



A BRITISH INNOVATION  
Patent pending

# 2X-300 VEHICLE SCANNER

## CAR INSPECTION PORTAL

### SYSTEM APPLICATIONS

- > Border check points
- > Government facilities
- > Airports
- > Military bases
- > Hotels & events
- > Secure facilities
- > VIP facilities
- > Check points



- > The 2X-300 car scanner has been developed to meet the fast-moving demands for vehicle screening at ports, border crossings and secure facilities
- > Top down imaging of the vehicle provides the operator with excellent fast and easy imaging tools for detecting threats, drugs, explosives, weapons, contraband and people trafficking
- > 2X-300 is designed for ease of installation and deployment, and the system can be installed within 4 hours on any flat site. The system is also designed to fit into a standard 20ft shipping container. Minimal engineer intervention is required on setup, with power and data link cable being the only connections required
- > The shipping container is pre-fitted to enable it to be transformed into a command and control centre when unloaded
- > 2X-300 can be configured to operate in number of modes. High throughput drive-through in excess of 250 vehicles per hour and conveyor mode up to 55 vehicles per hour
- > Tunnel dimension of 3.0m wide by 3.0m high, capable of scanning cars, vans and small buses
- > 200kV up to 350kV switchable dual energy transmission X-ray provides high definition X-ray images to the operator. The X-ray energy switching can be performed by the operators onsite or remotely
- > The variable energy operating modes allow for alternative governmental regulations on the scanning of passengers. 2X-300DT for drive through scanning where the driver and passengers stay in the vehicle and 2X-300DC for the conveyor system that allows driverless operation
- > The system is also equipped with OCR, recording the number plate on the image and storing the image for retrieval local or remote

## FEATURE HIGHLIGHTS

- > 2X-300-DT "Drive-through" configuration for increased throughput up to 250 vehicles per/h
- > 2X-300-DC "Driverless" configured with a conveying system to allow up to 55 vehicle per/h to be scanned without the driver
- > Compact footprint, fits into a 20ft ISO container for shipping, setup requires only a forklift for installation
- > Fast install time and minimal engineering intervention on setup
- > Radiation safety in compliance with ANSI 43.17 for general use applications
- > Excellent image quality through the optimised beam geometry
- > Penetration typically 70 mm steel
- > The Vehicle Inspection System 2X-300 has specifically been designed for the screening of cars, vans and mini buses, including their chassis for bombs and smuggled goods
- > The 2X-300 is configured for drive-through inspection. The optimised footprint is the result of the re-engineering core components, which simplifies the integration into existing infrastructures
- > The drive-through concept enables a throughput of up to 250 vehicles per hour and thus is tailored for busy checkpoints
- > 2X-300 is an ideal solution for the protection of critical infrastructure facilities such as government buildings, military checkpoints, nuclear power plants and other utilities, as well as land and sea borders

General Specification	
System dimensions	4.040m (W) x 3.695 (H) x 3.829m (L)
Tunnel dimensions (W x H)	3.00m x 3.00m
Max. vehicle dimensions	2.5 (W) x 2.9 (H) x 7.0 (L)
Inspection throughput for cars up to 5m length (cars / hour)	Up to 250 vehicles per/h
Scanning speed	Approx 8 km/hour (5 mph)
Exclusion zone	5.00m x 5.00m depending on configuration

X-ray Generator	
Nominal energies (voltage)	Switchable from 200kV up 320kV
Beam direction	Vertical-centric view (top to bottom)
Typical dose per scan (drive through)	0.15 µSv per inspection
Steel penetration (mm)	Standard: 65mm Typical: 70mm
Resolution (wire detection)	Standard: 0.75mm Typical: 0.5mm

Installation Data	
Operating temperature	-20° to 40°C (-4° to 104°F)
Relative humidity	Up to 95% non-condensing
Power supply	200-230VAC. Single phase 50/60Hz 30 Amp
Power consumption	Approx 9.5kW
Storage temperature	-20° to 60°C (-4° to 140°F)

