Enhanced Detection Panel
For the Mini Z System

The MINI Z® system is the world’s first and most powerful handheld Z Backscatter® imaging system, highlighting organic threats and contraband and providing unsurpassed operational flexibility. Rapiscan Systems | AS&E’s new Enhanced Detection Panel option for the MINI Z system provides operators with invaluable additional information about scanned objects.

Using the Enhanced Detection Panel, operators can select to acquire a transmission image of the object to detect metallic threats, such as guns and knives. The transmission image is displayed simultaneously with the Z Backscatter image. Alternately, the panel allows operators to acquire Z Backscatter images with a larger field of view as well as images of objects concealed at greater depths. No matter how this versatile panel is deployed, it helps operators to detect more threats by providing more information about scanned objects.

The Enhanced Detection Panel is ready to scan as soon as the MINI Z system is powered on. There is no change to the MINI Z system’s X-ray source to generate the additional images with the panel, so the system remains inherently low dose.

FEATURES AND BENEFITS
- Versatile panel offers flexibility to create a transmission image or an enhanced Z Backscatter image
- Improved detection of metallic objects such as guns and knives
- Lightweight, durable design

The transmission image (left) reveals a lead box (used to conceal narcotics) welded to a tire rim. The Z Backscatter image (right) highlights drugs placed in the tire itself.

The transmission image (left) shows a pipe bomb in a carry-on bag while the Z Backscatter image (right) highlights dynamite in the same bag.
Enhanced Detection Panel for Mini Z System

Mini Z Operating Features

*Note: There are no changes to the operating features of the MINI Z scanner when used with the Enhanced Detection Panel*

- X-ray Source: 10-watt 120 keV X-ray tube
- Scanner Battery: Four hours (typical) per battery; two batteries provided
- Scan Speed: Nominal 15 cm (6 in) per second
- Tablet Battery: Six hours, typical
- System Software: Microsoft® Windows® 10 IoT with ASEInspecon™ software

Enhanced Detector Panel Performance

- Transmission Imaging: 17 mm of steel penetration

Physical Dimensions

Enhanced Detector Panel Dimensions

- Length: 27.6 in (70.2 cm)
- Width: 19.2 in (48.9 cm)
- Height: 1.5 in (3.8 cm)
- Weight: 10 lbs (4.5 kg)

Enhanced Detector Panel Transport Case Dimensions

- Length: 28 in (70.2 cm)
- Width: 24 in (61 cm)
- Height: 4 in (10.2 cm)
- Weight: 20 lbs (9.1 kg)

Environment

- Operating Temperature: -4°F to 113°F (-20°C to 45°C)
- Storage Temperature: -40°F to 140°F (-40°C to 60°C)
- Operable in: Rain, snow, high winds, and altitudes up to 9,845 ft (3,000 m) nominally
- In Compliance With: CE directive 2004/108/EC

Health and Safety

- Complies fully with all applicable U.S. federal health and safety regulations:
  - ANSI/HPS N43.3–2008 Open System Classification
  - Conforms to applicable ANSI, ICRP, NCRP, and Euratom radiation safety standards for annual allowable dose for the general public
  - To help prevent inadvertent X-ray emission, the system is equipped with a series of interlocks and audiovisual indicators
  - Contains no live radiation source

System Components

- Enhanced Detection Panel
- Protective carrying case
- Connection Cables: Up to 9 m cable (3 individual 3 m cables connected in series)

System Options

- Panel Stand: Allows panel to be raised for scanning taller objects and in higher locations