

Price range of spectrometers



Summary of Content

Spectrometer prices vary widely, from around \$50,000 for basic mass spectrometers to over \$1.5 million for high-end research systems, with optical spectrometers generally starting at a few thousand dollars.

Mass Spectrometers

Mass spectrometers are widely used in life sciences, pharmaceuticals, and biotech research. Entry-level benchtop models can cost \$50,000 to \$150,000, such as quadrupole systems suitable for routine analysis and environmental testing. Time-of-flight (TOF) spectrometers start around \$200,000 and can exceed \$500,000 for high-resolution models used in proteomics and metabolomics. Ion trap systems range from \$100,000 to \$300,000, offering strong structural analysis for small molecules. Orbitrap spectrometers cost \$400,000 to over \$1,000,000, providing high-resolution accuracy for complex biological studies. Fourier transform ion cyclotron resonance (FT-ICR) systems are the most expensive, often exceeding \$1.5 million, delivering ultra-high-resolution molecular characterization. Operational costs, consumables, software, and service contracts add significantly to the total investment .

Optical Spectrometers

Optical spectrometers, used for UV-VIS, NIR, Raman, and fluorescence applications, are generally more affordable. Prices for laboratory or industrial optical spectrometers typically start at a few thousand dollars and can increase depending on resolution, sensitivity, and additional features such as fiber optics, detectors, or automated sample handling. Suppliers like Edmund Optics and Farnell UK offer a wide range of models and accessories, with pricing often available upon request or through online catalogs .

Article Content

Amazon : Spectrometers

Price and other details may vary based on product size and color. Online shopping for Spectrometers - Spectrometry from a great

Spectrophotometer Pricing Guide: What to Expect

Wondering how much a spectrophotometer costs? Explore pricing ranges, key features, and what to expect when

The Best Spectrophotometers: A Buyer's Review of Price and Features

The Shimadzu UV-1900i Plus stands out for regulated environments requiring speed, while the DeNovix DS-7 offers a

Spectrometry: Industrial & Scientific

Price and other details may vary based on product size and color. Online shopping for Spectrophotometers - Spectrometry from a

Laboratory Spectrometers & Spectrophotometers – MSE Supplies

Our range of spectroscopy and analytical instrumentation is crafted to meet the precise needs of PhD researchers and professionals

The Best Spectrophotometers: A Buyer's Review of

The Shimadzu UV-1900i Plus stands out for regulated environments requiring speed, while

Optical Emission Spectrometer Price: 2025 Market Trends

Discover current optical emission spectrometer price trends for 2025. Compare benchtop, portable, and industrial

How Much Does an OES Spectrometer Cost? | 2026 Price Guide

Real-world OES spectrometer price ranges for 2026 -- entry-level to high-end, Chinese vs Western brands, plus total cost of

Buy Mass Spectrometers For Sale, New & Used Prices | LabX

New models can offer enhanced performance, efficiency, and ease-of-use -- while used models may provide suitable performance at

Mass Spectrometer Costs: How Much Should You Budget?

How much does a mass spectrometer cost? Explore price ranges, key factors, and what labs should budget for

Spectrometers & Spectroscopy Equipment | Edmund Optics

Edmund Optics offers a range of optical spectrometers and compatible accessories. Our selection includes gas cells, reflectance

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://benniedesignstudio.co.za>

Email: sales@benniedesignstudio.co.za

Phone: +27 82 391 4765

Address: The Towers, 1 St Georges Mall, Cape Town, 8001, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

