

Portable X-ray detection Solution Catalogue



Discover the invisible

VCsecurity is a division of VisiConsult X-ray Systems & Solutions GmbH, a leading manufacturer of digital X-ray solutions with over 15 years' experience in supplying portable systems for security applications. Based on hundreds of supplied systems globally the systems provide a versatile and easy to use software, durable hardware for operation at any kind of weather conditions and full robot integration.

Our goal is to provide the operators with better tools that are more effective and provide a safer operation. To accomplish this, we look at the real-world problems that security officials deal with in the field. The systems are completely designed and manufactured inhouse to ensure highest quality and performance in cooperation with leading specialists from the field. VCsecurity offers a solution from operators, for operators.

- > IED & EOD
- > Special Forces
- > Counter Surveillance
- > Border Control
- > Customs
- > VIP Security



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CR Plates

The main advantages of CR35+ imaging plates are their low weight, varying sizes, flexibility and accuracy.

In combination with a battery-operated X-ray source they deliver unmatched mobility. The flexible IP-plates can be wrapped around objects or squeezed into small gaps to achieve images without interferences.

In case of high energy applications CR plates can also be combined with constant beam tubes in higher kV ranges.

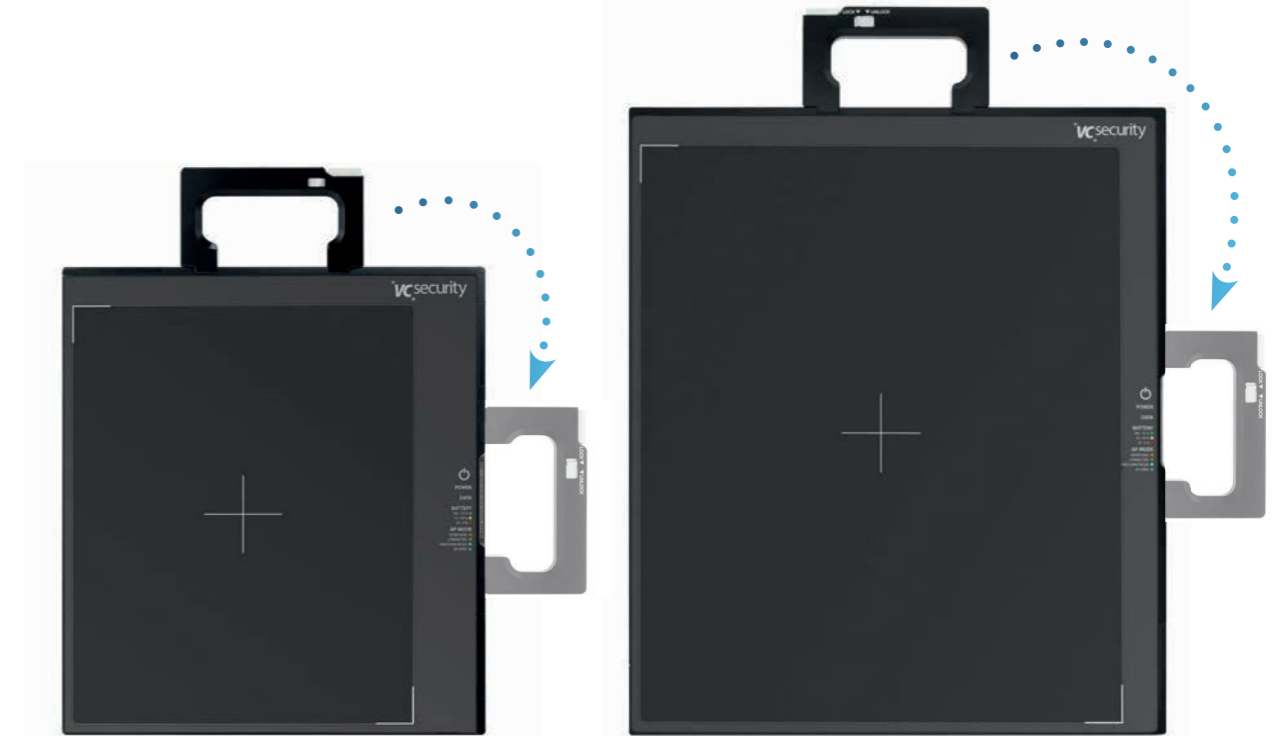


Detectors

Flat panels offered by VCsecurity have many advantages like a high resolution and fast setup time. Below you find technical specs and page 5 lists up the differences between DR2532 and DR3643.

