A compact, economical system for fast inspection of airline baggage

The CT-800 system automatically detects a wide variety of explosives, and creates color-coded high-resolution images to help screeners identify objects and materials in bags. The system uses Reveal's unique dual-energy computed tomography (CT) X-ray technology and explosive detection algorithms to provide excellent detection performance with a very low false alarm rate.

The CT-800 is a highly practical system. It's designed for both in-line and stand-alone operation, and to be used with both checked and carry-on bags. Its TSA-certified multiplexing architecture helps facilities streamline their screening operations by centralizing the threat-resolution function. Its small size and light weight make it easy to integrate into typical baggage handling systems. And its low price and high reliability reduce its overall life cycle cost.

BENEFITS
- Automatic dual-energy CT-based explosives detection
- State-of-the-art high-resolution imaging of every bag
- Designed for use with both checked and carry-on bags
- Certified by the world’s most demanding security organizations
ADVANCED TECHNOLOGIES
The CT-800 uses Reveal’s dual-energy CT technology to measure both density and atomic number (\(Z_{eff}\)), enabling the system to identify a wide range of explosives (including liquid, homemade, and sheet) with high reliability and a low false alarm rate. The system also creates high-resolution CT images of the entire bag for automatic and visual inspection, and a color-coded high-resolution X-ray image for visual inspection. These capabilities help users clear more bags without secondary inspection.

CERTIFIED PERFORMANCE
The CT-800 meets some of the world’s toughest performance standards, including TSA standards for EDS algorithms, EU ECAC EDS Standard 3, and Israel’s ISA EDS standards. The system is equipped with several TSA and ISA EDS algorithms and can switch between them for any bag based on bag ID, barcode, or operator selection.

FLEXIBLE OPERATION
The compact Reveal CT-800 system can be installed in cramped airport environments without requiring significant infrastructure changes. Optional powered conveyors assist integration with an airport’s existing baggage handling infrastructure, or support operation in stand-alone environments. Reveal’s optional multiplex control console and integrated field data reporting system monitor the performance of all Reveal scanners and viewing stations on a network and allow operators to change configuration settings on individual machines.

CAPABILITIES
- Low false alarm rate
- Compact size and light weight
- Large tunnel size accommodates full-sized checked baggage
- Offers ability to change detection algorithm for any bag

OPTIONS
- Remote threat resolution viewing station
- Remote multiplexing with gigabit Ethernet
- Field data reporting system
- Threat image projection
- Flat or sloped infeed and outfed powered conveyors
- External air conditioner

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<tr>
<th>Throughput</th>
<th>250 checked bags per hour (viewing all bags)</th>
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<tr>
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<td>Up to 400 carry-on bags per hour</td>
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<td>Max. bag size</td>
<td>62.3 cm (24.5 in) W x 50.5 cm (19.9 in) H x 120 cm (47.2 in) L</td>
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<tr>
<td>Safety</td>
<td>Conforms to applicable U.S. and international radiation safety regulations</td>
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