



## ZBV R-CLASS AS&E

MOBILE Z BACKSCATTER CARGO  
AND VEHICLE SCREENING SYSTEM

- ▶ BACKSCATTER IMAGING FOR PHOTO-LIKE IMAGES
- ▶ EASY TO USE
- ▶ HIGH-THROUGHPUT SCANNING
- ▶ HIGHLY VERSATILE WITH MULTIPLE OPERATIONAL MODES

Low-cost, easy to use, and highly versatile, AS&E's ZBV R-Class system is built onto a cargo van platform and can screen vehicles, containers, and other objects for threats and contraband simply by driving past them.

The ZBV system's single-sided configuration and varied operating modes provide maximum maneuverability and flexibility for multiple applications, and it can be immediately deployed in response to security threats.

With easy-to-interpret imaging for rapid analysis, the ZBV system enables high-throughput screening of vehicles and cargo.

The ZBV system employs Z Backscatter technology for a photo-like image that reveals threats and contraband that transmission-only X-ray systems can miss.

The ZBV system is ideal for screening vehicles for large quantities of concealed cigarettes, currency, drugs, explosives, and stowaways. It can also be equipped with the Tx-View option, which provides a transmission image for enhanced detection of metallic threats, including weapons.

With hundreds sold, the ZBV system is the top-selling, non-intrusive cargo and vehicle inspection solution in the world.



**THE ZBV SYSTEM** IS THE NUMBER ONE SELLING CARGO AND VEHICLE INSPECTION SYSTEM IN THE WORLD. WITH COUNTLESS SMUGGLING AND THREAT SEIZURES, THE SYSTEM IS EASY TO USE AND VERY VERSATILE.

### ZBV System Z Backscatter X-ray Images



Image shows hidden narcotics



Image reveals smuggled alcohol, hidden to avoid paying duties

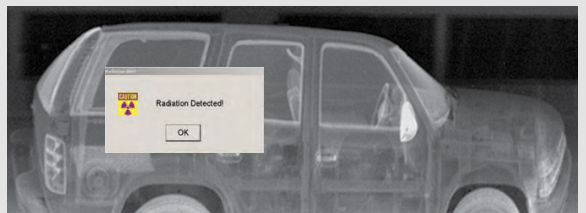


Image accompanies a possible radioactive threat



# ZBV R-CLASS AS&E

## OPERATING FEATURES

X-ray source	225 keV
Penetration	7 mm of steel at a distance of 1.5 m at scan speed of 1.5 kph (1 mph)
Scan speeds (operator selectable)	1.5, 5, and 10 kph (1, 3, and 6 mph)
Scan field of view	3.6 m in height at 1.5 m from the side of the ZBV; or 4.3 m in height at 2.3 m to scan a hi-cube container

## VEHICLE SPECIFICATIONS

Manufacturer	Ford
Model	F550 4x4 Crew Cab
Engine type	8-cylinder (6.4 L)
Transmission	5-speed automatic
Direction	Left-hand drive
Fuel	Diesel fuel runs vehicle and X-ray equipment generator. System uses four gallons of fuel per hour when scanning

## DIMENSIONS (WITHOUT OPTIONS)

Length	8.1 m
Width <sup>1</sup>	2.7 m
Height <sup>2</sup>	2.9 m
Weight	6,396 kg

## ENVIRONMENT

Operating temperature	0° C to 42° C
Storage temperature	-29° C to 60° C
Operable in	Rain, snow, high winds, and altitudes up to 3,000 m nominally

## HEALTH AND SAFETY

Radiation dose	The dose to the driver (in stationary scan mode) and to the cargo is less than 0.1 µSv (0.01 mR) per scan, at an average speed of 5 kph (3 mph) at 1.5 m distance
Radiation dose to crew	0.5 µSv in any one hour
Radiation standard	Conforms to ANSI N43.3-2008 for general radiation safety installations using non-medical X-ray and sealed gamma-ray sources, energies up to 10

<sup>1</sup> With mirrors extended  
<sup>2</sup> To top of scanning lights

## SYSTEM OPTIONS

- **Stationary scan mode** : scans vehicles driven past parked ZBV; includes shore power (230 VAC +/- 10 VAC, 50/60 Hz, 80 amps, single phase)
- **Remote operator's console** : console can be located up to 500 m (1,640 ft) from parked ZBV; for use in stationary scan mode
- **Tx-View™ trailer** : provides a dual-energy transmission image for enhanced detection of metallic threats; includes detectors, low-profile ramp, transport trailer, and image analysis tools. For use in stationary scan mode
- **Scan area monitoring kit** : for applications where vehicle occupants may be scanned; designed for compliance with ANSI 43.17-2009 for personnel scanning; monitors the scan area and stationary scan mode exclusion zone to prevent exposure above the specified limits
- **Radioactive threat detection** : automatically detects both gamma rays and neutrons
- **Isotope identifier** : digital, handheld, multi-channel spectrometer providing gamma and neutron isotope identification
- **MINI Z® system** : Handheld Z Backscatter system for auxiliary scanning (see separate data sheet); includes storage location and charging station for scanner batteries and tablet computer
- **Wireless networking Kit** : for use with CIM Server Networking Solution to provide interconnected remote image analysis and supervisor stations
- **Audible scan notification** : indicates when system is scanning

## HTDS

Parc d'Activités du Moulin de Massy – 3 rue du Saule Trapu  
BP246 - 91882 Massy Cedex France

Tel : +33 (0) 1 64 86 28 28 – Fax : +33 (0) 1 69 07 69 54 – info@htds.fr – www.htds.fr

HTDS Algeria: +213 232 384 01/02

HTDS Morocco: +212 222 749 59

HTDS Egypt: +202 229 053 06

HTDS Lybia: +218 91 69 50 70 8

HTDS Madagascar: +261 326 170 443

HTDS Tunisia: +216 70 836 961