Sensor	Wide Quantization Depth with Low Noise Level
Panel	TFT with photodiode
Scintillator	GOS (CsI optional available)
Greyscale	16bit
Mechanical	Stable and Reliable AED Function
Detachable handle	Portrait and landscape (two sides)
Communication	High speed wireless transmission with 3 antennas
Status Display	Wi-Fi, LAN and battery indicator
Wireless Data I/F	802.11n/ac Wifi standard at 2.4 & 5 GHz
Fast Initial Setup Time	15 seconds only
Image Acquisition Time	Wired: 1.5 s / Wireless: 3 s
Environmental	Excellent Temperature Stability
Ingress Protection	Water resistant and dustproof (IP67)
Operating Environment	-20°C - +50°C
Drop Testing	1 m height
Power	Long Battery Life
Battery	Rechargeable Li-Ion battery (hot-swappable)
Battery Charger	External two bay charger 100 – 240 V AC 50/60 Hz
Operating Time	8 hrs. capturing / 9 hrs. standby

Options of image sources Detectors & CR Plates



DR2532

DR3643

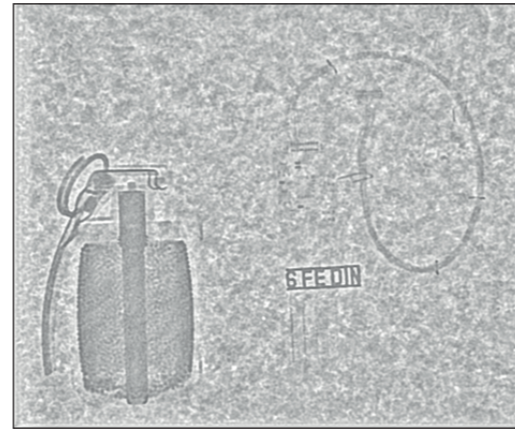
Pixel Matrix	2048 × 2560 pixels	2560 x 3072 pixels
Pixel Pitch	124 μm	140 μm
Resolution	4 lp/mm	3.5 lp/mm
Size	322 x 355 x 17 mm (10" x 12")	400 x 470 x 17 mm (14" x 17")
Imaging Area	253.95 × 317.44 mm	358 x 430 mm
Weight	2.7 kg (6 lbs.)	4.2 kg (9.3 lbs.)
Dead Space	8.5 mm bottom and right side	8 mm bottom / 10 mm right side



High Energy X-ray sources...

XRS-4

The XRS4 is a 370 KV pulsed, battery powered source, used by security forces, mainly for munition inspection to penetrate thick objects indoor or outdoor.



Exposure through 141 mm solid concrete curb with High Energy by Evo source

Smart Evo

The constant beam X-ray source allows higher energies and longer exposure times to penetrate even thick materials.

- Penetration of up to 60mm steel wall thickness
- High energy X-ray source with 300kV



...standard X-ray sources...

Standard source	Weight	Dimensions	KVP	Pulse Rate	Pulses per Battery Charge
XR150	4.7 lbs. 2.1 kg	9.1" x 3" x 4.1" 23.1 x 7.7 x 10.3 cm	150	4 counts per sec.	1700 counts
XR200	10.7 lbs. 4.8 kg	10.7" x 4.3" x 5.8" 27.2 x 10.8 x 14.8 cm	150	10 pulses per sec.	6000 pulses
XRS-3	11.8 lbs. 5.3 kg	14.2" x 4.3" x 5.8" 36.1 x 10.9 x 14.8 cm	270	15 pulses per sec.	5500 pulses



Perfect images with our X-ray sources & CR35+ scanner

...and CR35+ scanner!

