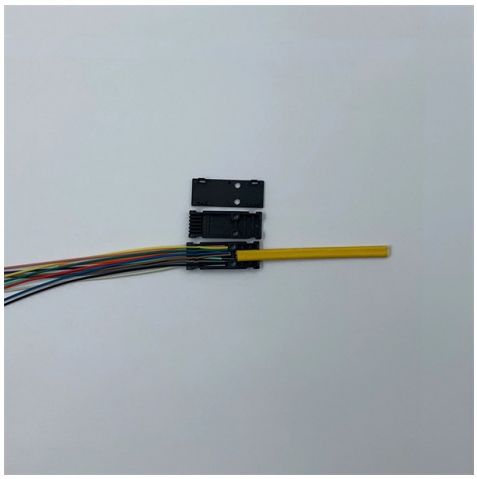
Compact Spectrometer



Overview

This innovative spectrometer is a compact, lightweight, powerful device that sets a new standard in high-quality spectroscopy.

Key Takeaways

Compact spectrometers are small, portable devices that measure optical spectra across UV, visible, and near-infrared ranges, suitable for laboratory, industrial, and OEM applications.Overview

Compact spectrometers are miniature spectroscopic instruments designed to provide real-time spectral measurements in a small footprint. They integrate an optical system, detector, and electronics into a portable form factor, often comparable in size to a hard drive, making them ideal for field measurements, laboratory setups, and OEM integration . These devices can cover a wide range of wavelengths, from 200 nm in the UV to 2100 nm in the NIR, depending on the model and sensor type .

Key Features
• Spectrometer Geometry: Many compact spectrometers use a crossed Czerny-Turner configuration for high-resolution spectral measurements .

• Resolution: Available resolutions range from

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Article Content

NEXOS Compact Spectrometer

This innovative spectrometer is a compact, lightweight, powerful device that sets a new standard in high-quality spectroscopy.

Compact Spectrometer Products | Pembroke Instruments

Compact spectrometers from Pembroke Instruments provide high-performance

Compact Spectrometer | CompactLine | Avantes | NEXOS

Featuring CMOS detectors along with advanced electronics and communications, these compact spectrometers deliver not just high

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Compact and high-resolution spectrometer via Brillouin integrated ...

This work presents a compact spectrometer using acoustic Brillouin scattering on a hybrid chip, achieving a 0.56 nm

Compact multi-foci metalens spectrometer | Light: Science

We propose and experimentally demonstrate a compact high-resolution spectrometer with a multi-foci metalens.

Compact spectrometer based on a disordered photonic chip

A miniature spectrometer has been developed that employs light scattering in a photonic chip with a random structure.

Miniature Spectrometer

The MSP1000 miniature spectrometer (MiniSpec) is a compact, fibre-coupled spectrometer suitable for common laboratory tasks. By

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Compact Spectrometers for UV-VIS, NIR, and High-Resolution Measurements Pembroke Instruments helps engineers select the

Compact Spectroscopy Instrumentation: On-Board

Compact, array-based spectrometers continue to develop in response to advances in

Selection guide / Mini-spectrometers

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FTIR engines (FT-NIR spectrometer) Compact FT-NIR spectroscopic modules that can be incorporated into portable measuring

USB Spectrometer | Low Price Optical Spectroscopy

A compact and reliable USB spectrometer which brings affordable UV-Vis-NIR (320 nm to 1050 nm)

Ultra-small spectrometer yields the power of a 1,000 times bigger ...

Ultra-small spectrometer yields the power of a 1,000 times bigger device UC Santa Cruz researchers are designing

Compact Spectrometer: A Dedicated Compact Wide Band Spectrometer

The calibration activities of the COmpact SPectrometer—COSP for the FERMI Free-Electron Laser (FEL) facility at

Compact Spectrometers: Technologies, Market Trends and Needs

At the moment, it is still research and industrial optical characterization that possess the biggest shares within the compact

Mini-spectrometer micro series C12666MA | Hamamatsu Photonics

The C12666MA is an ultra-compact (Finger-tip size) spectrometer head developed based on our MEMS and image sensor

Chrisp Compact VNIR/SWIR Imaging Spectrometer

A compact imaging spectrometer is implemented as modules that, when coupled with a freeform

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Thorlabs · CCT12 Compact Spectrometer, 500

Our customer service teams will reach out if these items are revised. We welcome your thoughts!

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