



VShield DR and CR35+ bundle Technical Specifications

VShield DR and CR35+ bundle

The main advantages of CR-plates are their low weight, varying sizes, flexibility and accuracy. In combination with a battery-operated X-ray tube this results in an unmatched mobility and quality. 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. Digital images can be retrieved from the physical plates through a high definition CR scanner that allows an accuracy of up to 35 microns (Available in the special high-resolution version). The scanner is proven in field and comes in a customized transport case for easy handling.

The deep integration into the software allows direct scanning and image representation in real-time.

In case of big objects VisiConsult offers the convenient 4 or 9 in 1 plate holder that allows to cover a huge area in a single shot. The software offers a convenient stitching feature for these images.



Digital IP-Plate Processor

The Vshield CR35+ digital imaging plate processor is capable of imaging plates down to 75 μm . Which exceed other CR scanners by 25 μm . With the upgraded high definition NDT model, you can image plates down to 30 μm . The CR 35 system comes standard with its own back up battery and power supply that provides up to 6 hours of operational run time (more than 100 scans) and 12/24 VDC operation capability

General technical Data

- > Dimensions (LxWxH): 37 x 40 x 47 cm
- > Scanner Weight: 17.5 kg (38.5 lbs.)
- > Laser spot size: 50 μm
- > Plate resolution: 100 μm (75 μm on demand)
- > Grey levels: 16-bit, 65.536 grey levels
- > Max. plate size: 35 cm wide, length virtually unlimited
- > Electrical: 100 – 240 VAC / 50 – 60 Hz ~ 140 W
- > Temperature range: 10°C to 35°C

ICU Unit CR

- > Power Supply: Operating CR scanner by
- > AC mains / vehicle power supply / battery pack
- > Battery pack: BB 2590/U battery
- > Capacity: 9.9Ah in 24V Mode; 19.8Ah in 12V Mode
- > Weight: 1.4 kg (3.1 lbs)
- > (More than 100 imaging plate scans during 6 hours of operation)
- > Size: Length: 112 mm (4.4") Width: 61 mm (2.4") Height: 127 (5")

Image plate

- > Size: 35 cm x 43 cm / 4 pcs included
- > Thickness / weight: < 2 mm / 200 g
- > Life-cycle: more than 1.000 times (depending mechanical stress)
- > Incl. 4 protection bags, color black, numbered
- > Image plate Mounting Wall board foldable (4 plates)
- > Image plate Mounting Canvas (9 plates)
- > Image plate mounting kit (rope, D rings, etc.)
- > Flexible mounting of IP-plates through Velcro cover

Accessoires

- > Transport case: Pelican case or truck mounted
- > With push loading drawer for rack system
- > Pelican case weight: 32.4 kg (71.5 lbs.)
- > Size: 45 cm x 45 cm x 57 cm
- > Full system is contained in this case
- > Cable set: Ethernet 3 m, power supply AC mains and vehicle



Vshield3643/2532 DR detectors

Model	Vshield3643	Vshield2532
Pixel Matrix	2560x3072 px	2048x2560 px
Pixel pitch	140 µm	124 µm
Resolution	3.5 lp/mm	4 lp/mm
Size	400x470x17 mm (14x17")	322x355x17 mm (10x12")
Active area	358x430 mm	253x317 mm
Weight	4,2 kg (9.3 lbs.)	2,7 kg (5.95 lbs)
Dead space	8 mm bottom / 10 mm right side	8.5 mm bottom and right side
Sensor	Wide quantization depth with low noise level	
Panel	TFT with photodiode	
Scintillator	GOS (CsI optional available)	
Greyscale	16 bit	
Mechanical	Stable and reliable AED function	
Detachable handle	Portrait and landscape (two sides)	
Communication	High speed wireless transmission with 3 antennas	
Status display	WiFi, LAN and battery indicator	
Wireless data I/F	802.11 n/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 (-4°F - +122°F)	
Power	Long battery life	
Battery	Rechargeable Li-Ion battery	
Battery charger	External two bay charger 100 - 240 V AC 50/60 Hz	
Operating time	8 hrs capturing/9 hrs standby	
Set content:	ICU WLAN, antennas, charger, cable ICU-X-ray generator, cable ICU-image detector, cable ICU-notebook/tablet Standard 50 m cable operation (Optional to increase or reduce length)	

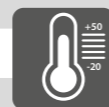
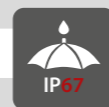


