

Item number	Product	Quantity	Price excluding VAT	Amount excluding VAT
MALDI-TOF	M-Discover 100 Excellence Mass Spectrometry System	1 compl	230 000,00	230 000,00



M-Discover 100 Mass Spectrometry System

Revolutionizing Clinical Microbiology

M-Discover 100 is a cutting-edge mass spectrometry system designed for the rapid and highly precise identification of clinical microorganisms. By leveraging advanced Matrix-Assisted Laser Desorption/Ionization Time-of-Flight (MALDI-TOF) technology, the system delivers exceptional accuracy in bacterial and fungal profiling through high-resolution mass spectral analysis.

This powerful solution enables laboratories to streamline diagnostic workflows, significantly reduce time-to-result, and ultimately improve patient outcomes.

Key Technical Specifications

- Mass range: 1–300 kDa
- Mass accuracy: < 30 ppm
- Detection sensitivity: 1 fmol/mL
- Mass resolution: ≥ 2000
- Operating temperature: 10–30 °C
- Relative humidity: $\leq 70\%$
- Power supply: 220 V, 50 Hz, 800 VA consumption
- Weight: 150 kg

Standout Features

- MALDI-TOF Technology – Industry-leading laser desorption and ionization technology ensuring superior sample ionization and highly accurate spectral results.
- High-Precision Microbial Identification – Provides reliable, species-level identification of bacteria and fungi with unmatched confidence and diagnostic accuracy.

Key Performance Advantages

- Lightning-Fast Analysis – Processes samples in under one minute, significantly accelerating laboratory workflows and reducing turnaround times.
- Cost-Effective Operation – Cost per analysis is under 2 UAH, delivering exceptional operational efficiency without compromising analytical quality.
- Automated Laser Tuning & Data Acquisition – Fully automated, hands-free operation ensures consistent results with minimal user intervention.

How It Works

Samples are mixed with a specialized matrix and applied to an ionization target. A laser pulse then ionizes both the matrix and the sample molecules. The resulting ions are accelerated in a vacuum and analyzed using a Time-of-Flight (TOF) detector.

The acquired mass spectra are automatically compared against an extensive reference database, enabling rapid and highly accurate identification of microorganisms. This process makes even complex diagnostics simple, fast, and highly reliable.

Transform Your Laboratory Performance

Enhance your laboratory's diagnostic capabilities with M-Discover 100. Contact us today to learn how this innovative MALDI-TOF system can redefine the efficiency, accuracy, and speed of your microbial analysis workflow.