

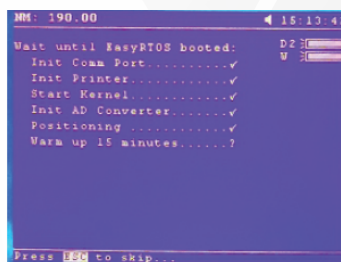
Microprocessor UV-VIS Double Beam Spectrophotometer

Model: ADB-1100 | Make: ANALAB | HSN Code: 90273020



Standard Configuration

Glass Cell	: 4 Nos.
Quartz cells	: 2 Nos.
Instruments Cover	: 1 No.
Software CD	: 1 No.
USB Cable	: 1 No.
Operational Manual	: 1 No.
Software Manual	: 1 No.
Software key	: 1 No.



Display (Graphic LCD
320 x 240 Dots)



Soft touch keypad

Technical Specification:

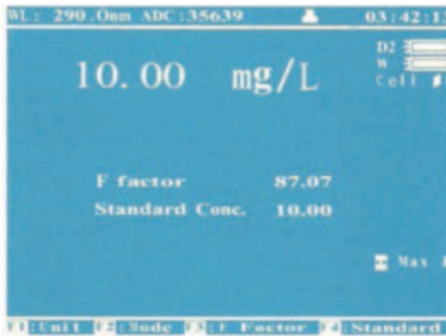
Wavelength Range	: 190-1100nm
Spectral Bandwidth	: 1 nm
Optical System	: Double Beam, Blazed Holographic Grating (1200 lines/mm)
Wavelength Accuracy	: ± 0.5 nm
Wavelength Repeatability	: ≤ 0.2 nm
Wavelength Setting	: Auto, Resolution 0.1nm
Photometric Range	: 0~200%T, -4~4A, 0~9999C
Photometric Accuracy	: ± 0.002 A (0~0.5A), ± 0.003 A (0.5~1A), $\pm 0.3\%$ T (0~100%T)
Photometric Repeatability	: ≤ 0.001 A (0~0.5A), ≤ 0.002 A (0.5~1A), $\leq 0.2\%$ T (0~100%T)
Stray Light	: $\leq 0.05\%$ T(220/360nm)
Scan Speed	: High, Medium, Low. Max.2000nm/minute
Baseline Flatness	: ± 0.001 A/h (500nm,0A)
Stability	: ± 0.001 A/h (500nm,0A)
Noise	: $\leq 0.2\%$ T/3 min (250/500nm, 0%T); $\leq 0.3\%$ T/3 min (250/500nm,100%T)
Sample Compartment	: 10mm Pathlength Cuvette
Detector	: Silicon Photodiode
Lamps	: Tungsten Lamp & Deuterium Lamp (Pre-aligned)
Display	: Graphic LCD (320*240 Dots)
Keypad	: 30-key Alphanumeric Membrane Keypad
Output Port	: USB Port
Printer	: Mini Serial Printer; PC Printer
PC Software	: PC Scanning Software
Power Requirements	: AC 90-250V, 50/60Hz
Dimension	: 635x515x255mm
Weight	: 26kg
Holder	: 8 cell holder

Salient Features:

Double beam ensure low drift, low noise and Low stray light
High speed MCU, high precision AD, large storage capacity
Large LCD display (320*240 Dots)
1.0nm or variable Bandwidth meet Pharmacopoeia
Data and Curve can be stored in real-time
Online software upgrade capability
Lamps can be turned on/off individually
Easy to change Pri-aligned lamps

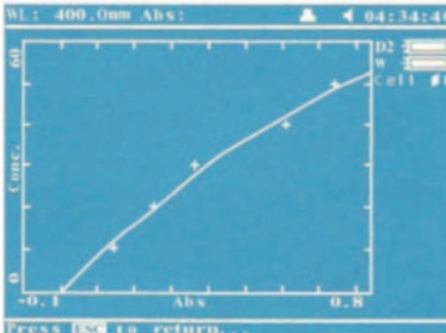
Function:

Photometric
Quantitative(Standard Curve)
WL Scan(Spectrum Scan)
Time Scan(Kinetics)
DNA/Protein Test
Multi-WL Test
System Utility



