DigiRad
digital radiography

Portable X-ray Solution in Digital Security Inspection

Portability: 100% operated with batteries and wireless
First portable system totally free of cables
Unique case for easy transport and field design with working components in hard conditions

Latest Technology: Wireless x-ray flat panel detector with maximum resolution for small object detection and the best automatic image quality with minimum noise and maximum contrast

Designed for maximum operator safety: Safe distance with only one approach. Low doses with short exposures that assures maximum operator safety using 100m operation distance

Advanced software with latest features: Resume experience in developing digital radiography applications in the last 15th years. Incorporating:

- **Automatic setup** for instant images on screen in < 5 sec (variable time depending of wireless distance)
- True Plug&Play detector with a set of valuable automatic security software features
- Plug&Play advance security features with High Resolution images using a **Leader-in class 100 µm pixel** pitch detector
- Wide centered and thinnest 35cm x 43cm x 15cm Detector image area
- Direct deposition CsI:Tl, for excellent image quality
- **Wireless detector** 802.11ac with wifi built-in
- **Auto Trigger** & Compatibility with X-Rays CP & Pulsed Real steel penetration of 15mm or 25mm
- Side-slot inserted rechargeable Lithium-Ion battery 5 hours operation using one charge
- Industry Leading 14 bit (16384 grayvalues) Image Quality
- Exclusive and new powerful SMD (Software Material Discrimination) module. Organic / Inorganic detection in real time
- Complete Software suite, developed exclusively for Security

Detection of smuggled explosives, drugs and contraband for customs inspections

Wireless without cables facilitate work without contaminating the scene with wires

Easily reveal tiny details and minimal changes in devices which might indicate security breaches and miniature listening devices
Detector

Full wireless built-in flat panel detector, light weight (3.5kg) for digital radiography with embedded rechargeable battery and single-piece carbon-fiber for the front and back housing that allows easy placement and cleaning.

Panel
- Single substrate amorphous silicon activeTFT/diode array

Power

Wireless antenna 1

Wireless antenna 2

Battery

Wireless antenna 3

Scintillator
- Direct deposition CsI:Tl

Pixel Matrix
- 3556 x 4320

Pixel Pitch
- 100 μm & 5 lp/mm

ADC
- 14 bit

Integration time
- 400 ms

Wireless
- 802.11ac with wifi built in

Protection
- Protective robust case with handle and carbon fiber in exposure face

Battery LBP
- Rechargeable 4.5 hours Lithium-Ion

Software

DR Detector control
- 100% integrated and controlled (WiFi, battery, temperature, signal/distance, channel)

Exposure Indicator
- Computed for Each Image

Image Review
- Window/Level, Pan, Zoom, Flip, Rotate, Invert,
  Aut. LUT Management, Annotate, Magnifying Glass,
  Stitching, ROI’s

Measurements
- Manual and automatic in different modules

Image Processing
- (Based on inspection type) Automatic in capture. Specific Security filters

SMD (v. 1.5)
- Automatic Window/Level Determination

SQL Full Security Database

Image Output
- DCM, TIFF, JPEG

Reports
- Automatic using

Computer (Recommended minimum specification)

- Laptop / Tablet Intel i5, 3.0 GHz
- 4 GB (RAM)
- 500GB SSD, External USB3 Disk
- Windows 8 64 bit

Display
- LED+, Color 1920x1080

Operating System
- TCP/IP & WiFi 802.11ac

Accessories

- Portrait and landscape support for external applications
- Light magnesium adjustable tripod