

Features and Benefits

Features	Benefits
Bi-Directional Scanning	Ability to scan in both directions
High Throughput (Dual Speed)	0.2 m/s Standard 0.3 m/s High Throughput Up to 1.5x faster than average
ABC Automatic Belt Control	The belt automatically starts and stops when an item is placed or removed from the belt
Material Discrimination	Ability to display organic, in-organic and metallic components
ADS Automatic Detection System (Optional)	Highlights dense and potentially dangerous objects
Image Enhancements	Negative Image Material Recognition Brightness Adjustment High / low penetration Pseudo Colour Edge Enhancement Atomic Number Z7, Z8, Z9 Zoom up to 64x
High Resolution Monitor	Enables easy identification of Suspect Packages

Image and Unit Performance

- 22.8" Monitor
- Wire Resolution: Typical 40 AWG
- Steel Penetration: Typical 32mm

X-ray Generator

- 140 KV @ 0.5mA (160 KV @ 1.0 mA max.)
- Beam Projection - Diagonally from bottom

Operating Requirements & Environment

- Single Phase 230V, 50/60 Hz, 350W / 0.4 KVA
- Operating Temp.: 0°C to +45°C
- Storage Temp.: -40°C to +60°C
- Relative Humidity: 95% non condensing
- Supplied with 5m power cable

Health & Safety and Compliance

- All Todd Research equipment complies with applicable International Health & Safety regulations
- Leakage dose at outer surface <math><1.0\mu\text{Sv/h}</math> as specified in Ionising Radiation Regulations 2017 (IRR17)
- Complies with European Directives
- Electromagnetic compatibility (EMC) 2017/30/EU
- Complies with United Kingdom regulations
- S.I. 2016 No. 1091 Electromagnetic compatibility Regulations 2016

TR50

Conveyor X-ray Inspection System



Todd Research Limited Standard Terms & Conditions apply E&OE.

Threat from suspect devices is not exclusive to any one sector, consequently over many years Todd Research has built an enviable reputation partnering with organisations as diverse as Government, Embassies, Global Banking, Pharmaceutical, Oil & Gas, Legal, Media, Facilities Management, Retail and many more. Call Todd Research to understand how we can help protect you, your personnel and assets.

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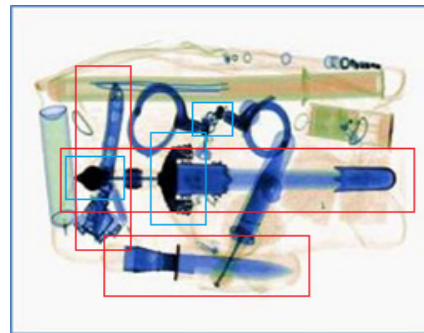
When space is a premium the TR50 offers a compact foot print with no compromise in detection capability. This small but advanced x-ray inspection system can be used for quick and effective inspection of post, parcels, small bags, and briefcases.

PRODUCT INFORMATION

The TR50 provides the effective inspection of small bags and parcels within a limited space.

The detection system allows the identification of weapons, explosives (including plastic explosives), narcotics, detonators and dangerous objects, by the recognition of substances by atomic number.

Dual energy imaging of the system with automatic colour coding of materials having different atomic numbers helps screening specialists to easily identify dangerous objects inside parcels or bags.



The addition of ADS (Automatic Detection System) software further enhances the ability to detect threat or contraband items. The algorithm will highlight suspect packages by encapsulating them on the screen.

Ergonomically designed, the conveyor can easily be relocated through most doorways and deployed even in restricted space areas without any need for special equipment or staff.

The innovative technology enables accurate detection of metal and organic objects; weapons, explosives, liquids, narcotics, contraband, etc.

