





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

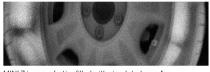


The MINI Z system comes equipped with a **rugged transport case**, battery charger, and spare batteries.

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



 $\mathsf{MINI}\,\mathsf{Z}\,\mathsf{image}\,\mathsf{of}\,\mathsf{a}\,\mathsf{tire}\,\mathsf{filled}\,\mathsf{with}\,\mathsf{simulated}\,\boldsymbol{\mathsf{cocaine}}$



MINI Z image revealing simulated **marijuana**



MINI Z highlighted a Bondo® patch in the arm of an excavator, where **\$150,000** of drugs were hidden.

Self-contained, portable, easy to use

The MINI Z^{\otimes} 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 bags, walls, furniture, boats, aircraft, vehicle tires, and car interiors.

The MINI Z system is the only handheld X-ray system that **can produce images using single-sided imaging** to quickly detect anomalies. 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 technology works by displaying X-rays that are reflected from the scanned object. Organic items, such as drugs and currency, reflect X-rays more than metallic objects and appear bright white in MINI Z images (see images). MINI Z has also been successful in revealing anomalies associated with structural modifications and compartments made to conceal contraband (see photo).

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.



MINI Z

HANDHELD Z BACKSCATTER SCREENING SYSTEM



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

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 $^{\!\scriptscriptstyle{\text{\tiny{M}}}}$

software

Transport Case Dimensions

 Length:
 63.5 cm (25 in)

 Width:
 49.5 cm (19.5 in)

 Height:
 38.1 cm (15.0 in)

 Full System Weight:
 21.8 kg (48 lbs)

System Options

Tablet Mount Kit: Includes a mount for the tablet and a shorter connector cable

Tactical Backpack: For greater portability **Language Kits:** Arabic, Chinese, English (standard), French, Polish, Portuguese, Russian, Spanish

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

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

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

In compliance with CE directive 2004/108/EC

ASEInspection Software — Tablet Edition ASEInspection is the Windows-based application

System Software and Imaging Tools

ASEInspection is the Windows-based application software used to control the system operation, manage the data, and analyze the images. The tablet edition includes touch-screen interaction.

System Operation

Main Screen: Displays system control functions **Scan Screen:** Enables scanner operation and provides real-time image viewing

Status Bar: 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: Exports images as .jpg or .png 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 Tools

Adjustable Aspect Ratio: Allows users to adjust the image for different scan rates

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

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

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

Manual Image Stitching: Allows the user to create a composite image using up to four images in a group; composite images can be stored, recalled, and exported Negative: Toggle between the normal, "positive" image or the reverse "negative" image, thereby enhancing subtle density differences

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

Touch Scrolling: Flick an image to scroll to another region **Touch Zoom:** Zoom images up to 16x magnification by pinching or double tapping

