

# Portable Spectrometer



## Summary of Content

Portable spectrometers are compact, field-ready instruments that allow on-site spectral analysis for a wide range of applications, from material identification to color measurement and environmental testing.

### Overview

Portable spectrometers are designed to bring laboratory-grade analysis to the field, eliminating the need to transport samples to a lab. They are lightweight, handheld, or benchtop devices capable of measuring light, color, or elemental composition depending on the technology used . Common types include X-ray fluorescence (XRF), Raman spectroscopy, Fourier transform infrared (FTIR), and visible/near-infrared (VIS-NIR) spectrometers .

### Key Features

- **Portability and Ease of Use:** Devices are compact, often battery-powered, and ruggedized for field conditions .
- **Spectral Range:** Depending on the model, portable spectrometers can cover UV, visible, NIR, SWIR, or X-ray ranges .
- **Accuracy and Sensitivity:** High-end models provide precise measurements comparable to benchtop instruments, though some trade-offs in resolution or detection limits may exist .
- **Data Handling:** Many devices allow wireless connectivity, data export, and integration with spectral libraries for rapid identification .

## Article Content

### SPECTROSCOUT

Small footprint with high analytical power. The new portable SPECTROSCOUT ED-XRF analyzers deliver

portable spectrometer | Belec

For maximum flexibility and precision, Belec offers a comprehensive range of accessories for the portable

Portable Spectrometer / Handheld Spectrometer

Portable spectrometers / handheld spectrometers allow researchers to analyze samples on the go. Perfect for applications like field

AURA® handheld NIR | Versatile & portable spectrometer

Get reliable, lab-quality results with a portable, complex spectrometer that can even be handled by non

Handheld Portable Spectrometers – Gamma Scientific

Handheld Portable Spectrometers The UPRtek line of precision portable spectrometers are reliable, lightweight and easy-to-use.

Miniature and Portable Spectrometers

Miniature and Portable Spectrometers Why? There are straightforward motivations for miniaturizing a spectrometer. If an instrument

NIRvascan™ Handheld NIR Spectrometer | Portable 900–2400nm

NIRvascan™ handheld NIR spectrometer (900–2400nm). Portable, affordable, with built-in light source. Analyze protein, sugar,

Portable Spectroscopy

Portable and handheld optical spectrometers 1 – 3 started to have a significant market presence with the destruction of the World

Amazon : Spectrometer Handheld

Explore a wide range of handheld spectrometers for light measurement and analysis. Find portable spectrum analyzers for research,

ILT960-NIR Portable Spectroradiometer

ILT960-NIR Portable IR Spectrometer for Measuring Infrared Light Sources - 900-1700 nm The ILT960-NIR is a portable mini

Portable and Handheld Spectroscopy

Researchers at Nanjing Forestry University have developed a color-changing fluorescent probe made from waste

Portable spectrometer

Portable spectrometers | Choosing the Right Spectrometer There are two main categories of spectrometry: radiation spectrometry

Buyer's Guide: Portable Spectrometers | American

Buyer's Guide: Portable Spectrometers by Laura French Portable and handheld spectrometers bring

Handheld Spectrometer for Light Measurement,340

Handheld Spectrometer for Light Measurement,340-1000nm Portable Spectrum

12 Best Portable Spectrometers (June 2026) Professional Reviews

Finding the right portable spectrometer used to mean spending thousands on benchtop lab equipment that never left

Smartphone Spectrometer | GoSpectro

GoSpectro: The Ultimate Smartphone Spectrometer The GoSpectro is a revolutionary device that turns any smartphone or tablet into

Handheld FTIR, Mobile Nondestructive Testing | Agilent

A handheld FTIR spectrometer for mobile non-destructive testing in the field and non-laboratory

Portable Handheld Spectrophotometers

Our portable spectrophotometers offer ultimate sample measurement precision. We offer spectrophotometer and colorimeters for all

Portable Spectrometer / Portable Spectrum Analyzer

Portable spectrometer acts as a stand-alone spectral engine, imaging and measuring, through a rapid and nondestructive process, a

Handheld Raman Spectrometers, Portable Raman | Agilent

What is Handheld Raman Spectroscopy? Handheld Raman spectrometers combine the long-established principles of Raman

GoSpectro handheld spectrometer

GoSpectro: Turn your smartphone into a visible spectrometer The GoSpectro is a device that turns any

Portable & Handheld Spectrophotometers | Learn More

X-Rite's high precision portable handheld spectrophotometers offer consistent and accurate color

Portable Spectrophotometer Handheld Color Reader

Discover the handheld color spectrophotometer for accurate color measurement and portable

Portable Handheld Spectrophotometers

Portable spectrophotometers/colorimeters from HunterLab allow you to measure on the go—including samples on plant production

Portable & Handheld Spectrophotometers | Learn More

A portable spectrophotometer is a compact instrument ideal for measuring color, verifying tolerances,

5 Best Portable Spectrometers Scientists Actually Use Daily

5 Best Portable Spectrometers Scientists Actually Use Daily Disclosure: When you buy something through links on

Compact & Portable FTIR Systems, Mobile FTIR | Agilent

Agilent compact and portable FTIR systems deliver the sensitivity and efficiency of a lab-based system, yet are fully portable. These

Portable Spectrometer / Handheld Spectrometer

Find, compare, and request a quote for portable spectrometers across leading suppliers at Labcompare; including access to product

Portable Spectroscopy and Spectrometry | Wiley Online Books

Portable Spectroscopy and Spectrometry: Volumes One and Two Volume One provides complete and up-to-date

Portable handheld spectrometers

Malvern Panalytical offers a range of portable spectrometers and a portable XRF analyzer alternative to a XRF handheld or XRF gun.

Portable and Wearable Spectrometers in Our Future

As spectrometers progress from bulky lab instruments to compact, portable, and even

Handheld Portable Spectrometers – Gamma Scientific

Handheld Portable Spectrometers Precision and Portability in a Compact Package These spectral light meters are designed for

## Portable Metal Analyzer

The SPECTROPORT portable arc spark spectrometer is ideal for many applications in the metal

## Portable Mass Spectrometers

BaySpec's portable and compact mass spectrometers bring the laboratory to the samples for answers in real-time. Designed for in

Buyer's Guide: Portable Spectrometers | Labcompare

Specifications like spectral range, resolution and limits of detection are common sense

## Contact Us

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

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