

Spectrophotometer

IG-28DS Touch



IGENE LABSERVE

Innovative • Interactive • Intuitive

FEATURES & SPECIFICATIONS

DESCRIPTION

Spectrophotometer is an instrument which measures the amount of light that a sample absorbs. Steady, modern, and elegant appearance design. Adopt the newest microcomputer technology and electronic control system. Optimized optical system and structure can both extend new functions and ensure the accuracy, stability, and durability. This instrument is widely used in petroleum, chemical, pharmaceutical, sugar, refining, research, and food industries. This spectrophotometer also has wide scope of use in related colleges, universities & scientific research institutions for meaning the photometric value of samples.

FEATURES

- ❖ Large Touch screen Display: It sports a large touchscreen display to show results and curves directly on the screen.
- ❖ It has a reference cuvette holder and 4 sample cuvette holders.
- ❖ Automatic change-over between T lamp & D2 lamp.
- ❖ Optimized optics and large-scale integrated circuits design, light source and receiver from world famous measurement methods all add up to high performance and reliability.
- ❖ Data can be directly exported through USB drive, Mail, Bluetooth.
- ❖ Improved Circuit: Improved design prevents circuit fluctuations and stray light to ensure stability of the instrument.
- ❖ PC controller measurement can be achieved for more accurate and flexible requirement.
- ❖ Parameters and data can be saved for user's convenience.
- ❖ Rich measurement methods: wavelength scan, time scan multi wavelength determination, double-wavelength methods, and triple-wavelength methods etc., meet difference measurement requirement.
- ❖ It has a function for filtering & smoothing the peaks of measurement in wavelength scan parameter.



❖ **Basic Mode** (To measure the Absorbance, transmittance% and Energy)

❖ **Quantitative**

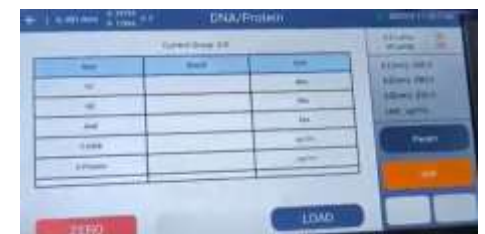
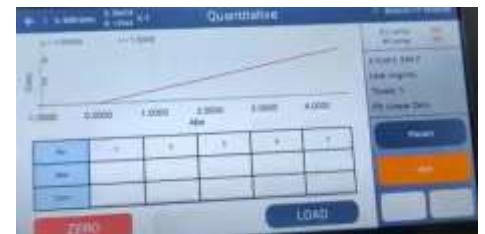
1. Coefficient Method
2. Standard Curve Up to 10 Standard sample may be used to establish a Curve. Four methods for fitting a curve through the calibration points: Linear fit. Linear fit through zero, square fit and cubic fit.

❖ **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 /Survey 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. 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



STANDARD ACCESSORIES:

- ❖ Software
- ❖ 10mm Glass Cuvette
- ❖ 10mm Quartz Cuvette
- ❖ Instruction Manual
- ❖ Power Cord



SPECIFICATIONS

Model	IG-28DS Touch
Bandwidth	0.5, 1.0, 2.0, 4.0 nm
Cell Holder	4 Sample & reference cuvette holders (both 10mm)
Optical System	Double Beam (1200 lines/mm Grating)
Wavelength Range	190 ~ 1100 nm
Wavelength Accuracy	± 0.3 nm
Wavelength Repeatability	± 0.2 nm
Scanning Speed	High, Medium, Low (Max. 3000 nm/min)
Photometric Range	-3 ~ 3A, 0~999.9%T, 0~9999C, 1~9999F
Photometric Accuracy (T)	± 0.3%T
Photometric Repeatability	0.2%T
Stability	± 0.001 A/h (700 nm, preheating for 1 hr)
Photometric Accuracy(A)	≤±0.002A(0~0.5A), ≤±0.004A(0.5~1A), ≤±0.006A(>2.0)
Baseline Flatness & noise	± 0.001A/h
Stray Light	<0.05%T @220nm, 360nm
Data Output	USB
Printer Port	Parallel Port
Display	Touchscreen
Lamps	D2 & Tungsten Halogen Lamp
Detector	Silicone Photodiode
Power Supply	AC 220V / 50Hz
Dimensions & Weight	650 x 450 x 220mm & 25kg)

