COMMODITY DESCRIPTION

HSK NO.	ITEM NO.	DESCRIPTION	Unit	Quantity
9027-30-2000		Nanobiometer OPTIZEN 3220UV bio		

1. Usage

NanoBiometer **OPTIZEN 3220UV bio** is Double Beam type UV/Vis spectrophotometer that shows more precisive performance. With the NanoBiometer **OPTIZEN 3220UV bio**, You don't need for any sample dilutions and other cuvettes.

OPTIZEN 3220UV bio shows great performances not only in DNA, RNA & Protein analysis but also in Kinetic analysis, so can be used in various fields such as immunology, cell biology, biochemistry, clinical medicine, molecular biology, microbiology, neurology, food diagnostics, botany diagnostics, environmental analytics, veterinary diagnostics, pharmaceuticals and so on.

2. Description

1. Laboratorical, educational, clinical and pharmaceutical use
2. High precision/resolution with the Modified Czerny-turner type monochromator
3. Nanoliter cell(3.0~5.0㎕) that doesn't need for dilution included
4. Lamp turn on & off control available.
5. Can save as EXCEL files
6. Automatical Calibration
7. Network upgarde available (Software & hardware)
8. Network instrument check and correction
9. USB ports for versatile data processing and other accessary connection
10. Windows XP based Operation system
11. Embedded PC can save more than 40,000 data
12. OptizenView4.1 bio (Sotware) for DNA, RNA, Protein & kinetics analysis

3. System configuration

1. UV-Vis spectrophotometer (Optizen 3220UV bio)
2. Embedded Opearting S/W 1 set

4. Specification

1. UV-Vis spectrophotometer

1) Spectral band width : < 1nm
2) Wavelength range : 190 - 1100nm
3) Wavelength accuracy : ± 0.3 nm
4) Wavelength repeatability : ±0.1 nm
5) Monochromator : Modified Czerny-turner type with Blazed grating (lb = 313 2 or 253 7)
6) Photometric system : Double Beam Optics
6) Scan Speed : 300nm/min ~ 3000 nm / min
7) Stray right : <0.05 %T at 220 and 340nm
8) Photometric display range: -0.5 to 4.0A
9) Photometric accuracy : ± 0.004A at 1 A
10) Photometric reproducibility : ± 0.002A
11) Noise level : < 0.001A around 0A at 220 and 340 nm
12) Drift : 0.002A/hr at 340 nm
13) Stability : ± 0.002 A/h
14) Light Source : Tungsten-halogen lamp and Deuterium lamp (ASB System)

15) Display Mode : 17" TFT LCD Monitor
16) Sample holder : Automatic rotary type 8-position multi-cell holder
17) Interface ports : RS-232C and centronics ports for Optizen View
18) Wavelength slew rate : 5000 nm /min
19) Power requirement : 220 V/1A, 60 Hz

2. OptizenView 4.1 bio

- Nucleic Acids Analysis
  - Quantification
    - simple Quantification
      - dsDNA(50)/ssDNA(37)/RNA(40)/OligoDNA(33)
    - multi Wavelength Quantification
  - Ratio Mode(purit check)
    - dsDNA(A260/A280)/RNA(A260/A230)
    - Background correction wavelength selectable
- Protein analysis
  - Quantification
    - Bradford(CBB) Method
    - Lowry Method
    - BCA Method
    - Biuret Method
    - UV absortion Method
- Labeling efficiency
  - dye incorporation rate for microarray experiments
  - Cy-3 / Cy-5
- Cell density
  - for microbiology cell culture
- Spectrum Measurement
  - one-time measurement for all results you want
  - wide-range spectrum(190~1,100nm) can be obtained
- Kinetics :
  - The trend graph is automatically created. (To the Degree 3(Cubic) curves can be selectable)
  - Easy scale mode.
  - You can select the curves you want to see.
  - Merge graph possible.
  - Graph image can be saved as BMP files.
- Report Form selectable
- Automatical Calibration
- Customize Mode
  - User Created Method can be saved up to 999

5. Remark

1. Manual, Program software, tools are provided.
2. One year Warranty