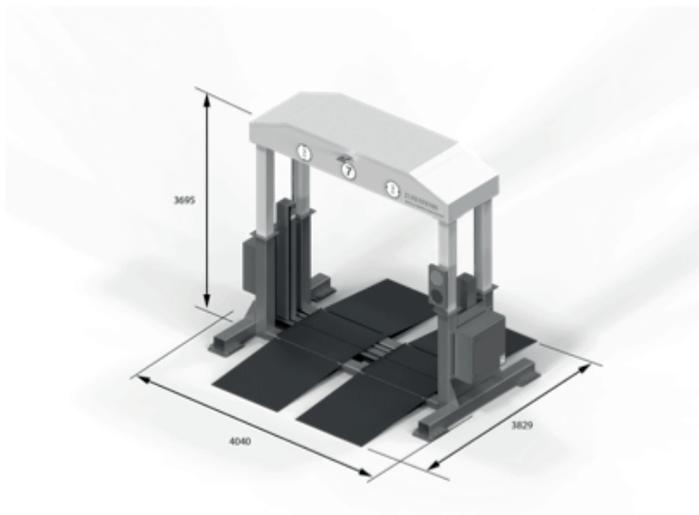
## FEATURES

Standard Features
Organic/inorganic imaging
Colour & black/white imaging
High pen function
Pseudo colour
Auto image archiving
Print image capability
Material discrimination
Reverse monochrome
Real time image manipulation
Continuous zoom
Image review
Speed counter

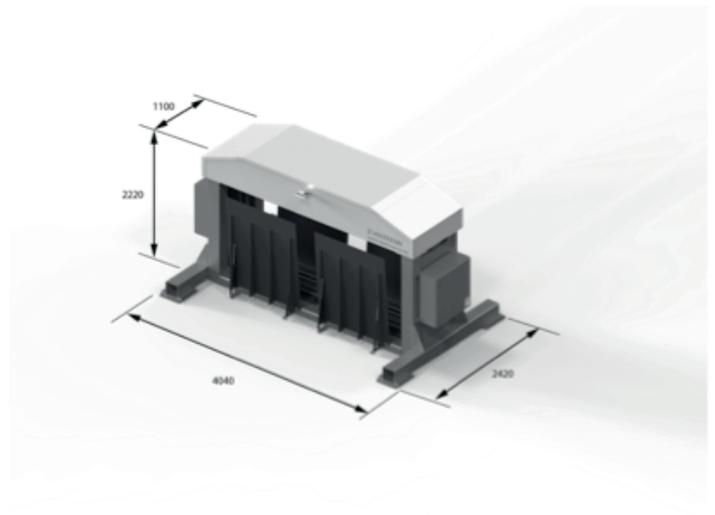
Optional Features
CCTV camera system
OCR & NPR readers
Conveyor system (unoccupied scanning)
Remote inspection
Traffic signals
Traffic barriers
Cold & hot climate kits
Operator control pod

## HEALTH & SAFETY

In compliance with ANSI 43 17 (Radiation Safety for personnel security screening systems using X-ray)  
 CE – in compliance with guidelines 2004/108/EC, 2006/42/EC, 2006/95/EC



Operational footprint



Transportation footprint

## INSTALLATION AND TRANSPORT OPTION

The 2X-300 has been developed for ease of transportation and installation. The system is designed to fit into a standard 20ft ISO container that has been adapted to take the system fully built. Wheels are fitted to allow the system to be moved on rails out of the container and then moved into the operating position. The top section is then lifted by forklift or crane to the correct height and pins are then inserted (option for hydraulic feature is also available). The spring loaded ramps on each side are then manually lowered into place. Power and data cables are then connected. The system is then ready for operation.

All traffic and indicators i.e. lights, speed indicators and sensors are fitted to the base machine to simplify the installation.

### Options

The container used for transportation is designed to be adapted for use as a control room. Once the system has been removed from the container, a rear internal partition is moved into place to allow a control room to be created, to support 2 operator work areas and image station, including print and remote monitoring facilities. The control room will be equipped with lighting, heat and aircon.

Exclusion area fencing may be required to meet local regulations and specific customer site operations. Metal over height structures and vehicle automated barriers can also be provided. Cable connections are pre installed in the system control panels and the software is design for remote operation for these functions.



The information and photos are indicative and for information only. Due to continual engineering development of our products 2X Systems Ltd reserves the right to amend the specifications without notice