RTR-4®

Portable Digital X-ray System

Fast X-ray inspection —
when and where you need it

A suitcase, a package, a car tire, a trash can — any of these can conceal an explosive device, weapon, or other threat. The RTR-4 digital X-ray system lets you look inside and see the threat, quickly and safely.

Used by law enforcement, military, customs, and security personnel, the RTR-4 can reveal explosives, weapons, narcotics, and other contraband in parcels, baggage, vehicle tires and body panels, aircraft and building walls, and many other targets.

The RTR-4 system can be a valuable aid in assessing and defusing improvised explosive devices (IEDs) and unexploded ordnance (UXO) by helping personnel evaluate objects from a safe distance to determine the best method for disposal. The system is fully digital for clear, fast, and easy image viewing, analysis, and management — far superior to cucmbersome, low-resolution film and analog systems.

Designed for use in a wide range of field scenarios, the RTR-4 system can be used in tight quarters, right down to ground level. Weighing just 12 kg (26 lbs) in total, the X-ray source and imager are easy to move into position by hand, or to mount on bomb-disposal robots for remote operation.

SECURITY AND TRANSPORTATION TECHNOLOGY

BENEFITS

▶ Supports fast X-ray inspection in the field

▶ Images the contents of luggage, packages, vehicle compartments, and other targets without disturbing them

▶ Supplies high-resolution digital images in seconds

▶ Supports wired or wireless control and viewing from the included notebook computer

▶ Assists trained operators in identifying and evaluating suspicious items

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POWERFUL AND PORTABLE

The RTR-4 system is designed for easy use in the field. The standard system includes these components:

▶ **X-ray source.** The standard 150 kVp source can penetrate more than 25 mm (1 inch) of steel, with a beam angle of 40 degrees for up-close operation. A more powerful 300 kVp source is also available.

▶ **Imager.** The standard imager provides high-resolution images up to 20 x 25cm (8 x 10 in). A larger imager with an area of 40 x 56 cm (16 x 22 in) is also available.

▶ **Control computer.** A standard notebook or optional Toughbook® computer lets users control the system and analyze images. Our powerful database and image-analysis software is available in many languages.

The system includes a rugged, padded case on wheels for easy transport (total weight 34 kg (76 lbs)). A backpack carrier for the key components is available.

FEATURES FOR ANALYZING IMAGES

The system provides a variety of features to highlight items of interest in X-ray images, including zoom, pseudo-color, contrast stretch, edge detection and sharpening, smoothing, embossing, and histogram equalization. These features can be applied to the entire image or just to a specific region of interest.

The system also provides multi-image display, grid overlay, point-to-point distance measurement, and annotation. For data integrity, the system's image-enhancement features do not affect the original image files.

Images are stored as standard TIFF files in the system database on the control computer. Video, audio, text and other data can be stored along with each image. Individual images and the accompanying data can easily be retrieved from the database for later review, e-mailing, or other uses.

CAPABILITIES

▶ High-resolution digital images through more than 25 mm (1 inch) of steel

▶ Fully digital imaging for fast viewing with no image degradation — superior to film and analog systems

▶ Lightweight, compact design for easy use and transport

▶ Powerful software for analyzing and managing images

▶ Available with wireless control for added safety

▶ Large-area imager available

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