

MINI Z™

HANDHELD Z BACKSCATTER® SCREENING SYSTEM



The MINI Z system comes with a **standard-sized tablet**, which operates both as an operator interface and an image viewing monitor.



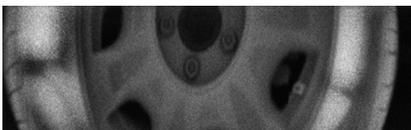
The MINI Z system comes equipped with a **rugged transport case**, battery charger, and spare batteries.

THE MINI Z IS THE WORLD'S FIRST HANDHELD Z BACKSCATTER SYSTEM.

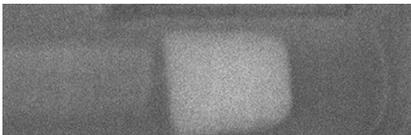
THE SYSTEM'S TECHNOLOGY HIGHLIGHTS ORGANIC THREATS AND CONTRABAND IN HARD-TO-REACH PLACES.



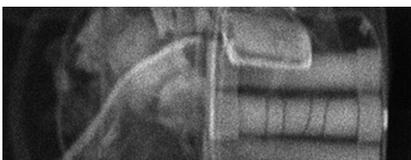
MINI Z system scanning a tire



MINI Z image of a tire filled with **cocaine***



MINI Z image revealing **marijuana***



MINI Z image revealing an **IED***

*simulated

Self-contained, portable, easy to use

The MINI Z™ system is the world's first handheld Z Backscatter® imaging system providing unsurpassed operational flexibility. Using the same technology that made the ZBV the top-selling cargo and vehicle inspection system in the world, the MINI Z system's Z Backscatter technology **highlights organic threats and contraband**. With its small form factor and single-sided imaging, the MINI Z system **can access hard-to-reach areas**, allowing for the effective screening of a wide variety of items such as suspicious bags, walls, furniture, small boats, aircraft, vehicle tires, and car interiors.

Unlike density meters, trace detectors, or transmission X-ray systems, the MINI Z system is the only handheld Backscatter system that **can produce images using single-sided imaging** to quickly locate hidden potential threats or contraband behind organic surfaces. The system's fast and easy set-up with user-friendly, intuitive interface **produces an image much more readily than portable transmission systems**. The MINI Z system is completely self-contained, with no required set-up and no consumables to replenish. Simply power the device on and you're ready to scan for potential threats and contraband.

Z Backscatter technology

The MINI Z system employs Z Backscatter technology—pioneered and perfected by AS&E. Z Backscatter produces an image and reveals organic threats and contraband that transmission X-ray systems can miss—such as explosives, currency, and drugs.

Safe, secure, dependable operation

The MINI Z system was designed with safety in mind, and **features reliable and redundant safety subsystems**. The MINI Z system is **safe for operators, bystanders, and the environment**. The system conforms to applicable ANSI, ICRP, NCRP, and Euratom radiation safety standards for annual allowable dose for the general public. Although the MINI Z system is a low-energy, low-dose Z Backscatter system, it is not designed to scan people. The MINI Z system must be used in accordance with the manufacturer's instructions and applicable laws and regulations.



Detect the difference.

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TECHNICAL SPECIFICATIONS

System Specifications

X-ray Source: 10-watt 70 keV X-ray tube

Interconnection options: Wireless connection through built-in Wi-Fi; optional hard-wire via Ethernet cable

Scanner Dimensions

Length: 29.2 cm (11.5 in)
Width: 24.9 cm (9.8 in)
Height: 19.3 cm (7.6 in)
Weight: 4.2 kg (9.2 lbs)

Operating Time

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 8.1 tablet edition with ASEInspection software

Transport Case Dimensions

Length: 73.7 cm (29.0 in)
Width: 55.9 cm (22.0 in)
Height: 38.1 cm (15.0 in)
Full System Weight: 21.8 kg (48 lbs)

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

MINI Z Scanner

Dell Windows 8.1 Tablet PC with ASEInspection Software

Rugged Tablet Case with Integrated Stand

Two Replaceable Batteries

Battery Charger (with international power cords)

Transport Case

Calibration Dock

Quick-Start Guide

Shoulder Strap

Optional Network Cable

Environment

Ambient Operating: 0°C to 45°C (32°F to 113°F)

Storage: -40°C to 60°C (-40°F to 140°F)

Operable in: Rain, snow, high winds, and altitudes up to 3,000 m (9,845 ft) nominally

CE labeling: In compliance with directive 2004/108/EC

Conformity declared to standards:

EN 61000-6:2005,
 EN 610000-6-4:2007 + A1:2011,
 EN 55022:2010 // FCC 15.109(g) // ICES-003 Issue 5,
 EN 6100-3-2:206 + A2:2009,
 EN 61000-3-3:2013,
 EN 61000-4-2:2009,
 EN 61000-4-3:2006 + A2:2010,
 EN 61000-4-4:2012,
 EN 61000-4-6:2009,
 EN 61000-4-8:2010,
 EN/UL/CSA IEC 61010 3rd Edition

System Software and Imaging Tools

ASEInspection Software—Tablet Edition

ASEInspection is the Windows-based application software used to control the system operation, manage the data, and analyze the images. The tablet edition has a contemporary look and feel and has been designed for touch-screen interaction.

System Operation

Main Screen: Displays system control functions

Scan Screen: Enables scanner operation and provides real-time image viewing

Status Bar: Located on the bottom of the screen; displays connection status, battery levels, and links to Wi-Fi connection and system status screens

Status Screen: Provides system status overview with detailed page tab that displays current status of key system parameters

Tablet Connection: Connects to the scanner by Wi-Fi or wired Ethernet

GUI Skin Support: Adjusts the user interface to improve viewability for operation inside with artificial lighting or outdoors with natural light

Data Management

Image Groups: Images of the same object may be collected into their own group

Image Flagging: Images of interest may be flagged or tagged with an optional comment

Reference Library: Save your reference images to removable media for quick transfer to other tablets

Image Gallery: See thumbnails of images to quickly find images of interest

Image Search: Search for images by date taken, group or comment name, or those that have been flagged

Export Image: Save images as jpeg files

Backup and Restore: Backup and restore images

Incident Reporting: Allows users to save system logs to a removable media for submitting system issues

Image Analysis

Touch Zoom: Zoom images up to 16x magnification by pinching or double tapping

Touch Scrolling: Flick an image to scroll to another region

Touch Density Expand: Manually refine image contrast and brightness with your fingers

Auto Enhance: Applies different levels of contrast to different features in the image, thereby enhancing subtle differences in the image

Dynamic Contrast: Automatically adjusts image contrast to accommodate different scanning distances and to facilitate image analysis

Negative: Toggle between the normal, "positive" image or the reverse "negative" image, thereby enhancing subtle density differences

Color Palette: Adds the ability to evaluate images in greater depth, using color

