

UV-VIS SPECTROPHOTOMETER

IG-71UV/ 72UV



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ABOUT THE COMPANY

iGene Labserve Pvt. Ltd. is gaining recognition by offering resilient, innovative solutions in laboratory instrumentation across healthcare, genomics, drug discovery, biopharma, and food & beverage sectors. We strive to enhance lab efficacy and reduce challenges through advanced technologies and a diverse product portfolio tailored to our customers' needs.

DESCRIPTION

The IG-UV Series Spectrophotometers are advanced analytical instruments designed to measure the absorbance and transmittance of samples across a wide wavelength range (190–1100 nm). Built with a modern design, optimized optical system, and powerful microprocessor, these instruments ensure high accuracy, excellent stability, and long operational life. With a large LCD display, intuitive silicone keypad, robust data storage, and support for multiple test modes, the IG-UV Spectrophotometer series is ideal for laboratories in research, pharmaceuticals, biotechnology, chemical analysis, and education.



KEY FEATURES

- **7-inch Color LCD Display:** A bright, intuitive screen that displays real-time scanning curves, graphs, and test parameters—enabling standalone operation without a PC.
- **High-Performance Optical System:** Equipped with a 1200 lines/mm holographic grating and low stray light level ($\leq 0.03\%T$), ensuring accurate spectral results and superior resolution.
- **Advanced Processing Power:** Built with a 32-bit Cortex-M3 processor (120 MHz) supporting fast operation, real-time calculations, and storage of 5000 data sets and 500 curves.
- **Long-Life Socket-Type Lamps:** Tungsten-halogen and deuterium lamps with up to 2000 hours life, automatic lamp switching, and easy tool-free replacement.
- **Connectivity & Data Management:** Supports USB-A, USB-B, RS232, and direct printer connectivity. Data can be exported in Excel, text, and image formats—no external software needed.
- **High Sensitivity & Stability:** Silicon photodiode detector ensures excellent sensitivity. Stability is maintained at $\pm 0.002A/h$ @ 500 nm.
- **Large Sample Chamber & Accessories:** Accommodates a wide variety of cuvettes and attachments for flexible analytical applications.
- **Comprehensive Operating Modes:** Photometry, Quantitation, Kinetics, Wavelength Scanning, Multi-Wavelength, and DNA/Protein measurement.

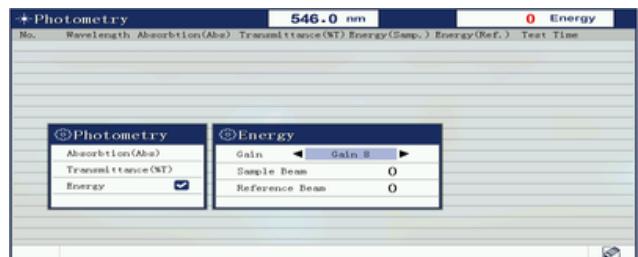
TECHINCAL SPECIFICATION

Parameter	IG-71UV	IG-S71UV	IG-A71UV	IG-72UV	IG-S72UV	IG-A72UV
Display	7-inch LCD	7-inch LCD	7-inch LCD	7-inch LCD	7-inch LCD	7-inch LCD
Keyboard	Silicone Button	Same	Same	Same	Same	Same
Optical System	Single Beam	Single Beam	Single Beam	Double Beam	Double Beam	Double Beam
Holographic Grating	1200 lines/mm	Same	Same	Same	Same	Same
Spectral Bandwidth	2 nm	1 nm	0.5/1/2/4 nm	2 nm	1 nm	0.5/1/2/4 nm
Wavelength Range	190–1100 nm (all models)					
Wavelength Accuracy	±0.3 nm					
Wavelength Repeatability	≤0.2 nm					
Photometric Accuracy	0.2%T (0–100%T), ±0.002A (0–0.5A), ±0.004A (0.5–1A)					
Photometric Repeatability	≤0.15%T, 0.001A (0–0.5A), 0.002A (0.5–1A)					
Stray Light	≤0.03%T @ 220/360 nm					
Stability	±0.002A/h @ 500 nm					
Photometric Range	0–200%T, -0.3–3.0A, 0–9999C					
Baseline Flatness	±0.002A (200–1000 nm)					
Noise	0.0003A @ 500 nm					
Working Modes	T, A, C, E					
Wavelength Setting	Automatic					
Scanning Speed	High / Medium / Low					
Detector	Silicon Photodiode					
Light Source	Tungsten-Halogen & Deuterium					
Data Output	RS232, USB-A, USB-B					
Processor	Cortex-M3, 120 MHz					
Shipping Dimensions (mm)	770×630×340 (27 kg)	940×740×510 (52 kg)	Same as IG-71UV	940×740×510 (52 kg)		

UI DESIGN

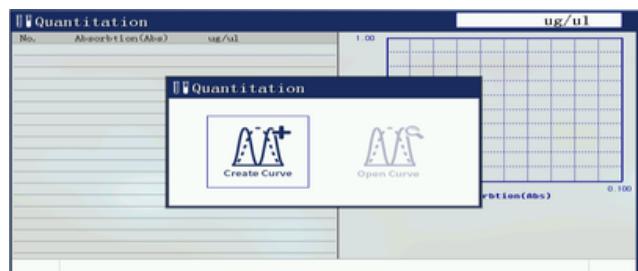
1. Photometry Mode: Three measurement modes:

- Absorbance (A)
- Transmittance (%T)
- Energy (E)
- View real-time graphs and curves directly on the 7-inch display.



2. Quantitative Test: Multiple quantitation methods:

- Coefficient
- Standard Curve
- Linearity
- Linear Zero Crossing
- Quadratic
- Supports up to 15 standards and precise curve fitting for highly accurate concentration measurements.



3. Kinetics (Time Scan):

- Analyze reaction rates by scanning absorbance at a fixed wavelength across a set time.
- Automatically calculates reaction rate after parameter input.



4. Wavelength Scanning (Qualitative Test):

- Scan any wavelength from 190–1100 nm to detect absorbance peaks.
- Peak values and curve shapes can be viewed and analyzed onscreen without PC software.



5. Multi-Wavelength Measurement: Measure absorbance at several wavelengths for the same sample—ideal for complex assays.

6. DNA / Protein Measurement: Dedicated module for molecular biology:

- Dual-mode operation
- Simplified workflow for nucleic acid and protein quantification





CONNECT WITH US

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