

# IMAGING & SCREENING SECURITY SYSTEM

## VP-XR1800S-BSJ8 ADVANCED THREAT DETECTION X-RAY CARGO SCANNER



### FEATURES

Advance X-ray generator technology for efficient screening & security

Single display monitor with 7 Colors image displaying technology for advance material classification

Dual energy penetration system supports organic/inorganic discerning

Versatile software with more than 30 image processing functions including auto-inspection of drugs and explosives

Supports real-time storage and retrieval of scanned images

Enhanced imaging software with density alerts and threat material prompts to assist operator

System initiates auto-diagnostic and calibration automatically at power on

Suitable for scanning mid-sized baggage at airports, bus/train/metro stations, borders/immigration security check points

## TECHNICAL SPECIFICATIONS

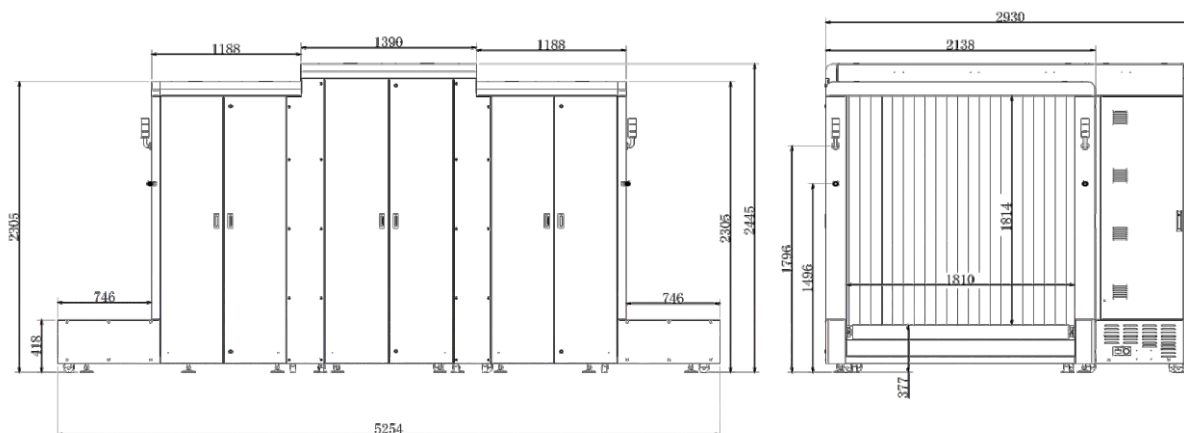
### VP-XR1800S-BSJ8

|                         |                             |  |
|-------------------------|-----------------------------|--|
| X-Ray Generator         | Tunnel Size                 | 1810(W)x 1814(H)mm   |
|                         | Wire Resolution             | 38 AWG   |
|                         | Spatial Resolution          | 1.0 mm Horizontal, 1.0 mm Vertical                           |
|                         | Steel Penetration           | Typical 50 mm  |
|                         | X-Ray Direction             | Sideward   |
|                         | X- Ray Generator            | 200kV  |
|                         | X-Ray Leakage               | ≤ 0.1 mR/hr(1.0 μSv/hr)                                      |
|                         | S/N Ratio                   | <68dB  |
|                         | Conveyor Speed              | 0.23m/s  |
|                         | Conveyor Height             | 380mm  |
|                         | Conveyor Max Load           | 2000kg   |
|                         | Leakage Current             | 1.0mA  |
|                         | Cooling                     | Sealed oil bath with forced air                              |
|                         | Duty Cycle                  | 100%,no warm-up procedure required                           |
|                         | Film Safety                 | Guarantee ISO 1600 (33 DIN)                                  |
|                         | Storage Capacity            | Up to 2,000,000 images stored automatically.                 |
| Image Processing System | Operation System            | Windows® OS  |
|                         | Display                     | Single 24" LCD display, full HD resolution: 1920x 1080       |
|                         | Operation Console           | Available /optional  |
|                         | Storage                     | 1TB HDD  |
|                         | Keyboard                    | Keyboard included  |
|                         | Roller                      | Integrated with tunnel at entry & exit                       |
|                         | X-Ray Sensor                | L-shaped photodiode array detector (dual energy),24bit depth |
|                         | Color Image Display         | 24 bit/pixel color display                                   |
|                         | Edge Enhancement            | Supports clear outlining of the object edges                 |
|                         | Image Recall                | Supports 30 images recallable                                |
| Power & Environmental   | Working Temperature         | 0°C ~ 40°C   |
|                         | Storage Temperature         | -20°C-60°C   |
|                         | Humidity                    | Up to 95% non-condensing                                     |
|                         | Working Voltage             | AC220V(±10%) 50/60Hz, 10A Max                                |
|                         | Automatic Voltage Regulator | Supported  |
|                         | Power Consumption           | Max. 5.2KW   |
| Mechanical              | Dimensions                  | 5254(L) x 2930(W) x 2445(H) mm                               |
|                         | Net Weight                  | 4300kg   |
| Certifications          | Certifications              | CE, RoHS, FDA  |

