



DS3000 Offline X-Ray Counter Machine with 80 KV Tube Voltage for 01005 Smallest Components and Radiation Leakage Dose < 1 μ Sv/h

Our Product Introduction

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Basic Information

- Brand Name: Wisdomshow
- Model Number: DS3000



Product Specification

- User Interface: 24" HDMI LCD Monitor + Mouse/keyboard Operation
- Component Size: Smallest Compatible Component: 01005
- Component Size Support: Supports 01005 And Larger SMD Components (resistors, Capacitors, Inductors, Crystal Oscillators, LEDs, Diodes, Transistors, Multi-pin ICs, Etc.)
- Power: Power Supply: 220 V / 50 Hz; Total Power: 800 W
- Counting Speed: Single Tray Or Four 7" Reels: 6-8 Seconds
- Data Storage: Automatically Saves Counting Results, Images, And SPC Statistics; Supports Report Export; Daily Counting Records Automatically Generated With Traceability
- Radiation Safety: Radiation Leakage Dose < 1 μ Sv/h; Steel-



More Images



Product Description:

The Offline X-Ray Counter Machine is a cutting-edge solution designed to revolutionize the way electronic components are counted and verified. This advanced device is specifically engineered to provide highly accurate, reliable, and efficient counting of components on reels and in bulk, making it an indispensable tool for manufacturing, quality control, and inventory management in the electronics industry. At the core of this X-ray part counting machine is a powerful X-ray tube operating at a voltage of 80 KV. This voltage level ensures optimal penetration and imaging quality, enabling the machine to accurately detect and count components even through opaque packaging materials. The system is designed with a strong emphasis on radiation safety to protect operators and the environment. It features a steel-lead-steel housing that effectively contains radiation, a leaded glass front door that allows safe observation, and a safety interlock mechanism that automatically cuts power to the X-ray tube when the door is opened. The radiation leakage dose is maintained at less than 1 µSv/h, ensuring compliance with stringent safety standards. Additionally, the machine has obtained exemption filing, further validating its safety credentials.

One of the standout features of this automatic X-ray component counter is its versatility in handling different reel sizes. It is compatible with tray diameters ranging from 7 inches to 17 inches, with a standard tray size of 15 inches that can be upgraded to accommodate larger reels up to 17 inches. This flexibility allows the machine to count components on a wide variety of reel sizes, ensuring it can meet the diverse needs of production lines. Moreover, the system is capable of accurately counting smaller bulk materials, expanding its usability beyond just reel-based components.

Accuracy is paramount in component counting, and this X-ray parts counter for reels excels in this area through the integration of an AI deep learning algorithm. This intelligent software continuously learns and adapts, automatically improving recognition accuracy with increased usage. As a result, the current counting accuracy of the machine is an impressive ≥ 99.99%, significantly reducing errors and the risk of costly production mistakes. This AI-driven improvement ensures that the machine remains highly reliable and effective over time, adapting to new component types and packaging variations.

The machine is also capable of handling extremely small components, with a smallest compatible component size of 01005. This capability highlights the precision and sensitivity of the X-ray imaging and counting system, making it suitable for modern electronics manufacturing where miniaturization is a key trend.

In summary, the Offline X-Ray Counter Machine is a state-of-the-art tool that combines high-voltage X-ray technology, rigorous radiation safety measures, versatile reel compatibility, AI-enhanced accuracy, and the ability to count very small components. Whether you need an X-ray parts counter for reels or an automatic X-ray component counter for bulk materials, this machine offers unmatched performance and reliability. It is an essential investment for companies looking to streamline their component counting processes, improve inventory accuracy, and enhance overall production efficiency.

Features:

- Advanced Offline X-Ray Counter Machine designed for precise component inventory management
- Supports real-time printing of material codes and counting result labels, including 1D/2D barcodes
- User-friendly interface featuring a 24" HDMI LCD monitor with mouse and keyboard operation
- Capable of detecting taped SMD components on 7-17" reels, JEDEC trays, and loose/bulk components
- Not suitable for overlapping or non-flat-layered materials such as metal springs
- Incorporates AI deep learning algorithms to automatically improve recognition accuracy over time
- Achieves a current counting accuracy of ≥ 99.99%, ensuring reliable inventory data
- Automatically saves counting results, images, and SPC statistics for comprehensive data tracking
- Supports report export and generates daily counting records with full traceability
- Ideal as an X-ray component inventory system and intelligent X-ray counting system for efficient operations
- Functions effectively as an X-ray SMD parts counter to streamline component counting processes

Technical Parameters:

Counting Speed	Single Tray Or Four 7" Reels: 6-8 Seconds
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
Component Size	Smallest Compatible Component: 01005
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)
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
Radiation Safety	Radiation Leakage Dose < 1 µSv/h; Steel-lead-steel Housing; Leaded Glass Front Door; Safety Interlock (automatic Power Cut When Door Opened); Exemption Filing Obtained

Accuracy Improvement	AI Deep Learning Algorithm, Automatically Improves Recognition Accuracy With More Use; Current Counting Accuracy \geq 99.99%
User Interface	24" HDMI LCD Monitor + Mouse/keyboard Operation

Applications:

The Wisdomshow DS3000 Offline X-Ray Counter Machine is an advanced solution designed for accurate and efficient counting of electronic components in various industrial and manufacturing settings. As a cutting-edge X-ray electronic component counter, it is ideal for companies that require precise inventory management and quality control of small components used in electronics production. This X-ray parts counter for reels is perfectly suited for use in electronics manufacturing plants, assembly lines, and component distribution centers where components are typically stored and transported on reels ranging from 7" to 17" in diameter. The machine's compatibility with standard 15" reels and its upgradable capability up to 17" reels allows it to handle a wide variety of taped SMD components. Additionally, it supports counting from JEDEC trays and loose or bulk components, making it versatile enough for different packaging styles commonly encountered in electronics production.

One of the standout features of the Wisdomshow DS3000 is its emphasis on safety. The X-ray component counter is equipped with a steel-lead-steel housing and leaded glass front door to ensure minimal radiation leakage (less than 1 μ Sv/h), safeguarding operators from exposure. The safety interlock automatically cuts power when the door is opened, enhancing operational safety. This machine's radiation exemption filing confirms its compliance with strict safety standards, making it suitable for use in factories and laboratories without additional licensing concerns.

The DS3000 model leverages an AI deep learning algorithm that continuously improves recognition accuracy as the device is used, achieving a counting accuracy of 99.99% or higher. This makes it indispensable for environments where precise component counts are critical, such as in the production of high-reliability electronics or during quality assurance processes. It is capable of identifying and counting the smallest components, down to 01005 size, ensuring even the tiniest parts are accounted for.

However, this offline X-ray counter machine is not suitable for overlapping or non-flat-layered materials such as metal springs, which require different inspection methods. Nonetheless, for flat-layered taped components, JEDEC trays, and bulk materials, it offers unmatched accuracy and efficiency.

In summary, the Wisdomshow DS3000 X-ray electronic component counter is best applied in electronic manufacturing, component distribution, and quality control scenarios where precision, safety, and adaptability are paramount. Its ability to handle multiple component packaging formats and reel sizes, coupled with advanced AI-driven accuracy and stringent safety features, makes it an essential tool for modern electronics production environments.



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