



UV-VISIBLE SPECTROPHOTOMETER



Quality, Management, Environment, Health & Safety Standards



CDSCO MD 5 License



USFDA Listed



European CE



ISO 9001: 2015
IAF



ISO 13485:2016
NABCB/IAF



ISO 45001 : 2018
IAF



7 Electric Safety Certifications
IEC 60335-1 and IEC 60335-2-24, IEC 61010-1,
IEC 61010-2-020 and 61010-2-101, IEC 61326-1,
IEC 61326-2-6

INTRODUCTION

The MarkEn UV–Visible Spectrophotometer is a compact, high-precision analytical instrument designed for accurate quantification of nucleic acids, proteins, and other biomolecules. With an advanced light source and Silicon photodiode detector, it ensures rapid and reliable measurements with minimal sample volume. Ideal for molecular biology, biotechnology, and research laboratories, this system delivers superior wavelength accuracy and absorbance precision for diverse analytical applications



FEATURES

- **Micro-Volume Efficiency:** Requires as little as 0.5 μL of sample, reducing waste and maximizing analysis yield.
- **Wide Wavelength Range:** Covers 190 – 1100 nm for comprehensive biomolecular analysis.
- **High Accuracy & Resolution:** Delivers ± 0.5 nm wavelength accuracy and 2–3 nm spectral resolution for precise results.
- **Fast Measurement:** Provides results in less than 5 seconds, optimizing lab workflow.
- **Versatile Detection:** Capable of detecting RNA, DNA, and protein samples with excellent reproducibility.
- **User-Friendly Operation:** Operates through PC-based software (Windows XP/2007) or built-in LCD interface for flexibility and ease of use.
- **Robust Optical System:** Equipped with xenon lamp and Silicon photodiode detector for stable and long-lasting performance

TECHNICAL SPECIFICATION	
Make	MarkEn
Optical Design	Double beam with sample & reference cuvette positions
Sample Size	0.5 μ L
Spectral Bandwidth	1.0 nm
Detector	Silicon photodiode
Measurement Modes	Absorbance, % Transmittance, % Reflectance, log (1/R), log (Abs), Factor, Intensity
Wavelength Range	190 – 1100 nm
Wavelength Accuracy	\pm 0.5 nm
Wavelength Repeatability	\leq 0.05 nm
Spectral Resolution	2–3 nm
Cuvette System	Supports variable path length cells with cuvette holder
Scanning Speed	Variable, <1 to 6000 nm/min
Photometric Range	>3.5 Abs
Photometric Accuracy	\pm 0.004 AU (1 AU), \pm 0.005 AU (2 AU)
Photometric Repeatability	\leq 0.0001 AU
Stray Light	\leq 0.50% T (198 nm), \leq 0.03% T (220 nm), \leq 0.025% T (340 nm)
Baseline Stability	\leq 0.001 AU
Cell Path Length	Variable path length cell changer
Absorbance Precision	0.002–0.003
Absorbance Range	0.0 – 2.0 A or 0.002 – 1.5
Sample Detection Limit	0.5 – 1.0 ng/ μ L (dsDNA)
Maximum Sample Concentration	750–1000 ng/ μ L (dsDNA)
Data Interval	Selectable: 10, 5, 2, 1, 0.5, 0.2, 0.1 nm
Light Source	Xenon flash lamp (long life)
Sample Type	RNA, DNA, and Protein
Computer System	Branded Computer with i7 processor, 16 GB RAM (DDR5 or better), 500 GB SSD, 24" display, wireless keyboard & mouse, preloaded with Windows 11 Professional and MS Office
Power Supply	230V \pm 10%, 50 Hz AC
Accessories	Quartz cuvettes (10 mm), variable cuvette holder

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Blood Bank Equipment

Hospital & Scientific Equipment
Hospital Furniture & Infrastructure
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25+

Years of Excellence



400+

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1000+

Committed Engineers



1,00,000+

Satisfied Users

CERTIFICATION



10 products tested by a WHO-PQS accredited laboratory



Intertek



ISO 14001: IAF



WHO GMP



BIFMA Certified, BIFMA Level 3



ASTM- Corrosion Free Products



ISO 2409

EN 13523-26,
ISO 13849-1,
IP 69, IP 65

& MANY OTHER...

OUR ESTEEMED CUSTOMERS



& MANY MORE...



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