

HBI-120 Specifications

Size and Weight	9 x 8½ x 6½ in (24 x 22 x 17 cm) 8.1 lbs (3.7kg)
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	Image comparison; image colorization; edge enhancement; contrast enhancement Heuresis Data Management Software for PC.
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
Optional Accessories	4 and 6-bay battery chargers Guide wheels
Operating Conditions	–4 to 140 °F (–20 to 60 °C) IP54 rated splash and dust proof; CE

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.



HBI-120 Penetration

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.

Type of material	Thickness in millimeters	Thickness in inches
Steel	3.1	0.12
Aluminum	14.0	0.55
Concrete	16.2	0.64
Carbon Fiber	34.5	1.36
Plastic	55.0	2.17
Drywall/Sheetrock	30.2	1.19
Wood	81.9	3.22
Ceramic Tile	10.8	0.43
Rubber	55.0	2.17

*The above values are general guidelines. Variations in material composition will effect actual penetration capability.



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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 - A Game-changer for Law Enforcement

The Heuresis 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 6.6 lbs. (3 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.

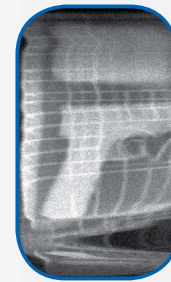
- Borders and Checkpoints
- Drug Interdiction and Counter-Smuggling
- Commercial and General Aviation
- Correctional Facilities
- Counter-Intelligence and VIP Security
- Perform searches faster and more cost-effectively
- Non-destructive, non-invasive scan reduces damage liability

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

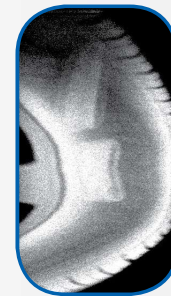


Contact us to request access to private video archives

Contraband Cannot Hide



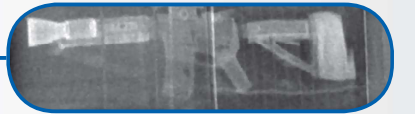
Cash/pistol hidden in air cleaner



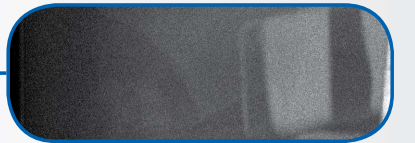
Narcotics mounted in tire



AR-15 hidden under rear bench seat



Narcotics hidden inside door



The HBI-120 revealed this hoard of cash hidden inside of a vehicle's quarter panel. The trim and speaker were then removed to retrieve it.



The HBI-120 revealed an anomaly beneath the seat of this vehicle. A kilo of marijuana was located in an engineered "trap" below the seat.