

Sole Source Specifications & Unique Features

April 17, 2025

To whom it May Concern:

NOVO DR is the manufacturer and sole source provider of the following portable digital imaging equipment designed for the security market.

NOVO Rover III 22WS, Bright XL Mesh System with Second Tablet for multi-tablet control and display.

Jay Coleman
Director of Operations



NOVO's portable digital radiography systems for Security applications provide a complete solution for grabbing x-ray images in the most extreme & demanding environments. NOVO's systems offer unique capabilities not found with any other comparable system in the market today.

The NOVO systems are specifically built for security applications which require more rugged hardware than others. The connectors for cabling meet military MIL-DTL-38999 standards and are weatherproof. There is only one possible way to connect the cables, eliminating mistakes and broken wires found with other equipment.

All NOVO equipment operates via the same NOVO Touch software, meaning new equipment can be added to existing equipment for a plug & play user experience.

The detectors are of the latest technology and outperform others in many ways. NOVO Detectors are Amorphous Silicon 3rd Generation (Latest generation) No memory effect. NOVO detectors are weatherproof and have undergone drop testing and load testing. An advantage of the detector is the ability to operate wired or completely wireless with truly unmatched image quality.

NOVO uniquely offers Parallel Multi Location Control & Display. This ability increases safety and communication for everyone. The technicians can use one tablet closer to the inspected object and a second tablet from a greater distance of safety. Both tablets can be used to control the system, display x-ray images, enhance x-ray images, and share with others in remote locations. This greatly increases safety and accuracy.

NOVO builds their Native Touch Interface software "in-house" meaning they can upgrade, test, and uniquely modify to any special needs immediately rather than many months or years. A very proprietary function of the software has been named, "Genie". The Genie is a Powerful Automatic Enhancing Algorithm adjusting optimal grayscale in seconds which allows the user to see more detail. With the Genie enhancement, the technician can now shoot one pulse images and still get enough information to make a decision...a huge advancement for delicate situations. The software has extremely fast automatic stitching and is integrated with XTK. In addition

to Windows® operation, NOVO's latest advancement with software is the introduction of Android mobile phone capabilities for the ultimate portability.

The NOVO system operates on a wireless mesh network offering increased wireless stability and range and can be enhanced with additional nodes if needed.

***The Rover 22WS** system allows our largest detector and all required equipment to be transported in one wheeled pelican case (24"x19"x13"). The system works wireless, wired, and hybrid mode to meet mission requirements. The 22WS detector is NOVO's largest high-quality panel producing excellent images and showing even the smallest details.

NOVO Software

- User friendly, Native Touch interface software designed from the ground up and developed to provide the best user experience and functionality in harsh & extreme field conditions.
- Genie - Powerful Automatic Enhancing Algorithms – one pulse image capability
- Extremely fast automatic stitching, manual stitching included as well
- HDR – High Dynamic Range Enhancement capability
- Controls the operation of NOVO system and Accessories
- Intuitive operation for grabbing X-Ray images, annotating, archiving, and sharing information
- NOVO uniquely offers Parallel Multi Location Control & Display (2+ tablets at once)
- Compatible with the latest touch screen technology & standard PC's
- Windows® OR Android Mobile Phone operation
- Compatible with XTK

Software Features

- Genie - The Genie One Touch Enhancement Feature -Proprietary State-of-the-art Algorithm
Allows for taking a single image and enhancing both easy to penetrate and difficult to penetrate objects on the same image, while showing all elements and highlighting all the threats with just one touch.
- HDR (High Dynamic Range)
Allows for taking two images at different exposures, combined for the best result providing High Dynamic Range Imaging.
- Manual & Automatic Stitching
- Manual & Automatic Summing
- Averaging
- 1600% non-digitizing Zoom
- Window Leveling
- Measurements
- Annotations -Text, Shape Etc.

