w X h : 10mm X 30mm
5. Round cell holder  
When test tube is used, single cell holder  
- Test tube deepness : 16mm, 25mm



1 year AS guarantee

**SYSTEM CONFIGURATION**

UV/Vis Spectrophotometer (Double beam type)  
Automatic rotary type 8 cell holder  
OptizenView (Software) : For customizing, please ask your local sales officer or contact [overseas@mecasys.co.kr](mailto:overseas@mecasys.co.kr)



► **Certifications in Korea**



► **Other products**

- Portable Spectrophotometer : OPTIZEN MINI
- Visible Spectrophotometer : OPTIZEN 141 2V
- UV/Vis Spectrophotometer : OPTIZEN 21 20UV (Single-beam)
- UV/Vis Spectrophotometer : OPTIZEN 21 20UVplus (Split-beam)
- Clinical Analyzer : OPTIZEN 141 2H
- Agro-Chemical Detector : OPTIZEN MINI-SP (Portable)
- Agro-Chemical Detector : OPTIZEN 141 2-SP (Desk-top)
- Soil Analyzer : OPTIZEN 141 2SA



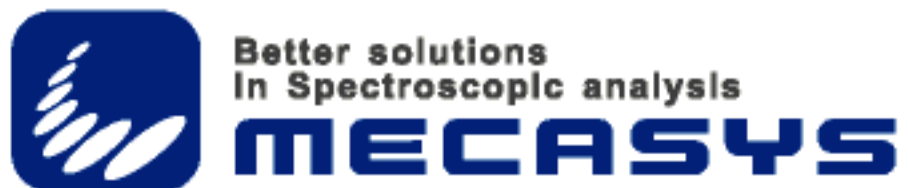
Head Office  
2F 397-28 Doryong-dong, Yuseong-gu, Daejeon,  
305-340, Republic of KOREA  
Tel. +82-42-485-0118 Fax. +82-42-485-7118

<http://www.mecasys.co.kr>  
E-mail: [overseas@mecasys.co.kr](mailto:overseas@mecasys.co.kr)

Overseas Sales Section/Manager  
Paulline Kim  
65-403, Banpo APT, Banpobon-dong  
Seocho-gu, Seoul, 137-812, Republic of KOREA  
Cellular. +82-10-3380-5567  
Fax. +82-2-3476-5567

Double Beam UV/Vis Spectrophotometer

**OPTIZEN 3220UV**



www.mecasys.co.kr

## Double Beam UV/Vis Spectrophotometer

**OPTIZEN 3220UV**

**OPTIZEN 3220UV** is very much ideal for analyzing components that require multiple wavelengths, time course operations, and getting stable data sheets.

**What is Nice about OPTIZEN 3220UV?**

- Expand your laboratorial work using ultraviolet (UV) testing capabilities for applications and measurement requiring wavelengths not available on visible-light-only spectrophotometer, and advanced applications available using double beam light sources.
- Fast analysis of a wide range of samples and capable your analysis to put out experiments using programmed procedures.
- Even more powerful in information technologies so that you will be able to work out in your home by using internet.
- Bigger storage capacity than any others.
- Simple kinetics using time-course measurement or complete other research projects using its double light source ability to automatically complete multiple scans.
- OPTIZEN 3220UV has capabilities with a range of 190nm to 1100nm.

**Features**

- More powerful in information technologies in your lab.
- Better in holding memories.
- USB ports for user-friendly programming updates and other accessory connections.
- Universal sample cell holder holds 8 cells.
- Rotating cell holder (8 cells and one blank)
- Supurb optics for maximized accuracy.
- Exceptional precision and reliability.
- User-friendly software with scanning and time course capabilities.
- Versatile data processing.

**For Better**

- Embedded system solution
- Upgrade software service on networking
- Touch screen control : Option

**Standard Accessories**

- 8 cell automotive rotating holder
- Embedded XP based program
- 17 Inches TFT- LCD monitor
- Keyboard
- Mouse

**Hardware Specification**

**Photometric System** Double beam optics  
**Spectral Band pass width** < 1.0nm  
**Wavelength Range** 190nm to 1100nm  
**Wavelength Accuracy** <  $\pm 0.3$ nm  
 (at D2 peak 656.1 nm, 486.0nm)  
**Wavelength Reproducibility** <  $\pm 0.1$ nm  
**Wavelength Setting** 0.1nm  
**Wavelength Slew Rate** about 5000nm/min  
**Wavelength Scanning Speed** Max. 3000nm/min  
**Photometric Range** - 0.5 to 4.0ABS  
**Photometric Accuracy**  $\pm 0.004$ ABS (at 1.0 ABS)  
**Photometric Reproducibility**  $\pm 0.002$ ABS  
**Stray Light** < 0.05% T at 220nm & 340 nm  
**BaseLine Flatness** <  $\pm 0.001$ ABS  
 (200nm to 1100nm)

**For Human**

- User-friendly 8 cell rotating cell holder
- Self-checking system for start
- Good design
- Software : OptizenView 2005
- Upgrading software : Free
- Power system : 110V/220V available (Ask your nearest distributor)
- Touch-screen (17 Inches) : Option (Ask your nearest distributor)

**Noise Level** < 0.001A

**Drift** 0.002A/hr at 340 nm

**Stability**  $\pm 0.002$  A/hr

**Light Source** Tungsten-halogen lamp and deuterium lamp

**Lamp Change Wavelength** 340nm to 410nm (default 370nm),  
 Include auto position system

**Monochromator** Modified czerny-turner type with 1200  
 lines/mm blazed grating

**Detector** Silicone photodiode

**Power Requirement** AC 220V, 50/60Hz (Please confirm  
 power rate of your area)

**Dimensions** 600(w) X 440(d) X 250(h) mm

**Weight** 16kg

