HBI-120 Handheld X-Ray Imager

- Border Security, Counter-Smuggling, Narcotics Interdiction
- The most advanced x-ray imaging system of its kind
- Quickly and cost-effectively reveal concealed narcotics, currency, and other contraband
- Scan through steel, aluminum, wood, sheetrock, rubber

**HBI-120 Specifications**

- **Size and Weight**: 9 x 8½ x 6½ in (24 x 22 x 17 cm), 8.1 lbs (3.7 kg)
- **X-Ray Generator**: 120 keV, 5 W shielded x-ray generator; shielded scanning x-ray beam optics
- **Display**: Transflective 720 x 1280 pixel color touchscreen LCD
- **Scan Speed**: 6–12 in (15–30 cm) per second for optimal image quality
- **Batteries**: Rechargeable Li-ion battery packs; 4-hour battery life with typical duty cycle
- **Operating System**: Android™ OS
- **Connectivity**: WiFi; Bluetooth™; USB
- **Data Storage**: >10,000 scans
- **Data Management Software**: Image comparison; image colorization; edge enhancement; contrast enhancement

**Standard Accessories**

- Lockable waterproof case with wheels
- Multi-position adjustable safety strap
- 110/220 V AC battery charger and spare battery pack
- Quick Start Guide; User Guide; Electronic training materials
- 4 and 6-bay battery chargers
- Guide wheels
- Ruggedization Kit

**Operating Conditions**

- Temperature: –4 to 140 °F (–20 to 60 °C)
- IP54 rated splash and dust proof; CE

**Penetration**

<table>
<thead>
<tr>
<th>Type of Material</th>
<th>Thickness in Millimeters</th>
<th>Thickness in Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>3.1</td>
<td>0.12</td>
</tr>
<tr>
<td>Aluminum</td>
<td>14.0</td>
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</tr>
<tr>
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<td>16.2</td>
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</tr>
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*The above values are general guidelines. Variations in material composition will effect actual penetration capability.*

**For more information or onsite demonstration contact:**

HBI-120 penetration is dependent on several variables, including distance from scanned object, density & thickness of the material being scanned, and the density and thickness of the contraband. In general, the less-dense the material being scanned, the greater the depth of penetration, and the farther you can be from the scanned object.

**Safe to Operate**

The HBI-120 is not designed to scan people. Do not point the unit at yourself or anyone else, and keep your hands away from the front of the unit during operation.

When used in accordance with manufacturer’s instructions, user exposure when operating the scanner in typical duty cycle of 25 hours per week would be 20-35 mrem per year. US guideline for members of the general public is 100 mrem annually from non-natural sources of radiation. So, in proper use, the radiation exposure from the HBI-120 is a fraction of that allowable.

When scanning, the HBI-120 emits a pencil beam of x-rays that sweep across the face of the imager 150 times per second. An exclusion zone of 1-meter (3ft., 3in) from the front of the instrument provides more than adequate protection for members of the general public.

In comparison:

- Typical exposure from flying in an airplane for 1 hour is ~0.5 mrem (0.005 mSv).
- Flying 30,000 miles per year would result in an annual exposure of 25-30 mrem (0.25-0.30 mSv).
- A typical chest x-ray exposes a patient to ~6 mrem (0.06 mSv) of radiation.
- A typical banana contains ~45µg of 40K (a potassium isotope).
- Eating a banana every day for one year would result in ~3.6 mrem (0.036 mSv) exposure.

For more information, ask your local representative for a copy of the HBI-120 radiation safety profile and guidelines.

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www.dael.com/en/security
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Contraband Cannot Hide

HBI-120 - A Game-changer for Law Enforcement

The Viken HBI-120 is a rugged, handheld x-ray imager that enables users to quickly and cost-effectively find concealed narcotics; cash, fraudulent payment cards, and other monetary instruments; bulk explosives; and other contraband through automotive body panels, upholstery, drywall, and a wide variety of other materials.

The HBI-120's unique design and simple Android™ user interface enables law enforcement, customs and border patrol officers, and security forces to quickly and easily locate concealed threats and contraband in motor vehicles, ships and watercraft, aircraft, steel drums, trash receptacles, mailboxes, abandoned bags, and countless other locations.

Weighing only 8.1 lbs. (3.7 kg), the HBI-120 scans objects using a miniaturized, 120 keV x-ray generator that produces a raster-scanning pencil beam of x-rays. As the HBI-120 is moved over the object, a scanned x-ray image of the object is displayed in real-time on HBI-120's high-resolution LCD touchscreen and is simultaneously saved in both tiff and jpeg format in the instrument's memory.

Whether your focus is on Customs and Border Protection, international, regional or local counternarcotics, highway drug interdiction, or tactical operations associated with the execution of search warrants, the HBI-120 x-ray imager provides you with “x-ray vision” to find hidden contraband in vehicle concealments, inside walls and HVAC ducts; above ceilings and below floors; in airplanes and boats; and in various consumer and industrial products from fire extinguishers and air compressors to animal feed. X-ray scans taken with the HBI-120 identify organic anomalies in real time, providing officers and agents the opportunity to seize concealed contraband with unprecedented speed.

• Borders and Checkpoints
• Drug Interdiction and Counter-Smuggling
• Commercial and General Aviation
• Correctional Facilities
• Counter-Intelligence and VIP Security

• Perform searches faster and more cost-effectively
• Non-destructive, non-invasive scan reduces damage liability

For a selection of public video footage of the HBI‑120 in action, click or scan this QR Code:

Contact us to request access to private video archives

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