



**XONAR**

# TrueScan™

Specification Sheet



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## Specification Sheet

XONAR®

## Feature Highlights

- **Small footprint:** Xonar TrueScan™ is a 50x30 AI-enabled x-ray machine. The portable machine is suitable for scanning backpacks, purses and medium size boxes while still maintaining a small footprint. With its built-in wheels, TrueScan can be moved from one location to another with ease.
- **AI inference mode scoring:** Xonar TrueScan™'s AI feature highlights the prohibited contents of a bag. This allows the operator to substantially speed up the inspection process. The AI labels items with a percentile-based scoring system. Any detection that it considers concerning should be inspected by the operator.
- **Identify weapons and objects:** Xonar TrueScan™'s AI is not only limited to alerting on handguns and knives. It can identify dozens of other objects such as smoke bombs, pistol magazines (partially or fully loaded), liquor bottles, airhorns, smoke bombs and flares, to name a few. Additional AI object recognition training is available upon request.

## Key Advantages

### Dual Energy Image

TrueScan™ captures single-view images from a bottom-up perspective. Utilizing dual-energy detectors enhances material classification accuracy and enables the representation of object features in more distinguishable colors.



### 4 and 7 Color Imaging

TrueScan™ features an innovative design with exclusive seven color dual-energy technology and advanced material classification, allowing operators to view screened objects in seven distinct colors, each corresponding to a specific range of atomic number (Zeff). This design enhances visibility, with three-kerosene objects highlighted in red for improved identification.

Key: 1: Aluminium 2: Iron 3: silver, 4: carbon 5: glass 6: gasoline 7: water 8: Thinner 9: lead 10: aluminum alloy

Material Type	Atomic No.	Colors	Colors	Example	Possible Threat
Light Organics	6	Orange	Red	Polyethylene, Light Hydrocarbons	Natural gas, gasoline, kerosene
Organics	6-8	Orange	Brown	Timber, Oil, Alcohol	Explosives, Pure Drugs, Diamonds
Light Inorganics	8-10	Orange	Orange	Paper, Teflon, Water	Drugs
Inorganics, Nonmetals, and Light Metals	10-19	Green	Green	Glass Aluminum, Silicon	Gems, Gunpowder, detonators
Heavy Metals	19-40	Blue	Blue	Iron, steel, copper, brass, nickel, titanium	Weapons, ammunition, knives
Dense Metals	40+	Blue	Violet	Noble Metal	Silver, Platinum, Gold
Impenetrable	-	Red(Black)	Red(Black)	Lead, Bismuth	Hidden threats



### Imaging Processing Tools

- Switchable between 4 and 7 Color Modes
- Organics & Inorganic & Mixture Color
- Super & Partial Enhancement
- High / Low & Fusion Energy
- Brightening & Darkening
- Edge enhancement
- Inverse Mode
- & more
- Density Threshold Alarm (DTA)
- Continuous Scan (C-Scan)
- Continuous Zoom (64X)
- Splicing-scan (S-Scan)
- Zeff-scan (Z-Scan)
- Inverse Mode
- Grayscale
- AI.



## Specification Sheet

### General Specifications

- Tunnel Size: 500 (W) × 300 (H) mm  
(19.7 (W) × 11.8 (H) in.)
- Belt Speed: 0.23m/s (45ft/min) Conveyor
- Load: 150 kg (330 lbs) (evenly distributed)
- Conveyor Height: 650mm (14.95 in.)
- Power Consumption: 0.5KW (Max)
- Noise: <55DB
- Machine Weight: 290 Kgs (640 lbs)

### X-ray Generator

- Voltage: 140KV
- Tube Current: 0.5 mA
- Cooling: Sealed Oil Bath with Forced Air
- Duty Cycle: 100%  
No Warm-Up Procedure Required
- Beam Direction: Upward
- Detector: L-Shaped Array
- Dual-energy: Yes

### Working Environment

- Operating Temperature:  
0°C- 40°C \ 32°F - 104°F
- Storage Temperature:  
-20°C- 60°C \ -4°F- 140°F
- Humidity:  
Up to 95% Non-Condensing
- Power Requirements:  
110 VAC ± 10%, 50/60Hz,

### International Standard

- Wire Detect ability:  
0.102mm AWG38 (Standard)
- Wire Penetration:  
0.203mm AWG34 (Standard)
- Spatial Resolution:  
1.0mm Horizontal  
1.0mm Vertical
- Steel Penetration:  
36mm steel (Standard)  
38mm steel (Typical)



## Certificates and Safety

### Compliance & Certifications

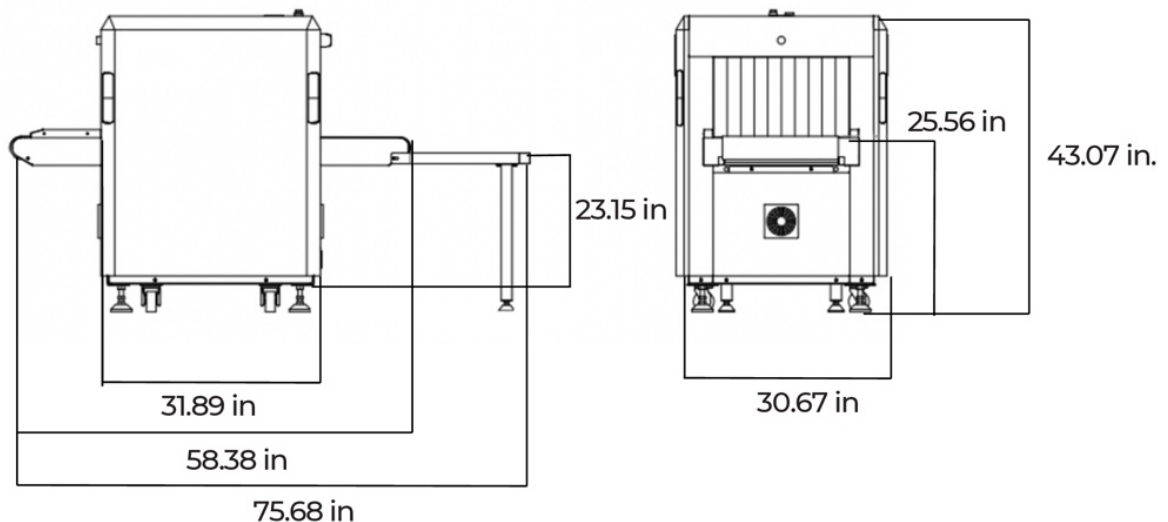
- CE Compliance:
  - The Electromagnetic Compatibility Directive 2014/30/EU
  - The Machinery Directive 2006/42/EC
  - LVD Directive 2014/35/EU
- RoHS: (EU) 2017/2102
- FCC Compliance Part 15 B, ANSI C63.4:2014
- Film Safety: Up to ISO 1600 (33 DIN)
- Radiation Safety Certificate
- ISO9001 Quality Management System

### Health and Safety

- Complies with GB15208.2-2018 standard
- Typical Radiation leakage is less than 0.1 mR/hr (1.0 µSv/hr)
- Film Safety: Guarantee ISO 1600 (33 DIN)

### Warranty

- 1 year warranty



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