- Audio Documentation
- Pixel Map
- Line Profile
- Auto Wall Thickness Calibration & Measurement
- Auto Basic Spatial Resolution
- Pseudo color
- Subtraction
- Sharpness
- Emboss
- Live Video & Audio Stream down range
- Organic Detection
- 3D Imaging
- XXL Slider Montage – Combine 24 Images together
- Compatible with XTK® Software
- And many more....

NOVO Tablet

- Screen Size: 21.5"
- Screen Resolution: 1920x1080
- Screen Brightness (NIT): 1500 – True sun readable
- Touch Screen: YES
- Operating System: Windows 11
- MIL-STD-810G

NOVO Connectors

- MIL-DTL 38999 Connectors
- Weatherproof
- Dual Direction Magnetic Connector on Detector

NOVO 22WS Detector

- Unmatched Image Quality
- Bit Depth: 16 bit latest generation
- Amorphous Silicon 3rd Generation (Latest generation) No memory effect
- Weight: 6.1 lbs.
- Size: 15.2" x 18.2"
- Thickness: 0.6"
- Imaging Area: 14" x 16.8"

- Active Area (Imaging Area / Detector Size): 85%
- Collapsible Handle
- Custom Built for NOVO Security Market
- Wired and built-in wireless operation
- Capable of Operation up to 300m wired; up to 2 miles wireless
- Dual Direction Magnetic Connector
- Specifically designed for fieldwork & harsh weather conditions

Falcon III Mesh Controller

The Falcon is a lightweight controller that provides wireless communication as well as wired communication. Its built-in battery allows for 6+ hours of operation and unlimited operation when the System is connected to External AC. The Falcon works with rugged MIL-DTL 38999 connectors. It supports operation of both old and new Golden Engineering Sources.

- Weight: 2 lbs.
- Unlimited Operation with AC
- Built-in Battery: 6+ hours
- Wired/Hybrid: YES
- Wireless: Up to 600m line of site in ideal conditions and even more with additional nodes.
- Supports All Golden as well as LiteX
- Quick Connection to Source: picatinny or magnet
- MIL-DTL-38999 Connectors
- Weatherproof Design
- LED Indicators
- Supports Parallel Multi Location Control & Display

X-RAY SOURCES

The NOVO systems are designed to operate with the entire range of Golden Engineering X-Ray sources (both old and new generations) and other X-Ray sources such as the LiteX or even high power continuous sources, high energy sources and isotopes.

Supported Golden: 2 Pin, 4 Pin, 5 Pin type B, 5 pin type K, 7 pin type K RS232* (shows Golden battery status and whether the Golden is On/Off with New 7 Pin sources)

Plug and Play with all NOVO Accessories

Lookout

The NOVO Lookout is a Lightweight, 3 in 1 accessory enabling the following capabilities.

- Organic Detection, Live Video, Live Audio

Folding Sliders

The NOVO Folding Sliders are ideal for screening large objects, such as walls, barrels, cars, etc. to automatically generate an outstanding high-quality mosaic image.

Folding Slider L

Automatically Generates an Outstanding High-Quality Mosaic Image

- Number of Images: 22W Detector - 2x2 Images
- Imaging Area: 22W - 33.5" x 27.4" (85.2cm x 69.6cm)

Folding Slider XXL

Automatically Generates an Outstanding High-Quality Mosaic Image

- Number of Images: 22W Detector - 6x4 Images
- Imaging Area: 22W - 98" x 53" (250cm x 135cm)

Robot

NOVO offers various Robot detector holders for both the NOVO 15WS and the NOVO 22WS detectors.

3D ARC

Provides Easy to Use, Fast 3D Images & Accurate Measurements of 1-2mm for All X, Y, Z Measurements .
Dramatically Decreases Risk of Manual Entry & IED Disruption

SUPPORT

Professional support from U.S. office.

HIGHEST IMAGE QUALITY | RELIABLE | EASY TO USE | PROFESSIONAL SUPPORT

NOVO provides Demonstrations | Training | Sales | Service | Support