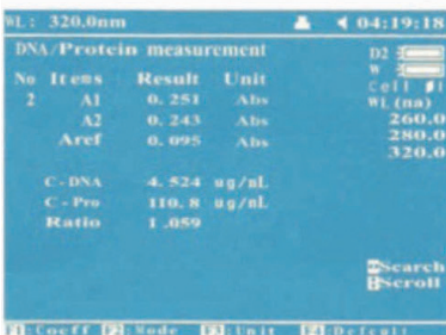
Basic Mode

To measure the Absorbance and transmittance



Quantitative

1. Coefficient Method
2. Standard Curve Up to 10 Standard sample may be used to establish a curve. Four methods for fitting a curve through the calibration points : Linear fit. Linear fit through zero, Square fit and cubic fit.

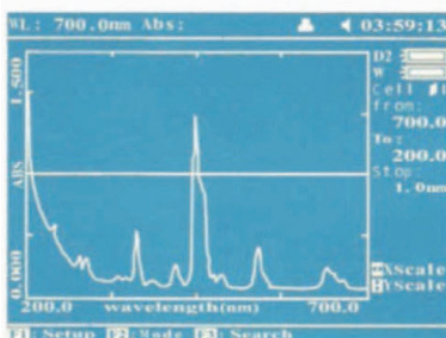


DNA/Protein Test

Concentration and DNA purity are quickly and easily calculated: Absorbance

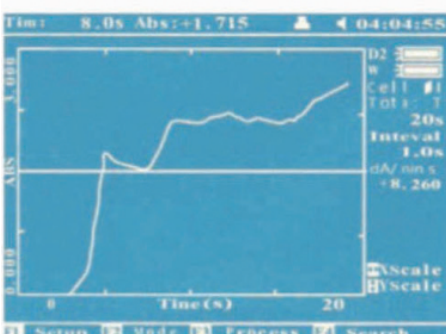
ratios: 260 nm / 280 nm with optional subtracted absorbance at 320 nm. DNA

concentration = $62.9 \times A_{260} - 36.0 \times A_{280}$ Protein
 concentration = $1552 \times A_{260} - 757.3 \times A_{280}$



Wavelength Scan

1. The wavelength scan intervals are 0.1, 0.2, 0.5, 1, 2, 5 nm
2. High, Medium and low scan speed are available. They vary from 100 to 3600 nm/min
3. Wavelength are scanned from high to low so that the instrument waits at high WL. And it minimizes the degradation of UV sensitive samples.



Kinetics

Abs vs time graphs is displayed on the screen in real time wait time and measurement time up to 12 hours may be entered with time interval of 0.5, 1, 2, 5, 10, 30 seconds and one min. Post-run manipulation includes re-scaling, curve tracking and selection of the part of the curve required for rate calculation. Rate is calculated using a linear regression algorithm before multiplying by the entered factor.

Applications

- Medicine/Pharmaceutical Industry
- Environment Monitoring
- Commodity Inspection
- Food Inspection
- Agricultural Chemistry
- Teaching in Colleges & Universities
- Metallurgy
- Geology
- Machine Manufacturing
- Petrochemical Industries
- Water and Waste water Labs
- Food and beverages Labs

Product Range

• pH/mV/°C/ORP Analyzer • Conductivity/TDS/Resistivity/Salinity/°C Analyzer
• Multiparameter Analyzer (pH/ORP/Conductivity/TDS/Resistivity/Salinity/°C)
• Karl Fischer Titrator • Auto Titrator • Automatic Melting Point Apparatus
• Flame Photometer • Friability Test Apparatus • Tablet Dis-integration Test Apparatus
• Tap Density Test Apparatus • Tablet Hardness Tester • Leak Test Apparatus
• Tablet Dissolution Test Apparatus • Electromagnetic Sieve Shaker • Ultrasonic Bath (Sonicator)
• Analytical Electronics Balance • Halogen Based Moisture Analyzer
• Visible & UV-Vis. Spectrophotometer • Nitrogen Gas Generator • Zero Air Gas Generator
• Combination Nitrogen / Zero Air Gas Generator • Air Drying Unit for TOC Analyzer
• Dew Point Apparatus • Gas Handling & Purification System • Laboratory Furniture & Fume Hood
• Exhaust Hood for AAS/ICP.

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AN ISO 9001 : 2015 CERTIFIED CO.
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