



Offline X-Ray Counter Machine with 99.99% Accuracy, Steel-Lead-Steel Housing, and AI Deep Learning Algorithm for Precise X-Ray Reel Counting

Our Product Introduction

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Basic Information

- Brand Name: Wisdomshow
- Certification: ce
- Model Number: DS3000



Product Specification

- Tube Voltage: 80 KV
- Tray Diameter: Compatible With 7" To 17" Reels (standard 15", Upgradable To 17"), Minimum 7", Includes Smaller Bulk Materials
- Control Type: Industrial PC (IPC) Control, Windows 10 64-bit Enterprise Edition, Operated Via Mouse/keyboard
- Data Storage: Automatically Saves Counting Results, Images, And SPC Statistics; Supports Report Export; Daily Counting Records Automatically Generated With Traceability
- Component Size Support: Supports 01005 And Larger SMD Components (resistors, Capacitors, Inductors, Crystal Oscillators, LEDs, Diodes, Transistors, Multi-pin ICs, Etc.)
- Printing Capability: Supports Real-time Printing Of Material



More Images



Product Description:

The Offline X-Ray Counter Machine is an advanced and reliable solution designed to meet the demanding needs of component counting in electronics manufacturing and inventory management. This state-of-the-art device functions as an efficient X-ray component inventory system, providing unparalleled accuracy, safety, and speed. It is specifically engineered to handle X-ray SMD reel counter and X-ray tape reel counter tasks with precision and ease, making it an indispensable tool for quality control and production line optimization.

One of the most critical features of the Offline X-Ray Counter Machine is its exceptional radiation safety measures. The machine is constructed with a robust steel-lead-steel housing that ensures minimal radiation leakage, maintaining a radiation leakage dose of less than 1 µSv/h. This outstanding safety standard is further reinforced by a leaded glass front door that provides additional protection while allowing operators to observe the counting process safely. Furthermore, the machine incorporates a safety interlock system that automatically cuts power when the door is opened, preventing any accidental exposure to X-rays. The device has also obtained exemption filing, demonstrating compliance with relevant radiation safety regulations and giving users peace of mind.

Accuracy is a paramount concern in component counting, and the Offline X-Ray Counter Machine excels in this aspect by integrating cutting-edge AI deep learning algorithms. These algorithms continuously improve the recognition accuracy as the machine is used more frequently, adapting to different component types and packaging variations. This technology ensures that the counting accuracy consistently meets or exceeds 99.99%, drastically reducing errors and minimizing the need for manual verification. As a result, users benefit from reliable inventory data and enhanced production efficiency.

The machine's counting speed is equally impressive. It can process a single tray or up to four 7-inch reels in just 6 to 8 seconds, significantly accelerating the component counting process compared to traditional manual methods. This fast throughput enables manufacturers and inventory managers to maintain real-time inventory tracking and streamline their workflows, ultimately reducing downtime and improving overall productivity.

Control and operation of the Offline X-Ray Counter Machine are designed to be user-friendly and efficient. The device is powered by an industrial PC (IPC) running Windows 10 64-bit Enterprise Edition, ensuring a stable and secure operating environment. Users interact with the system via a standard mouse and keyboard interface, allowing for intuitive navigation and control without the need for specialized training. This setup facilitates easy integration into existing production lines and inventory systems, making it a versatile addition to any electronics manufacturing facility.

In terms of technical specifications, the machine operates at a tube voltage of 80 KV, which is optimized to provide clear and precise X-ray images for accurate component detection and counting. This voltage level balances penetration power and image clarity, ensuring components of various sizes and materials are correctly identified without compromising safety or speed.

Overall, the Offline X-Ray Counter Machine stands out as a highly efficient, safe, and accurate solution for modern electronics manufacturing environments. Whether used as an X-ray component inventory system, X-ray SMD reel counter, or X-ray tape reel counter, it delivers reliable results that help businesses maintain tight control over component stocks, reduce waste, and enhance operational efficiency. Its combination of advanced AI technology, rigorous safety features, rapid counting capabilities, and user-friendly control system makes it an essential tool for anyone looking to optimize their component counting processes in a safe and effective manner.