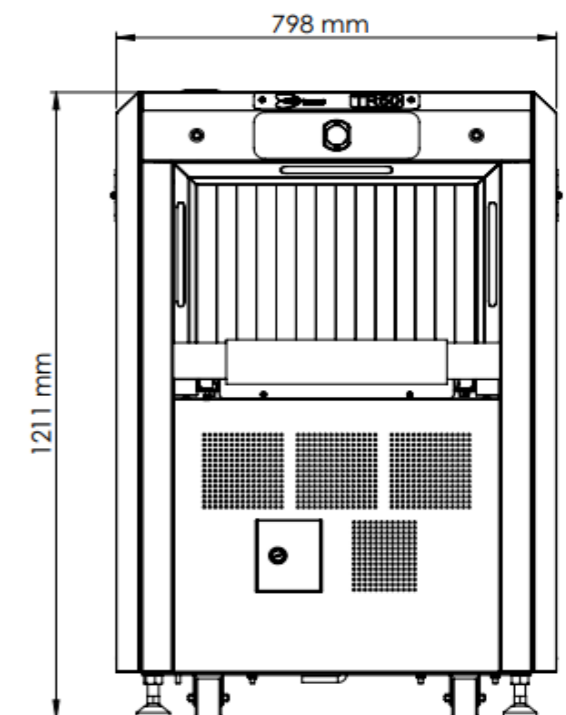
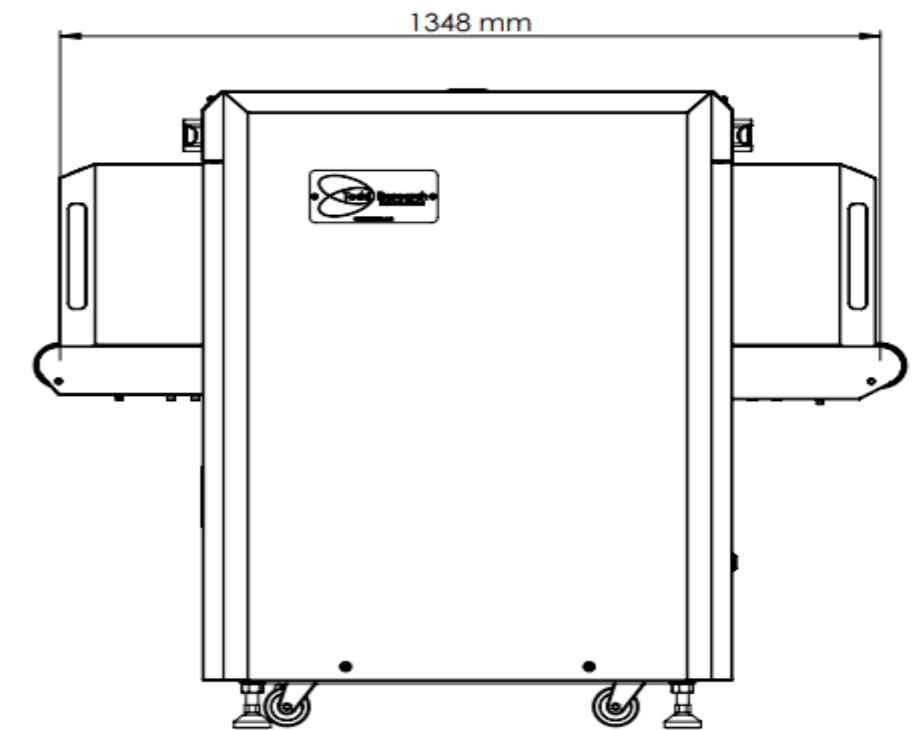
Automatic identification of suspicious items (narcotics, explosives and firearms) and highlighting of optically dense objects.



General Dimensions

TR50

Height:	1211 mm
Width:	798 mm
Depth:	1348 mm
Net Weight:	410 kg



High density Alert feature

Image management system

Outlining of dangerous objects

(which could be identified as drugs, explosives & weapons)

Highlighting of objects with

calculated atomic numbers of 7,8 & 9 intended to assist operator with threat detection

Super Enhancement easy viewing of individual components

Pseudo-colouring of Images

Contrast adjusting of strongly absorbing objects

Optimisation of the overall contrast: combination of edge enhancement and local enhancement algorithms

Gamma correction of images

Zoom (up to 64 x)

Quick system start up (approx. 30 seconds)

Image preview

Images Inversion

Negative Image identification of high density materials by displaying them as a bright object, while low density items become darker

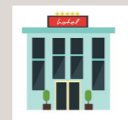
Auto saving X-ray images in archive and copying images on external storage media



Law Enforcement
Government
Buildings



Embassies &
Consulates
VIP Residences



Hotel Complexes
Shopping Centres



Schools &
Universities



Public Event
Venues &
Stadiums

For the detection of metal & organic objects, weapons, explosives, liquids, narcotics, primers and dangerous items at checkpoint security.