The CR35+ scanner is proven in field and comes in a customized transport case with drawers for easy handling or a portable case with wheels and handle. The deep integration into the Xplus Security software allows easy swapping with the DR models and image representation in real-time. For large objects VCsecurity offers a 4-plate holder and 9-plate blanket that allows to cover a large area in a single shot.

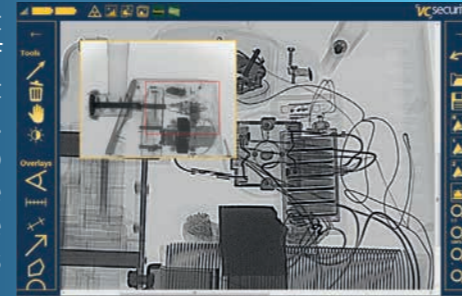


NEW Software

Field-oriented with many features

New developed IED Inspection Software

The core of every system is our in-house developed image enhancement system Xplus Security that constantly sets new standards. Over 25 years of experience in industrial and security X-ray applications and a permanent development lead to excellent inspection results and proven processes. Quality and reliability are the basic principles for all our security products to guarantee maximum operator safety. Advanced features like automated image enhancement, extensive measurement, mission logs and many more are performed by a single tap on the touch screen of the ruggedized notebooks or tablets.

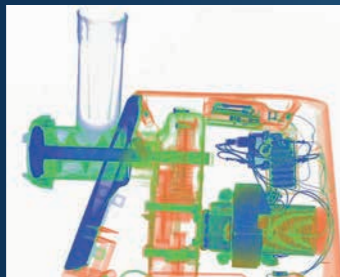


- High usability due to intuitive interface, responsive design, user feedback
- Real system stability, because our sophisticated IT team is passionate
- Covers wide range of tasks: Image exposure, editing, analysing and documentation

Some outstanding features

Material Discrimination

Material discrimination assists to differentiate between organic and inorganic materials. Colored representations allow fast classification to detect explosives, drugs, etc.



One Click Image Enhancement Filter

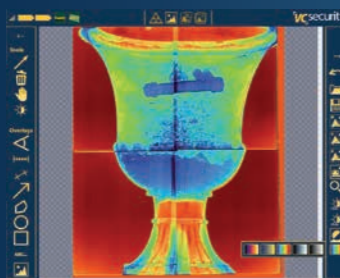
Our image enhancement filter adjusts digital images so further image analysis are possible. Discover more with our image enhancement filter that is easy to use.



Before and after image enhancement

Stitching

Advanced but user friendly manual and automatic stitching feature for large objects inspection.



Images Gallery

All images and X-ray parameters are saved automatically, complying to military standards.



Mobile X-ray inspection by Robot Integration

The robot module allows a deep integration of the Security software into bomb disposal ROV'S from all the leading companies like Telerob, Endeavor (Flir), Reamda and others. The X-ray control and image display is directly embedded in the robot remote and monitor. Long range Wi-Fi allows inspection of suspicious objects from a safe distance. Due to standardized holder mounts a broad variety of Flat Panel Detectors or CR-plates can be used.

- › Integration with the leading robot models
- › System embedded into the robot remote and monitor
- › 3D image option
- › Accessories like C-Arm available (see right image) or chassis mount option (left image)



Exclusive integration with Telerob robots



Accessories Top your package of

Notes

Communication Options



Handheld transmitter

Small and portable transmitters for quick tactical short-range operations (up to 400m).

eBox

Wireless, wired or hybrid communication for up to 1,500m with optional repeater.

Transportation Options



Backpack

All main system parts packed in a tactical 10-15 kg backpack.

Hard Case

Shockproof, waterproof and dustproof, therefore extremely portable and robust case.

Robot Accessories



C-Arm

Versatile accessory with source and panel mount.

Panel Case

For direct connection with the robot arm.

HOLDERS AND Cables



Detector holder

Easy to handle holder for safe vertical positioning of the detector.

Cables

Operation cables with rugged connectors. Extensions up to 200m or more available.

Series of horizontal dotted lines for taking notes.



Specifications can vary depending on X-ray equipment. Solutions can be customized in case of special requirements.

More information you can find on

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