Image control unit: eBox WLAN

- > Wireless, wired or hybrid communication between notebook/tablet and detector
- > 400 m line of sight (up to 1.500 m with optional repeater)
- > 5 hrs of operation with internal battery, charging time 3 hrs
- > Unlimited operation with AC main supply and parallel battery charging
- > Integrated Li-Ion battery 15 V, 3.200 mAh
- > 802.11n WiFi standard at 5 GHz, WPA2 AES

X-ray Sources

(Compatible with all Golden Engineering and Constant Potential sources)

	GE XR 150 new version	GE XRS 3 new version
Mechanical		
External Dimensions	231x77x104mm	361x108x148mm
Weight	2,2 kg (4.9lbs) with battery	5,4 kg (11,8lbs) with battery
X-ray output		
Counts per battery charge	1.700 (5.100 pulses)	4.000 pulses
Counts per second	4 counts (12 pulses)	15 (Nominal)
Expected tube life (glass tube)	50.000 counts	100.000 counts
X-ray source size	3mm (1/8in)	3mm (1/8in)
Maximum Photo Energy	150KVP	270KVP
X-ray pulse width	50 nanoseconds	25 nanoseconds
High temperature		
High use duty cycles every 4 min	300 pulses, 1.500 counts/h	200 pulses, 3.000 counts/h
Warm up	Not required	Not required
Power		
Battery voltage	12 or 10,8V	18-20V
Battery type	Li-Ion Battery	Li-Ion Battery
Battery charging time	~ 1h	~ 1h
Current draw	9amp @ 12V	20amp @ 18-20V
Set content	GE generator, transport case, 2pcs batteries, manual trigger, cable, battery-charger, Manual	

Hand held transmitter for X-ray source

- > Designed for rapid operation of the system for wireless communication
- > Direct wireless control of all functions of the X-ray source
- > Pulse counting, rounds and delay time
- > No elevation of the x-ray source
- > Range up to 400 m line of sight
- > Operating time 4-6 hrs. with integrated battery
- > Battery charging time 3 hrs.
- > Internal battery: (Li-Ion Li-Po 7,4 volt / 350mAh)