Features:

Product Name: Offline X-Ray Counter Machine

User Interface: 24" HDMI LCD Monitor with Mouse and Keyboard Operation

Component Size Support: Supports 01005 and Larger SMD Components including resistors, capacitors, inductors, crystal oscillators, LEDs, diodes, transistors, multi-pin ICs, and more

Counting Speed: Single tray or four 7" reels counted in 6-8 seconds

Radiation Safety: Radiation leakage dose less than 1 µSv/h, steel-lead-steel housing, leaded glass front door, safety interlock with automatic power cut when door is opened, exemption filing obtained

Control Type: Industrial PC (IPC) control running Windows 10 64-bit Enterprise Edition, operated via mouse and keyboard

High-speed X-ray reel counter ensuring efficient and accurate counting

Designed as a reliable X-ray part counting machine for various electronic components

Advanced X-ray electronic parts counter providing precision and safety in component counting

Technical Parameters:

Control Type	Industrial PC (IPC) Control, Windows 10 64-bit Enterprise Edition, Operated Via Mouse/keyboard
Component Size Support	Supports 01005 And Larger SMD Components (resistors, Capacitors, Inductors, Crystal Oscillators, LEDs, Diodes, Transistors, Multi-pin ICs, Etc.)
Smallest Compatible Component	01005
Tray Diameter	Compatible With 7" To 17" Reels (standard 15", Upgradable To 17"), Minimum 7", Includes Smaller Bulk Materials
Power	Power Supply: 220 V / 50 Hz; Total Power: 800 W
Tube Voltage	80 KV
Material Detection	Taped SMD Components (7-17" Reels), JEDEC Trays, Loose/bulk Components; Not Applicable For Overlapping Or Non-flat-layered Materials (e.g., Metal Springs)

Accuracy Improvement	AI Deep Learning Algorithm, Automatically Improves Recognition Accuracy With More Use; Current Counting Accuracy $\geq 99.99\%$
Counting Speed	Single Tray Or Four 7" Reels: 6-8 Seconds
Printing Capability	Supports Real-time Printing Of Material Codes And Counting Result Labels (including 1D/2D Barcodes)

Applications:

The Wisdomshow DS3000 is a state-of-the-art high-speed X-ray reel counter designed specifically for the SMT industry. Originating from China, this advanced machine utilizes an 80 KV tube voltage and incorporates an AI deep learning algorithm that automatically improves recognition accuracy with continued use, achieving a current counting accuracy of $\geq 99.99\%$. Its ability to support the smallest compatible component size of 01005 and larger SMD components such as resistors, capacitors, inductors, crystal oscillators, LEDs, diodes, transistors, and multi-pin ICs makes it an indispensable tool in modern electronics manufacturing.

This high-speed X-ray reel counter is ideal for various product application occasions and scenarios. In fast-paced SMT assembly lines, where precision and speed are paramount, the Wisdomshow DS3000 ensures that every reel of components is accurately counted and verified before use. This prevents costly assembly errors caused by missing or incorrect components. The machine's support for X-ray tape reel counting allows it to handle a wide variety of reel sizes and types, making it suitable for diverse production environments. In quality control departments, the Wisdomshow DS3000 serves as a reliable SMT component X-ray counter to verify incoming materials from suppliers. Its deep learning-enabled recognition system adapts to different component shapes and packaging styles, ensuring consistent accuracy in counting and reducing the need for manual inspection. Furthermore, the real-time printing capability allows operators to generate material codes and counting result labels, including 1D and 2D barcodes, which facilitates traceability and inventory management.

For electronics manufacturers dealing with high-mix, low-volume production runs, the DS3000's flexibility and high accuracy significantly streamline inventory management and assembly preparation. It is also suitable for research and development labs where precise component tracking is critical during prototyping and testing phases. Overall, the Wisdomshow DS3000 X-ray tape reel counter is a comprehensive solution that enhances efficiency, accuracy, and reliability in various SMT production and quality assurance scenarios.



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