

PE-Multi Z929D

Smart Walk-Through Metal Detector



Screen Interface: Alarm Display

Prohibited Items In detection mode, carrying restricted knives or similar items triggers an alarm and displays a red “No Entry” symbol; carrying other metals does not trigger an alarm



General Metal Items In metal detection mode, the system triggers an alarm for all metal items and displays a red “No Entry” symbol



In electronic device detection mode, carrying electronic devices such as cell phones triggers an alarm and displays a red “No Entry” symbol; carrying other metals does not trigger an alarm



Electronic Devices + Prohibited Items In the Detection Mode, the system triggers an alarm for items such as cell phones and restricted knives, displaying a red “No Entry” symbol; other metal items do not trigger an alarm



Product Overview

The Zhonghaoyue PE-Multi Z929D Smart Security Gate utilizes eddy current effects and electromagnetic induction principles to obtain material information about the metal items being inspected. It then employs three-dimensional field strength transformation technology to capture the three-dimensional shape information of these items. By integrating weak signal detection technology, precision filtering technology, and digital signal processing technology, the system compares the data against a product database to determine the material and shape of the inspected items, thereby separating electronic products that require inspection from prohibited items, and everyday items. It features powerful functionality and high integration, offering diverse data query and statistical analysis capabilities, as well as highly linked security inspection information and various query results. The system utilizes a 29-inch high-definition smart display with a downward-tilted design that adheres to ergonomic principles, ensuring simple operation and rich display content. The screen's mannequin graphic displays information such as the alarm location, alarm category, real-time video footage, facial images, comparison results, and historical data; It supports process snapshot capture, enabling historical record review; it also features enhanced resistance to interference from wind and vibrations, making it suitable for high-traffic environments such as exam halls, bid evaluation rooms, public security and government facilities, classified areas, transportation hubs, corporate campuses, office buildings, hospitals, cultural and museum sites, and large-scale security events.

Features

Digital Pulse Technology

Equipped with a digital signal processing and filtering system, it offers excellent resistance to electromagnetic interference; even when multiple gates are positioned side-by-side, their detection performance remains unaffected

Magnetic Field Safety

Complies with international safety standards and utilizes low-magnetic-field technology, posing no harm to individuals with pacemakers or pregnant women, while also having no adverse effects on floppy disks, film rolls, videotapes, and similar products

Detection Modes

Electronic Device Detection Mode, All-Metal Detection Mode, Prohibited Items Detection Mode, Electronic Device Detection Mode Prohibited Items Detection Mode

Electronic Device Detection Mode

Effectively filters out interference from everyday personal items such as coins, eyeglasses, watches, belt buckles, magnets, keys, cigarettes, and lighters, while accurately detecting whether a person is carrying a cell phone in any state, as well as confidential electronic devices such as laptops, iPads, digital cameras, and camcorders, and displays the results in a categorized format with text and images

All-Metal Detection Mode

When a person carrying more than the permitted amount of metal passes through the security gate, the system will trigger an audible and visual alarm, enabling effective verification of prohibited items

Prohibited Items Detection Mode

Effectively filters out interference from everyday items such as coins, eyeglasses, watches, belt buckles, magnets, keys, cigarettes, lighters, stainless steel water bottles, umbrellas, and other everyday personal items, while accurately identifying whether prohibited items (such as machetes, axes, firearms, aluminum beverage cans, tin cans, aluminum tubes, metal vest bombs, and metal belt bombs) are present, and displays the results in a categorized format with text and images

Facial Capture

Equipped with a 4-megapixel starlight-level IPC to enable round-the-clock facial capture, alarm notification integration, and image recording and retrieval

Facial Comparison

Supports comparison against multiple pre-configured facial databases, with individually configurable similarity thresholds; triggers corresponding actions when similarity reaches or falls below the threshold

ID Verification (Optional)

Supports ID card verification, comparing the ID card image with the live facial image to trigger corresponding actions

Smart Display

Features an industrial-grade A+ panel and a high-definition 29-inch smart display. The screen is designed with a downward tilt to comply with ergonomic principles, ensuring simple operation

The display offers rich content, including an on-screen avatar that indicates the alarm location and category.

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High ambition,sight further Zhonghaoyue Technology (Shenzhen) Co., Ltd.

It also supports directional guidance for the alarm location, alarm time, access instructions, number of people passing through, number of people triggering alarms, system time, real-time video feeds, facial images, comparison results, and historical data.

High-Definition Information Display

Features an industrial-grade A+ panel and an embedded information display screen at the entrance, supporting flexible layout and zoned display of various content types, as well as instant publication of images, text, rich text, and video information

Interlocking Control

Capable of outputting ≥ 2 control signals to devices requiring mutual control, such as X-ray security scanners, three-roller turnstiles, access control systems, and time-attendance machines

Data Statistics

Dual-sided infrared sensors accurately detect the number of people passing through and trigger alarms, and support bidirectional counting

Data Query and Storage

Capable of storing data such as the number of people passing through, the number of alarms triggered, facial information, and alarm details; supports queries on various metrics including total traffic, categorized alarm counts, facial attributes, and facial images; stores $\geq 100,000$ data entries

Quick Sensitivity Adjustment

Supports adjustment of detection sensitivity, with each detection zone adjustable from 0 to 255 levels

Alarm Sounds

Supports 10 different alarm tones. When multiple security gates are in use simultaneously, different alarm tones can be set to distinguish between alarms from different gates. Each tone is adjustable in 100 levels and supports a mute mode

360-Degree Alarm

Suspicious objects can be accurately displayed on any part of the body, with support for a 360-degree high-brightness red LED flashing alarm

Passage Indication

The product features a green LED passage indicator. The green LED remains lit when no one is passing through; it turns off when someone is passing through. When the security gate triggers an alarm, text prompts such as “Do Not Pass” appear, accompanied by a flashing red LED alert

Alarm Localization

High-brightness LED lights are mounted on all four sides of the gate pillars. When the security gate triggers an alarm, the location lights clearly indicate the area where the prohibited item is located, while the screen displays a silhouette of a person and provides guidance on the alarm location

Multi-Channel Communication

Supports multiple communication channels, allowing simultaneous use of multiple devices. It operates stably without interference or impact on performance.