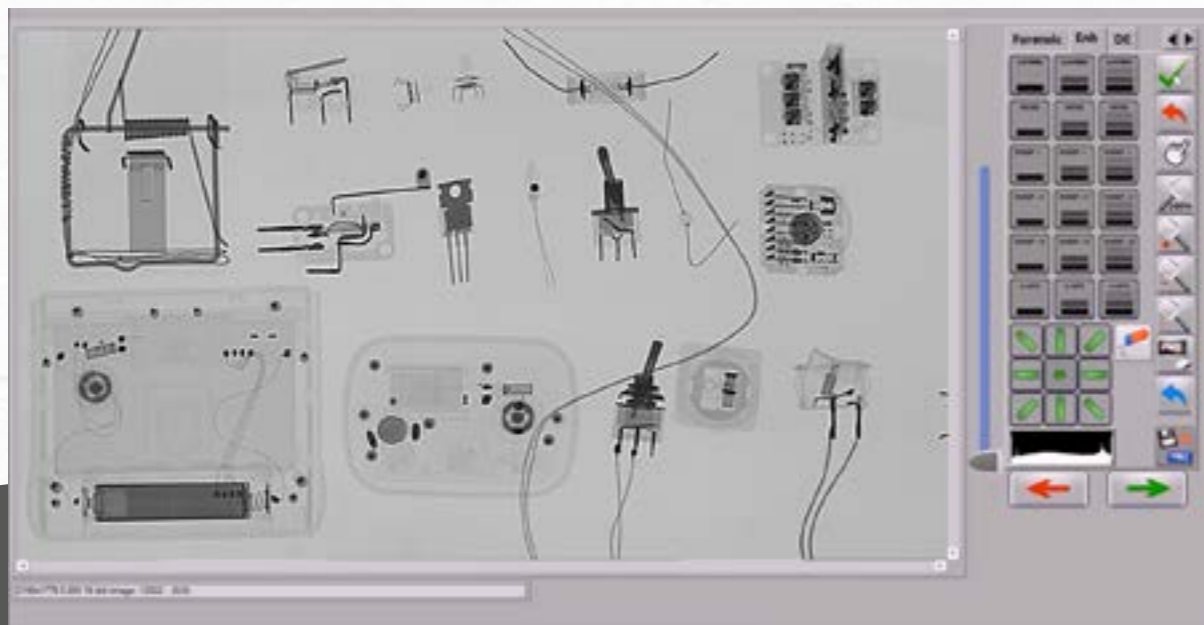


Xplus Security software

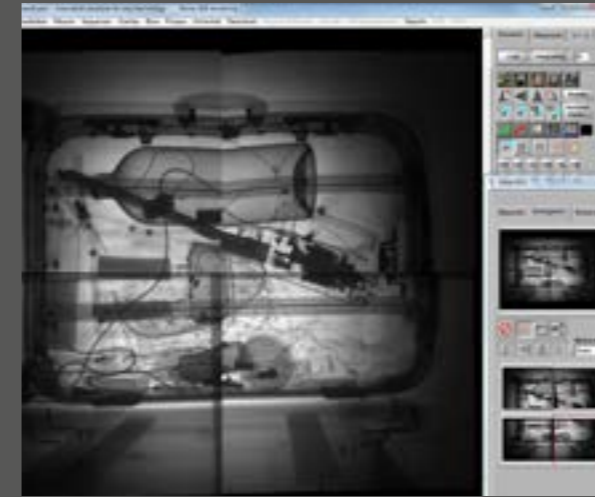
(Can be installed on several laptop or tablet models)

Main functions

- > "One Button" operation for intuitive handling
- > Stitching tool for stitching multiple images
- > Zoom-function and 1 to 1 illustration on the screen
- > High resolution and image enhancement filters for advanced visual inspection
- > Quick Enhancer applying sophisticated filters automatically
- > Advanced noise reduction, Measurement tools, Grid option, Annotations, ROI, Emboss
- > Contrast, brightness, positive and negative adjustment, Advanced Emboss function
- > Comprehensive measurement toolbox and decision-assistance functions
- > Archiving options and integrated mission log archive of relevant mission data for future reference. Mission logs can be exported through a single click
- > All images and X-ray parameters are saved automatically, complying to military standards
- > Image export in standard format (PNG) of 8bit and 16bit quality



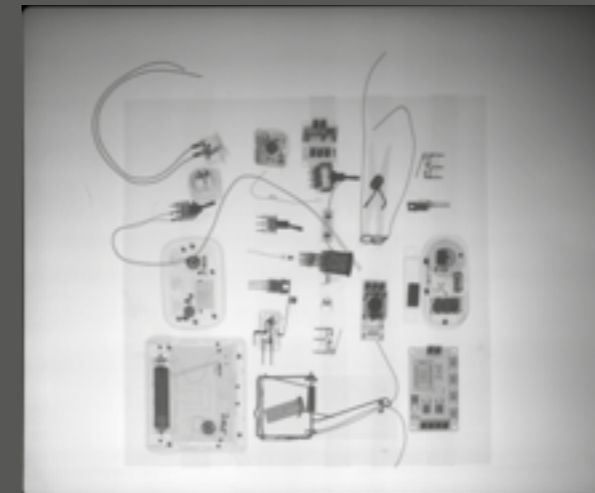
CR images



Stitched image



PVP and metal pipe bomb (filled)



IED circuit components



Meat grinder IED

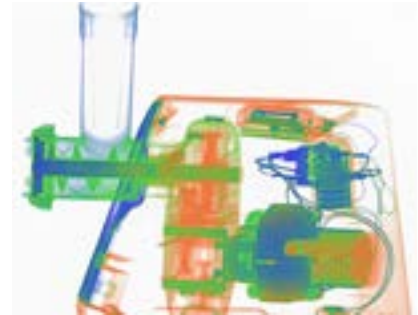
DR image



Penetration of 20mm of steel from 80cm distance with 10 pulses using DR panel and XRS-3.

Organic/Inorganic detection module

- > Material-classification through Dual-Energy filter
- > Differentiation between organic, inorganic and mixed materials
- > Sophisticated probe function that allows peeling external inorganic material and reveal the organic material behind it



Advanced Dual Energy Peeling Software

VCsecurity's advanced Dual Energy imaging software provides you the ability to „peel“ external inorganic material layers and detect the organic materials behind them. This advanced capability can help you to locate potential explosives main charges in an IED.

100m-200m fibre-optical cable on a cable drum

This network expansion kit is specially designed for our security system, lightweight, portable and rugged. Thereby this accessory is suitable for in field work, the fiber optic to ethernet converter is battery powered and integrated into the drum, no additional power supply is needed. This allows fast and independent deployment regardless of any infrastructure. It allows safe working off the distance under any circumstances.

Vshield2532 backpack option



Robot integration option



VC security

by VisiConsult

Contact us today for more information or schedule a Demo with one of our sales staff!

www.visiconsult.de/products/security for further product information.

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