# Bc series spectrometer



## Overview

BCSP Series Reflective Spectrometer-Products-Beichuang BCSP Series Reflective Spectrometer The company focuses on optical testing instruments, optical lens.

## Key Takeaways

The BC series devices are high-precision color mark sensors that detect surface colors using RGB light and 12-bit resolution processing, offering spectrometer-like color detection for industrial applications.

## Overview

### The B

C series, produced by Autonics, functions as a color mark sensor capable of detecting and matching colors on surfaces with high accuracy. While not a traditional laboratory spectrometer, it operates on similar principles by analyzing reflected RGB light to determine color composition and intensity. These sensors are widely used in packaging, labeling, and quality control where precise color detection is critical.

Key FeaturesRGB LED Detection: The sensors emit red, green, and blue light and calculate the reflected light ratios to match the reference color. High Resolution: 12-bit processing allows for 99. 2% average color matching accuracy, enabling detection of subtle color differences.

Detection Modes: Two modes are available: C mode: Color-only detectionC+I mode: Color plus intensity detection for more complex applications. Adjustable Sensitivity: Fine, normal, and rough sensitivity settings allow adaptation to different surface types and environmental conditions. Spot Size: The sensor has a small detection spot (1.

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24 x 6. 7 mm), suitable for tiny targets or precise color marks. Environmental Protection: IP67-rated housing ensures stable operation in wet, dusty, or industrial environments.

### Operation

Color Teaching: Users set a reference color using the teaching function. The sensor stores this color and compares subsequent readings to it.

### Real-

Time Detection: The sensor continuously measures reflected RGB light and determines whether the target color matches the reference. Indicators: LED indicators display operation status, stability, and teaching confirmation, simplifying monitoring and troubleshooting.

### Applications

Industrial Automation: Detecting color marks on packaging lines. Quality Control: Ensuring consistent product color in manufacturing. Label Verification: Checking printed labels for correct color coding.

Robotics and Vision Systems: Integrating with automated systems for precise color-based sorting or inspection.

### Summary

### The B

C series sensors provide spectrometer-like color detection in a compact, industrial-ready form. They combine high-resolution RGB analysis, adjustable sensitivity, and robust environmental protection, making them suitable for applications where accurate color recognition is essential. While they are not laboratory spectrometers, their functionality closely mimics spectrometric color analysis for practical industrial use.

## Article Content

BCSP Series Reflective Spectrometer-Products-Beichuang

BCSP Series Reflective Spectrometer The company focuses on optical testing instruments, optical lenses, optical lenses, automation equipment and technical services.

BCSP Series Reflective Spectrometer-Beichuang Optoelectronic

BCSP series reflective spectrum analyzer is a professional testing instrument developed by Beichuang Optoelectronics for surface reflectivity detection of spherical, aspheric and planar optical elements.

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XploRA™ PLUS

MicroRaman Spectrometer - Confocal Raman Microscope. The XploRA™ PLUS is a reliable and high-performance microRaman system designed for scientists, researchers and engineers exp

AUTONICS BC SERIES MANUAL Pdf Download

Using off-axis optical system for minimized optical loss, and cylindrical lens, BC Series compares setting color and sensing color with full-color

Autonics BC Series Photoelectric Color Sensor Manual | Manualzz

The BC series uses a teaching function for convenient color reference setting, has a compact spot size for detecting small targets, and features IP67 protection for harsh environments.

BC Series

The BC series generates and emits red, green, and blue light emitting diodes for high level of color matching accuracy. With 12-bit resolution processing, the

BC SERIES

BC SERIES I N S T R U C T I O N M A N U A L Thank you for choosing our Autonics product. Please read the following safety considerations before use.

Autonics BC Series Manual | Manualzz

Using off-axis optical system for minimized optical loss, and cylindrical lens, BC Series compares setting color and sensing color with full-color determination.

INSTRUCTION MANUAL BC

BC Series INSTRUCTION MANUAL TCD210062AD our Autonics product. Read and understand the instruction manual using the product. and ma For For your safety, read and follow the considerations

NMR spectrometer ECZ Luminous™ JNM-ECZL series

The ECZ Luminous™ (JNM-ECZL series) is an FT NMR spectrometer equipped with state-of-the-art digital and high frequency technology. The highly integrated

AAS – GBC

GBC is a world leader in the development and manufacture of atomic absorption spectrometers, with over thirty years of experience in supplying the needs of the

BC General Purpose Transistors

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BC General Purpose Transistors Technical Data and Comparison Tables. BC Transistor Datasheets and Ratings Table.

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spectrometer software application app download spectrometry open source Andrej Mosat CEO My research interests include applied spectroscopy, photonics, mathematical modeling and

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Untargeted ultra-high-resolution mass spectrometry metabolomic

In this study, ultra-high-performance liquid chromatography coupled with ultra-high-resolution mass spectrometry was employed for non-targeted metabolomic profiling of 200 human

Thorlabs/Light_Analysis_Examples

Software examples for Thorlabs products: Spectrometers CCSxxx | Polarimeter PAX1000 | Power Meter PMxxx | Optical Spectrum Analyzers OSA | Shack-Hartmann Wavefront Sensors WFSxx | CMOS

(PDF) Characterisation of a BC501A compact neutron spectrometer

A compact neutron spectrometer based on the liquid scintillator BC501A has been installed on the ASDEX Upgrade tokamak.

BC 1054 Black Carbon Analyzer

The BC 1054 Multi-spectrum Black Carbon Analyzer continuously measures the transmittance of light across filter media onto which particulate matter is

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