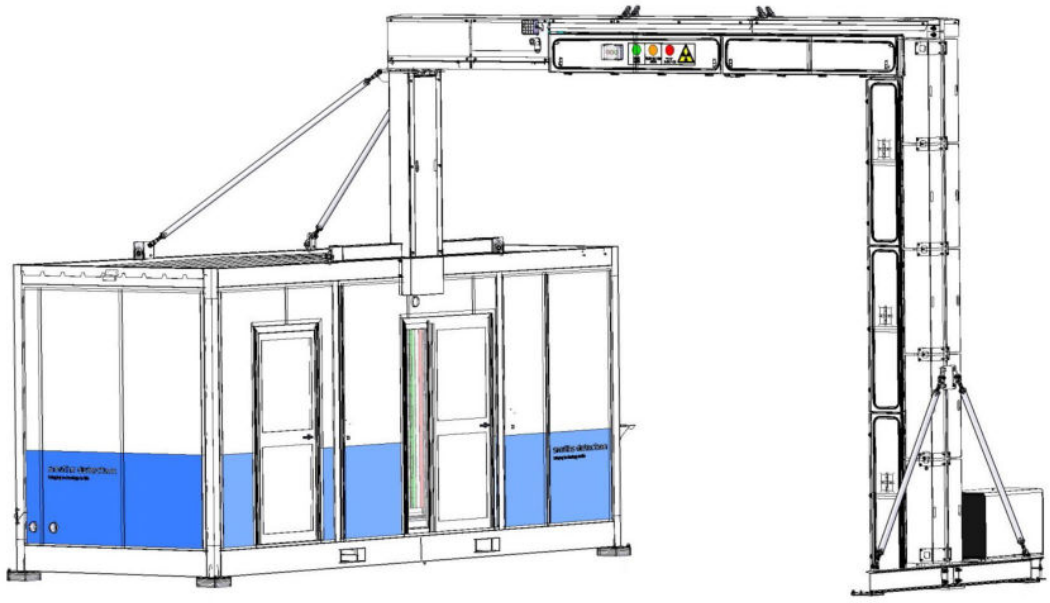
smiths detection

HCVP™ 2 Series

COMPACT, HIGH ENERGY, PASS THROUGH X-RAY SYSTEMS FOR TRUCKS, CONTAINERS AND AIR CARGO



Feature Highlights

- For inspecting loaded trucks, containers and vehicles at entrances to Ports, Airports and Border crossings and Critical Infrastructure sites
- High inspection rate with minimal system operators— up to 120 vehicles per hour
- Steel Penetration ≥ 320mm
- Small footprint with low X-ray emission
- ViZual technology using 4 colour discrimination provides a high-performance imaging capability with organic/ inorganic substances discrimination.

The HCVP series of pass through screening systems is designed to optimize security checks at ports, airports, border crossings and critical infrastructure areas. It reduces the need for manual inspection of trucks, containers and vehicles by verifying manifests and checking for threats such as explosives, narcotics, weapons of mass destruction (WMDs) and contraband.

High performance imaging equips operators with detailed radioscopic images of the container or vehicle and its contents.

Additional capabilities offered by the HCVP 2 series model include discrimination of organic and inorganic substances, delivering rapid and reliable results in a single scan.

Designed as a standalone unit, the HCVP systems have minimal external infrastructure requirements. They offer ease of operation and a small footprint, yet meet the most demanding, international security screening standards.

Additional options include integration with backscatter technology, providing four different image views to give the user a complete overview of the target vehicle or container under inspection. Harnessing the power of backscatter technology, Smiths Detection's high-energy cargo and vehicle inspection systems can accurately reveal small quantities of hidden contraband, such as narcotics.

General Specifications	
Scanning principle	Pass through X-ray system with target vehicle driven through at slow speed

System specifications	
Scanning height	From 0.15m (lowest point) to 4.70m (0.49 - 15.42ft)
Max. inspected vehicle dims. [W x H]	3.50 x 4.70m (11.48 - 15.42ft)
Recommended crew	1 system operator, 2 image operators
Operating temperature	-20 to +40°C [+ 55°C optional] (-4 to 109.4°F [131°F optional])
Relative humidity	Up to 95%
Electrical consumption	Standard 30kVA + 12 kVA (if operator's bungalow)

Computer system	
DaiSy workstation	Two image analysis workstations equipped with one 24''flat LCD screen each. Contrast and edge enhancement, filters, marks and annotations, histogram equalisation, review of stored images and manifest data for comparison, image conversion to standard formats, objects measurement
Database workstation (DBW)	SQL database
Data storage	RAID 5 – up to 60,000 datasets
Operating system	Windows 10, Windows Server 2016

Radiation protection safety	
Surveillance	Video surveillance, 3 colour CCTV & infrared barriers
Markings	Three colour indicator, sirens & regulatory displays
Speed	Speed display in standard
Regulations	In compliance with WHO, ICRP 103, EU and ANSI regulations

Health & security	
Dose in the environment	Average <0,5µSv/h <1mSv/an
Dose rate in operator room	Average <0,5µSv/h <1mSv/an

Options	
ARD™	Automatic radioactive material detection (gamma / neutron)
OCR-ALPR	Automatic license plate recognition
OCR-ACCR	Automatic container code recognition
Operator bungalow	Air conditioned
DaiSy image analysis	Additional station(s) with 24in LCD flat screen
DaiSy check-in	Station(s) with manifest and data recording scanner
DaiSy re-check	Station(s) for second analysis and decision
ClearCab	Scan of the driver cabin, compliant with ANSI N43-17 2009
iCmore	Automatic Target Recognition
Radiation protection	Concrete walls
Stop and go	Option can be provided, if enforced by local regulations
Remote Maintenance Tool	Remote maintenance access to HCVP

Configuration	HCVP Z60 -D5	HCVP Z60-DM
Nominal energy (MeV)	4/6	4/6
Steel penetration (mm)	≥320 @ 7km/h	≥320 @ 7km/h
Throughput (trucks/hour)	120	120
Standard scanning speed	7 (km/h)	7 (km/h)
Scattered dose for the driver cabin	≤ 200nSv/scan @ 7km/h (without Clear Cab)	≤ 200nSv/scan @ 7km/h (without Clear Cab)
Absorbed dose per scan in fret	≤ 5µSv/scan @7km/h	≤ 5µSv/scan @7km/h
Safety area (L x W x H)	50 x 11,5 x 6m (without roof)	45 x 11,5 x 6m (without roof)
Material discrimination	Yes	Yes
Scan of driver cabin	Optional (with ClearCab fitted.)	Optional (with ClearCab fitted.)

Backscatter Options	UVX	EVX
Energy	225 keV	225 keV
Backscatter view	1 Under Vehicle view	2 Edge Vehicle views
Material discrimination	Organic material	Organic material
Scan of driver cabin	Standard	Standard
	HCVP 360 (HCVP + UVX + 2 EVX)	
Max. absorbed dose for the driver	≤250 nSv/scan @ 5km/h	
Power Supply	150A-400V – 3 phases-50/60 Hz	

For product information, sales or service, please go to www.smithsdetection.com/locations

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