Size Indication of Detected Objects

Displays the amount of metal detected when an alarm is triggered

Multi-Scenario Settings

Supports quick setup for 24 application scenarios; automatically matches the appropriate security level and sensitivity for each scenario, while also supporting customization for special scenarios.

Network Connectivity

Enables network connectivity and interoperability; integrates with a platform for the upload and management of passenger flow data, alarm data, and information on screened individuals; supports both local and web-based debugging

Scheduling Function

Supports energy-saving mode: set a sleep duration, and the device automatically enters sleep mode when no one is passing through; it automatically wakes up when someone passes through, promoting energy efficiency and environmental protection

Password Protection

Program settings, sensitivity, and other parameters can only be modified after entering the correct password; users can set their own passwords, and a password recovery feature is supported

One-Click Factory Reset

Supports one-click restoration to factory defaults to return the device to its optimal state

Firmware Upgrade

Supports firmware updates via local or network connections

Extensive Connectivity

Supports network connectivity to eliminate information silos; supports uploading security inspection data to servers or platform terminals to enable smart security inspections

Door Material

The exterior is made of PVC, identical in material to imported brands. It is aesthetically pleasing, elegant, fire-resistant, corrosion-resistant, moisture-resistant, and impact-resistant, and does not warp.

Technical Specifications

Dimensions:	2266 (H) × 897 (W) × 663 (D) mm	Gross Weight:	100 kg
Passage Dimensions:	2000 (H) × 727 (W) × 663 (D) mm	Net weight:	90 kg
Main Unit Packaging Dimensions:	810 (L) × 610 (W) × 500 (H) mm	Power Consumption:	<90 W
Detection Gate Panel Packaging Dimensions :	2500 (L) × 1100 (W) × 400 (H) mm	Operating Humidity:	95% non-condensing
Operating Voltage:	AC 100V–240V, 50/60 Hz	Ambient Temperature:	-20°C to 65°C (operating environment)
Main Processor:	Industrial-grade embedded microcontroller	Operating System:	Embedded Linux operating system

User Interface:	Local mouse operation and web-based interface	Detection Range:	Omnidirectional coverage within the channel with no blind spots
Host Interface:	Supports animated mannequin display functionality	Alarm Location Notification:	Supported
Alarm time:	Supports alarm time display	Number of People Passed Through:	Supported
System Time:	Supported (Year, Month, Day display)	Number of people triggered an alarm:	Supported
Operating Frequency:	Adaptive adjustment	Adaptive adjustment:	Support
Alarm Volume:	Adjustable from 0 to 100 levels	Overall Sensitivity:	Adjustable from 0 to 255 levels
Alarm tone:	Adjustable from 1 to 10 types	Zone sensitivity:	Adjustable from 0 to 255 levels
Passage Count Retention:	Supports power-off data retention	Passcode Management:	Supported
Alarm count retention:	Supports power-off data retention	Password Change Function:	Supported
Alarm Log Query:	Supported	Data storage:	Supported
Internet Management:	Supported	Screen Brightness:	Adjustable from 1 to 255
Data Platform Upload:	Supported	USB Ports:	2 external USB 3.0 ports, 6 internal USB 3.0 ports
Face Capture:	Supported	Network Ports:	1 external RJ-45 port, 7 internal RJ-45 ports
Face Comparison:	Supported	Factory Reset:	Supports one-click factory reset
Whitelist and blacklist databases:	Supported	Power-Off Standby Mode:	Optional
Facial Information Retrieval:	Supported	ID Verification:	Optional
360-Degree Alarm Display:	Supported	Contactless Temperature Measurement:	Optional
Display Screen Size:	Features industrial-grade A+ panels and high-definition dual 29-inch smart displays that support information broadcasting		
Display Screen:	The screen displays an avatar indicating the alarm location and category, and simultaneously supports alarm location guidance, alarm time, passage instructions, number of people passing through, number of people triggering alarms, system time, real-time video footage, facial images, comparison results, historical data, and other information		
Detection Modes:	Electronic device detection mode, full-metal detection mode, prohibited items detection mode, and combined electronic device and prohibited items detection mode		
Application Scenarios:	Supports selection from 24 application scenarios and supports scenario expansion functionality		
Compliance	Complies with smart security gate detection standards		

Standards:	Interference resistance complies with the EN 50082-1 standard
	Radiation compliance with EN 50081-1
	Electrical safety complies with the EN 60950 standard
	GB 15210-2018 General Technical Specifications for Walk-Through Metal Detectors (National Standard)
Product Certifications:	Certified to EU CE, FCC, RoHS, and FDA standards
Corporate Certifications:	Certified to ISO 14001:2015 Environmental Management System
	Certified to OHSAS 18001:2007 Occupational Health and Safety Management System
	Certified to GB/T 19001-2016 / ISO 9001:2015 Quality Management System
Order Model: PE-Multi Z929D Equipment List: 2 cartons Configuration List: 1、Instruction Manual, Warranty Card, Certificate of Conformity X 1 2、1.8-meter power cord X 1 3、Host X 1 4、Face Recognition Camera X 1 5、Left detection door panel X 1 6、Right detection door panel X 1 7、Bolts X 8 8、Allen wrench X 1 9、Main Unit Key X 1	