



## S-7200 X-ray Source Online X-Ray Inspection Machine HAMAMATSU Japan Closed Microfocus with 220V AC Power Supply and AI Defect Judgment Customizable Algorithms

Our Product Introduction

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### Basic Information

- Brand Name: WISDOMSHOW
- Certification: CE
- Model Number: S-7200
- Minimum Order Quantity: Radiation Safety License (Yue Huan Fu Zheng [B0774]); Exemption Filing For Radioisotopes And Radiation Devices
- Packaging Details: Standard Export Wooden Case Packaging
- Payment Terms: T/T,Negotiable
- Supply Ability: Approx. 50-100 Units/month



### Product Specification

- Application: Electronics Manufacturing And Semiconductor Industries: Non-destructive Inspection Of PCB Assembly (BGA, QFP), LED Chips, Batteries, FPC, Electronic Components And Connectors
- Dimensions: 1300 Mm (L) × 1320 Mm (W) × 1800 Mm (H)
- Detectionobjects: Electronic Components, Semiconductors (BGA, IC, LED, FPC, Connectors, Etc.), Batteries (18650 Battery, Pouch Cell Battery, Etc.) Internal Defect Inspection (voids, Cracks, Broken Wires, Etc.)
- Power Supply: 220V AC, 50/60 Hz
- Power Consumption: Max Power 2.0 KW
- Software: Self-developed Software With CNC Automated Inspection Programming, Navigation & Positioning, Automatic Void

**Product Description:**

The Online X-Ray Inspection Machine is a cutting-edge 3D X-ray inspection system designed to meet the rigorous demands of modern electronics manufacturing and semiconductor industries. With its advanced features and user-friendly interface, this online SMT X-ray machine provides precise, non-destructive inspection of various electronic components, ensuring quality and reliability throughout the production process.

Measuring 1300 mm in length, 1320 mm in width, and 1800 mm in height, the machine's compact dimensions allow it to fit seamlessly into production lines without compromising on performance or accessibility. Despite its relatively small footprint, the system boasts a robust construction and high-end components that deliver exceptional accuracy and efficiency during inspection cycles.

The user interface is designed for intuitive operation and enhanced control. It includes a 24-inch HD monitor that provides clear, high-resolution images essential for detailed analysis. Operators can navigate and control the system efficiently using a combination of joystick, mouse, and keyboard, enabling smooth and precise manipulation of inspection parameters. This integrated control system facilitates quick adjustments and real-time monitoring, making it suitable for complex inspection tasks.

At the heart of the inspection machine lies self-developed software equipped with advanced CNC automated inspection programming. This software supports navigation and positioning capabilities that optimize the inspection process by accurately targeting areas of interest on the components. It automatically calculates void ratios and performs dimension measurements, including distance, angle, and circle parameters. Furthermore, the software incorporates AI-based defect judgment with customizable algorithms, allowing the system to intelligently identify and classify defects, thereby reducing false positives and enhancing inspection reliability.

The data output functionality is comprehensive, enabling image saving and detailed measurement data storage. This includes critical metrics such as void ratio and dimensional data, which are essential for quality control and traceability. The ability to archive inspection results allows manufacturers to maintain thorough records and perform trend analysis, ensuring continuous process improvement and compliance with industry standards.

This PCB X-ray machine is especially suited for non-destructive inspection within electronics manufacturing and semiconductor sectors. It excels in examining PCB assemblies, including Ball Grid Arrays (BGA) and Quad Flat Packages (QFP), as well as LED chips, batteries, flexible printed circuits (FPC), electronic components, and connectors. The system's capability to perform 3D X-ray inspections enables comprehensive internal views of complex assemblies, detecting hidden defects such as voids, misalignments, cracks, and solder joint issues that are not visible through traditional inspection methods.

In summary, the Online X-Ray Inspection Machine is a powerful solution for manufacturers who require high precision, reliability, and efficiency in their inspection processes. Its combination of compact design, advanced user interface, proprietary software with AI-driven defect analysis, and extensive data management makes it an indispensable tool in the production line. Whether used as an online SMT X-ray machine or a standalone 3D X-ray inspection system, it significantly enhances product quality assurance and helps reduce costly defects, ultimately contributing to higher customer satisfaction and improved yield rates.

