

PiX 1417 DR

PORTABLE, FORENSIC X-RAY

Contact us via email or phone to find out more or schedule an in-person demo.

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INTRODUCTION

Forensic Non-Destructive Testing (NDT) using portable X-ray systems provides several significant advantages in forensic investigations:

01 Artifact Analysis:

X-rays can be used to examine the contents of artifacts, packages, or containers without opening them, preserving the integrity of the evidence.

02 Examining Burned Items:

Examine the internal structure of burned items, such as electronic devices, machinery, or containers, to understand how they contributed to the fire or how they were affected by it.

03 Identifying Accelerants:

Help detect the presence of accelerants or other substances that might have been used to start or spread the fire by revealing residues or structural changes in materials.

04 Investigating Structural Damage:

Used to assess structural damage to buildings, such as the integrity of walls, beams, and other critical components, without causing further destruction to the scene.

05 Forensic Analysis of Fire Debris:

Assist in the analysis of fire debris, revealing hidden details that can provide clues about the fire's origin, progression, and intensity.

06 On-Site Analysis:

Portable X-ray systems allow investigators to perform detailed examinations directly at the crime scene or investigation site, eliminating the need to transport potentially fragile or hazardous evidence.

07 Minimal Evidence Contamination:

Using X-rays minimizes the risk of contaminating evidence, as it is a non-contact method. This is crucial for maintaining the integrity of evidence for legal proceedings.

08 Versatility in Various Environments:

Portable X-ray systems are adaptable to different environments, from indoor crime scenes to outdoor disaster sites, making them highly versatile tools for forensic investigators.

INTRODUCTION

The PiX 1417 Forensic Solution from Pacific NDT is engineered with the end-user in mind. It meets Military Standards 810G and 461G, ensuring reliable performance under extreme temperatures, vibrations, and altitudes.

Housed in a portable and rugged Pelican case with wheels and custom foam, the system is also available in a backpack configuration. The imaging unit features an IP67-rated DR with minimal edge space, a rugged laptop/tablet, PiX Acquisition Software, a PiX Long Range Control Box, a Golden XRS source, and various accessories (bipod stand, tripod stand, etc.).

The PiX Forensic Solution operates on a built-in battery and supports both tethered and wireless modes. This system allows you to capture and display images in seconds, facilitating quick decision-making in high-pressure situations.











TECHNICAL SPECIFICATIONS / X-RAY

Power	DeWalt** 12v Li-Ion Battery
Weight	4.70 lb (2.13 kg) including
Output Dose	Avg. 3.1 mR/ count, measured 12" from source
Pulse rate	4 Counts per Second
Counts per Charge	1700 Counts (5100 pulses)
Source size	1.8" (3mm)
Max Photon Energy	150 kVp
Pulse Width	50 Nanoseconds
Beam Angle	40 Degree standard
Current Draw	6.8 Amps & increase
Max Duty Cycle	100 Counts (300 pulses)per 4 minutes
Warranty	1 Years limited parts, labor, service

^{*}Note: 20V XRS150, XRS200, XRS300 Options Also Available



DETECTOR SPECIFICATIONS / DR

Items	Unit	Spect
Sensor Type	-	TFT Array
X-Ray convertor (Scintillator)	-	Gadox & Csl
Dimension (WxLxT)	mm	400x465x17
Weight	Lbs	(6.3-11) Depending on your application, lead shielding is done
Pixel Pitch	μm	140
Active Pixel Area	mm	358.4x427.3
Active Pixel Revolution	pixel	2500x3052
Limited Resolution	lp/mm	3.57
AD Convertor	bits	16
Data Transfer Interface	-	Wireless: IEEE 802. 11
X-Ray Generator Interface	-	AED/Line Trigger
Margin of Edge	mm	Bottom: <6, Left: <12 (Optional 3mm & 8mm available)
X-Ray Energy Range	kVp	~450kVp
Battery Perfomance	-	Over 4 hours (continuous capture)
Power Consumption	W	45 (DC 12V, 3.75A)
IP Grade	-	IP67
Component	-	Battery Charger, Control Box, Power Supply