

Portable X-ray Inspection Solution Catalogue



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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 the detectors.

Sensor	Wide Quantization Depth with Low Noise Level
Panel	Amorphous silicon (a-Si)
Scintillator	GOS
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 (optional)
Enviromental	Excellent Temperature Stability
Ingress Protection	Water resistant and dustproof (IP67)
Operating Enviroment	-20°C - +50°C
Drop Testing	1 m height
Power	Long Battery Life
Battery	Rechargeable Li-Ion battery
Battery Charger	External charger 100–240 V AC 50/60 Hz
Time	Up to 8 hrs.

Options of image sources **Detectors & CR Plates**



1012-V

Pixel Matrix	2304 x 3072 pixels	2048 x 2560 pixels	
Pixel Pitch	75 μm	124 μm	
Resolution	6.6 lp/mm 4 lp/mm		
Size	208 x 257 x 27.5 mm (7" x 9")	322 x 355 x 17 mm (10" x 12")	
Imaging Area	172.8 x 230.4 mm	253.95 × 317.44 mm	
Weight	2 kg (including battery)	2.7 kg (including battery)	
Dead Space	3 mm bottom, 6 mm side	8.5 mm bottom and side	

0709-V

2560 x 3072 pixels	3500 x 4300 pixels
140 μm	100 μm
3.5 lp/mm	5 LP/mm
400 x 470 x 17 mm (14" x 17")	458 x 379 x 15.6 mm (14" x 17")
358 x 430 mm	358 x 433 mm
4.2 kg (including battery)	3.8 kg (including battery)
8 mm bottom, 10 mm side	4.9 mm bottom, 8 mm side

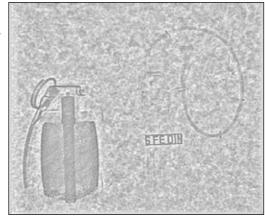
1417-I

1417-V

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 300 kV



...standard X-ray sources...

Standard source	Weight	Dimensions			Pulses per Battery Charge
XR150-20V		10.49" x 3.54" x 4.71" 26.65 x 8.99 x 11.96 cm		10 pulses per sec.	9000+ pulses
XR200		11.95" x 4.26" x 5.83" 30,35 x 10.82 x 14.81 cm		10 pulses per sec.	6000 pulses
XRS3		14.20" x 4.26" x 7.44" 36.07 x 10.82 x 18.90 cm	•	15 pulses per sec.	4000 pulses
XRS4		19.26" x 4.80" x 7.05" 48.92 x 12.19 x 17.91 cm		9 pulses per sec.	3000 pulses
	14	1300			
		200	M	3	

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 VCsecurity 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.

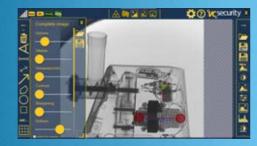




Upgraded intuitive SoftwareField-oriented with many features

Upgraded Inspection Software

The core of every system is our in-house developed image enhancement system 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. Quality and reliability are the basic principles for all our security products to guarantee maximum operator safety. Advanced features like automated image enhancement, 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 passionated
- 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)



Accessories Top your package of

Notes

Communication **Options**



Transportation Options



Other Accessories



(1) eBoxlight

Wireless, wired or hybrid communication for up to 1,000m with optional repeater.

(2) Handheld transmitter

Small and lightweight radio transmitters for rapid tactical operations.

(3) Backpack

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

(4) Hard Case

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

(5) Dual Energy Filter

Attachable on X-ray source for material discrimination.

6 C-Arm for Robot

Versatile accessory with source and panel mount.

(7) Detector holder

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

(8) Cables

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



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

More information you can find on

vc-security.net

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