

# PX1 Handheld Backscatter X-Ray Imager



**The PX1 raises the standard on inspection technology and image processing.**

Our technology makes it easy to scan any surface in a matter of seconds and automatically enhances the image for better inspection results.

With 140 keV and our optics, seeing through more material with greater depth is now possible.

**You have the mission,  
We have the vision**

As previously mentioned, we have created the most powerful and portable non-intrusive handheld inspection tool on the market.

Our goal is to empower global security and law enforcement agencies by amplifying their vision beyond the naked eye and allow them to see through virtually any surface layer to detect dense organic and inorganic materials that may pose a safety and security concern.

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## X-ray Performance

- X-ray source: 140kV, 10 Watts
- Penetration: 7 mm steel thickness or equivalent
- Scan Speeds: 12.5 cm (5") - 77 cm (30") per second
- Scan width: 260 mm wide at 150 mm from the front of the instrument

## Physical

- Size: Length: 8.3" (211 mm) / Width: 11.1" (282 mm) / Height: 7.3" (185 mm)
- Weight: 9.75 lbs. (4.3 kg)
- Touchscreen Size: 7" Diagonal (178 mm)
- Touchscreen Resolution: FHD display (1920 x 1080)
- Touchscreen Brightness: 700 nit
- Touchscreen Contrast Ratio: 1500:1
- Connectivity: 4G LTE, WiFi / Bluetooth, USB 2.0
- Visual Camera: 13MP camera
- Flashlight: Dual LED
- Guide Lasers: Dual vertical line lasers
- Operational Mode: Single-hand or Dual-hand operation
- Additional features: 4 multipurpose buttons for touchscreen free operation without ever needing to remove hands from handles

## Operational/Storage characteristics

- Battery Life: Up to 6 hours
- Operating temperature: -20° Celsius to 60° Celsius
- Storage temperature: -40° Celsius to 70° Celsius
- Operating Altitude: Up to 4,500 meters
- Ingress Protection Rating: IP54
- Humidity Rating: 5 to 95%/4

## Software Features

- Operating System: Android
- Supports Over-the-Air updates
- Complete List of Language support
- Image Analysis tools: Automated Dynamic contrast, Image Stitching, 8 images wide, Colorization using quick access buttons
- Image organization: Images, both visual and x-rays, can be organized into collections. Tags can be assigned to images for later reference
- Quick access menu: Commonly used features are on screen and accessible without the need to remove hands from the handles
- Real time Remote Connectivity to any device (PC, Mac, iOS, and Android) to view Field Operator scans in real-time from an Image Analysis Room, Command Center, etc.
- Lead Detection: Lead shows as a bright anomaly in images.

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## Radiation & Certifications

- Radiation Dose to the Operator or Bystanders. Proper Shielding used in the design of the PX1 results in low/negligible radiation leakage at 10  $\mu\text{R/h}$  (0.1  $\mu\text{Sv/h}$ ).
- Fully CE Compliance
- Radiation Safety standards met: ANSI, ICRP, NCRP, and Euratom

## Standard Accessories

- (2) 7300 mWh rechargeable batteries
- External charger with power adapter
- Shoulder strap with quick-release
- Dual wrist straps with quick-release
- Carry-on sized rugged water-proof transport case.

## Modular Transmission Panel:

Integrable with the MTP+ wireless transmission panel. Ability to adapt the transmission panel detector wirelessly to view X-ray images based on transmission and back scatter in the same scanning process

## User Interface & Experience End-User Oriented has a new meaning at Videray

The PX1 is completely user-friendly and ready to help achieve the most challenging missions. From our beautifully crafted device, to the ergonomic design and small footprint, the PX1 guarantees a user experience second to none.



# PX1 Handheld Backscatter X-Ray Imager



## With More Power Comes Better Performance

- 140 KeV / 10 watts / 0.07 mA power source
- Deepest surface penetration in the market
- Patented Wide Infinity Detector

## End-User Oriented

- 7" Super bright, Anti-glare touchscreen
- Intuitive User Interface
- Left and right-handed ergonomic operation

## Safe & Durable

- Lowest radiation exposure meeting multiple Radiation standards
- IP54 Dust and Water Ratin

## Stay Connected Stay Updated

- Free Over-the-Air (OTA) updates
- Easily share scans wireless to other devices

## Scanning Up to 30 cm per second

15 cm per second is the Nominal Scan Speed for a 1:1 Scan image to Scan Target Object Rat