\*Exact products and specifications shown may vary by geographic region and are subject to change without notice. Weights and measurements are approximate and may vary.

## DIMENSIONS

Unit: mm



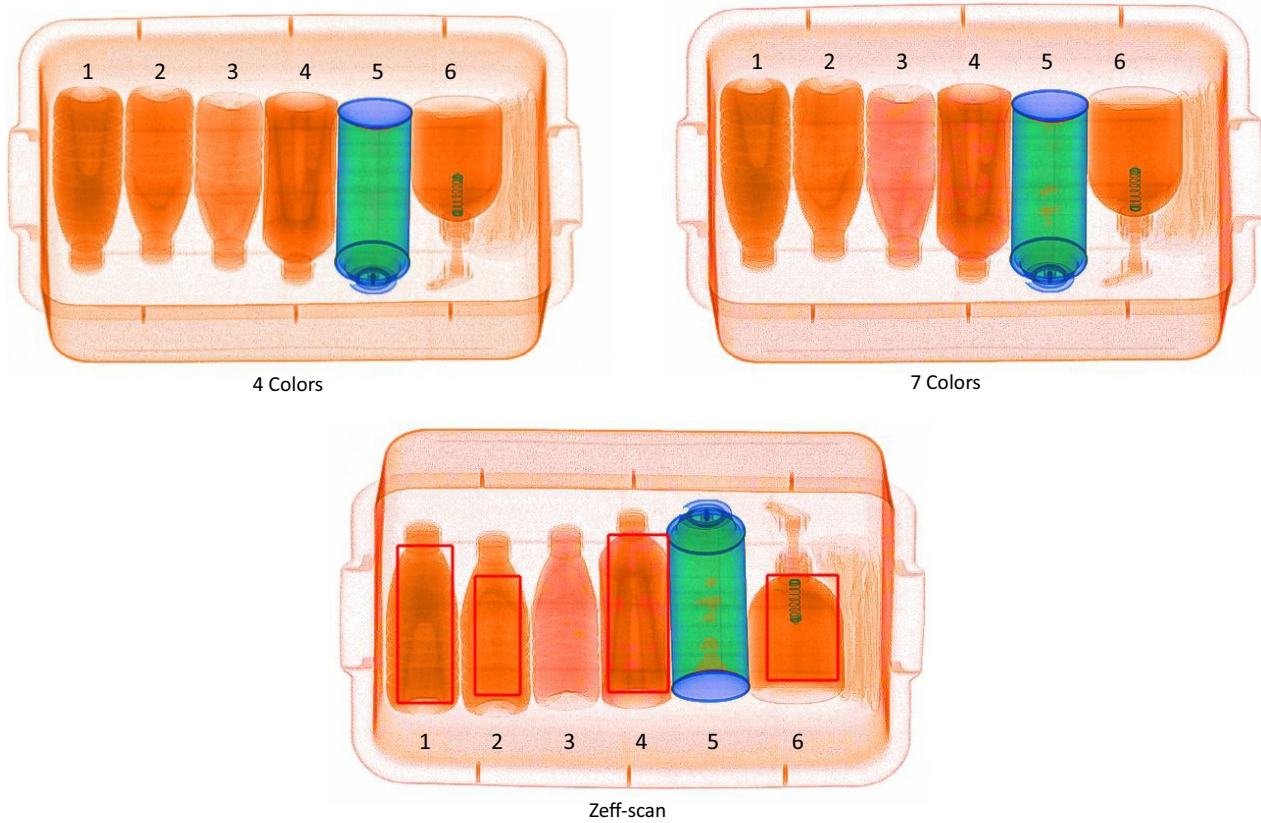
## Software Advantages:

### ■ 4 & 7-COLOR IMAGING & ASSISTANT EXPLOSIVE AND NARCOTICS DETECTION

The innovative 7-color imaging dual-energy technology is an advance material classification system which enables operator to view screened objects in 7 colors, each color correlate to a specific range of atomic number. It colors the 3-Kerosene with RED, hence easier to detect threats.

Combine with the Zeff-scan function to auto-highlight the potential threat of explosive and narcotic (Zeff 7.8.9) on X-ray image in real time during scanning process according to the characteristics range of explosives and narcotics atomic number , which help to identify the suspicious material more effectively.

\* 1-Water, 2-Alcohol, 3- Kerosene, 4-Edible Oil, 5-Liquefied Natural Gas, 6-Antibacterial Hand Gel



| Material Type                 | Atomic No. | Colors | Colors | Example                                       | Possible Threat                    |
|-------------------------------|------------|--------|--------|---|------------------------------------|
| Light Organics                | 6          | Orange | Orange | Polyethylene<br>light hydrocarbons            | Natural gas, gasoline,<br>kerosene |
| Organics                      | 6-8        | Orange | Orange | Timber, oil, alcohol,<br>water                | Explosives<br>pure drugs, diamonds |
| Light Inorganics              | 8-10       | Orange | Yellow | Paper, teflon                                 | Drugs                              |
| Inorganics                    | 10-12      | Green  | Green  | Glass   | Gems                               |
| Nonmetals and<br>Light Metals | 12-18      | Green  | Green  | Aluminum,silicon                              | Gunpowder, detonators              |
| Heavy Metals                  | 18-30      | Blue   | Blue   | Iron, steel, copper,<br>brass,nickel,titanium | Weapons,ammunition<br>knives       |
| Dense Metals                  | 30+        | Blue   | Violet | Zirconium,tin,bronze                          | Precious                           |
| Impenetrable                  | -          | Black  | Black  | Lead,bismuth                                  | Hidden threats                     |

## ■ SOFTWARE ADVANTAGES:

The software is to control the X-RAY baggage scanner as well to acquire and process the X-RAY image with different tools to find the potential threat, all the tools can be controlled by Exclusive Control Panel.

### IMAGING PROCESSING TOOLS

- Switchable 4 and 7 Colors Mode
- Inverse Mode
- Gray
- Variable Gamma
- Organics & Inorganic & Mixture Striping
- Plus 6 kinds Pseudo Color Display
- Variable High & Low Penetration
- Log & Exp Trans
- Gaussian Blur& Sharpen
- Super &Partial Enhancement
- High & Low & Fusion Energy
- Density Threshold Alarm(DTA)
- Continuous Zoom(64X)
- Splicing-scan(S-scan)
- Continuous Scan(C-scan)
- Zeff-scan(Z-scan)
- AI Roller(optional)
- Reset Image
- Calibration

### AUXILIARY FUNCTIONS

- Bidirectional Scanning
- Recall Historical Image
- Query & Backup & Mark Image
- Print Image
- Baggage Counter
- Day/Time Display
- Multi-language Operation
- Auto Image Archiving
- Storage Type:PNG, JPEG, BMP
- Start-up Self-diagnostics
- Real-time Image Manipulation
- Different Access Level Account
- Network Ready
- Secure Access Key
- Emergence Stop Button
- Console and Exit Landing Platform
- Interlock(optional)
- Threat Image Projection(TIP)(optional)
- Operator Training System (OTS)(optional)



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