**Features:**

- Product Name: Online X-Ray Inspection Machine
- User Interface: 24" HD Monitor with Joystick, Mouse, and Keyboard Combined Control
- Tube Type: HAMAMATSU (Japan) Closed Microfocus X-ray Source
- Resolution: X-ray Tube Focal Spot Size of 5 µm; Geometric Magnification up to 150X
- Dimensions: 1300 mm (L) \* 1320 mm (W) \* 1800 mm (H)
- Data Output: Image Saving and Measurement Data Storage Function including void ratio, dimensions, etc.
- Advanced X-ray NDT equipment designed for precise industrial inspection
- Reliable Industrial X-ray machine suitable for various quality control applications
- High-performance X-ray inspection equipment ensuring detailed non-destructive testing results

**Technical Parameters:**

Operating Temperature	0°C To 40°C
Inspection Type	X-ray Transmission Inspection (2D), Detector Tilttable 45° Left And Right (90° Total Viewing Angle)
Weight	Approx. 1250 Kg
Data Output	Image Saving And Measurement Data (void Ratio, Dimensions, Etc.) Storage Function
User Interface	24" HD Monitor, Joystick + Mouse + Keyboard Combined Control
Resolution	X-ray Tube Focal Spot Size: 5 µm; Geometric Magnification: 150X
Power Consumption	Max Power 2.0 KW

Software	Self-developed Software With CNC Automated Inspection Programming, Navigation & Positioning, Automatic Void Ratio Calculation, Dimension Measurement (distance/angle/circle), And AI Defect Judgment (customizable Algorithms)
Detection Objects	Electronic Components, Semiconductors (BGA, IC, LED, FPC, Connectors, Etc.), Batteries (18650 Battery, Pouch Cell Battery, Etc.) Internal Defect Inspection (voids, Cracks, Broken Wires, Etc.)
Power Supply	220V AC, 50/60 Hz

## Applications:

The WISDOMSHOW S-7200 Online X-Ray Inspection Machine is an advanced X-ray solder joint inspection system designed to meet the rigorous demands of modern electronics manufacturing and semiconductor industries. This cutting-edge Microfocus X-ray inspection system enables non-destructive inspection of critical components such as PCB assemblies (including BGA and QFP), LED chips, batteries, FPC, electronic components, and connectors. Its precise imaging capabilities allow manufacturers to detect hidden defects and ensure product quality without damaging the items under inspection.

Ideal for use in production lines where real-time quality control is essential, the S-7200 offers an efficient X-ray inspection solution that integrates smoothly into automated manufacturing environments. Its operation within a temperature range of 0°C to 40°C ensures consistent performance in various factory conditions. With a maximum power consumption of just 2.0 KW and a power supply of 220V AC at 50/60 Hz, it balances energy efficiency with high performance.

The machine's data output functionality allows the saving of detailed images alongside measurement data such as void ratio and dimensional analysis, providing comprehensive inspection reports that support quality assurance processes. This capability is crucial for industries requiring stringent compliance with safety and reliability standards.

Manufactured in China and certified with CE and Radiation Safety Licenses (Yue Huan Fu Zheng [B0774]), the WISDOMSHOW S-7200 complies with international safety regulations, ensuring safe operation and handling. Its standard export wooden case packaging guarantees secure delivery, and with a supply ability of approximately 50-100 units per month, it meets both small and large-scale production demands. Payment terms are flexible, including T/T and negotiable options, accommodating diverse customer needs.

Overall, the WISDOMSHOW S-7200 Online X-Ray Inspection Machine is an indispensable tool for electronics manufacturers seeking an effective, reliable, and certified X-ray solder joint inspection system. Its advanced microfocus technology and robust inspection capabilities make it the preferred X-ray inspection solution for enhancing product quality, reducing defects, and optimizing manufacturing processes across a variety of high-tech applications.



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