## Imaging & Analyzing:

### Superior Imaging Filter

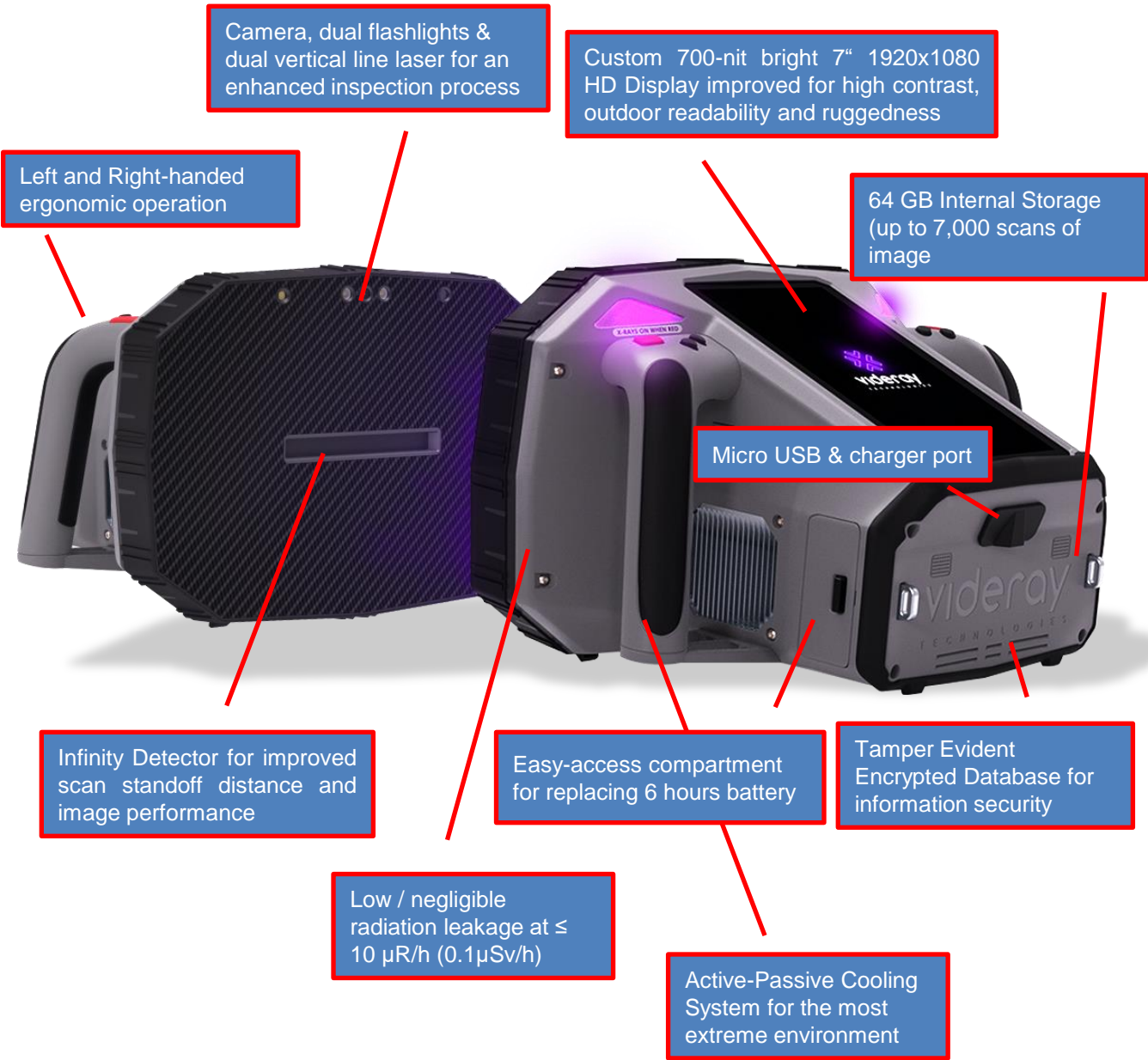
Providing more detail to the Operator regarding Anomalies & Suspect Items detected

## Market leading steel penetration

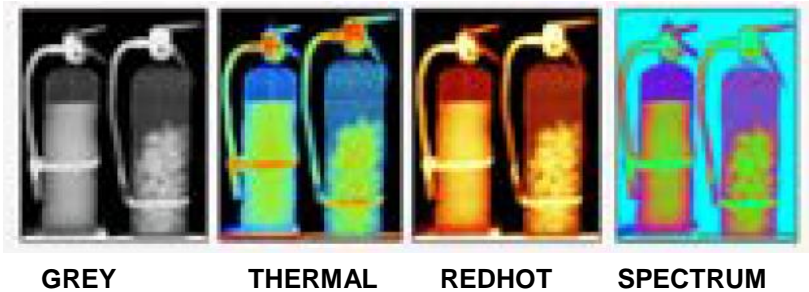
- See through up to 8mm of steel



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## NORM SUSPECT





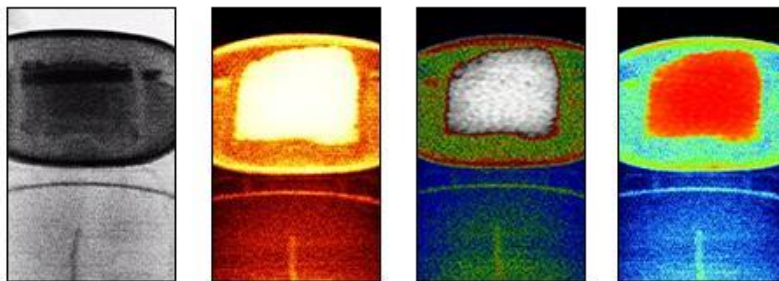
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## Imaging & Analyzing, made easy

The PX1 can be comfortably used in single or dual-handed operations. The device has 4 buttons on the handles and an embedded 7-inch anti-glare touchscreen.

A diverse set of imaging filters is included to better visualize and identify anomalies and potential security threats



Quality & Safety

**Best optics**

**Higher resolution**

**Lowest leakage radiation**

PX1 optics makes it easy to thoroughly scan any surface quickly, analyze images, and dispose scanned objects without worry of high doses of radiation to oneself.

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Detector & Image Processing

## **Bigger detector means better results**

PX1 Infinity detector allows the end-user to image faster with greater scan standoff distances on larger objects to quickly reveal potential security threats without compromising a high quality image definition.

The bigger our detector is,

The higher our x-ray detection efficiency

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The lower user radiation exposure

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For complete connectivity, we have integrated the latest technologies.

## **Connectivity & Cloud Stay connected Stay updated**

The PX1 has the capability to connect via cellular data, Wi-Fi, Bluetooth, GPS, and USB.

It allows over-the-air updates so you always enjoy the most updated operating system and features.

Complete connectivity ensures that all scans are always backed up and viewable remotely in case a secondary image analysis is needed.

