

## Digital Radiography Made Fast, Accurate, and Affordable



Nexus DR is advanced, digital x-ray image acquisition software designed to quickly and easily automate patient workflow and obtain higher quality images using less dose. Integrated with Varex 14x17 wireless cassette-sized detectors, Nexus DR provides a cost effective and trouble-free solution that includes advanced image processing algorithms for optimal image quality and excellent reliability.

Designed to provide fast and accurate diagnostic images with minimal user interaction, Nexus DR is an efficient solution for your digital radiography needs. Nexus can be interfaced with most HER/EMR systems to optimize workflow. Modality Worklist functionality allows X-ray technologists to focus their attention on the patient while easily capturing high quality images.

### Advanced Image Quality

- Processing and enhancement tuned to each anatomical protocol
- Site-specific tuning capability

### Easy to Use

- IOS-like look and feel with multi-touch monitor
- Easy MWL integration with EMR, HIS, RIS systems
- System guidance through defined protocol with seamless image transfer to DICOM server
- DICOM 3.0 compliant

### Cost-effectiveness

- Nexus DR is designed for high volume sites requiring fast throughput and great image quality
- Nexus DR systems include a 14x17 wireless detector, single bay battery charger, two rechargeable batteries and a preconfigured Dell workstation computer with 23" touchscreen LCD.
- Nexus DR is an American Made product designed to compete with imported Asian flat panel detectors.

## Technical Specifications

		. Amorphous Silicon with TFT/PIN diode technology
Conversion Screen		Csl, DRZ +
Pixel Area	Total	42.7 (v) x 34.4 (h) cm (16.8 x 13.5")
	Active (DRZ+)	42.4 (v) x 34.1 (h) cm (16.7 x 13.4")
	Active (Csl)	42.4 (v) x 33.9 (h) cm (16.6 x 13.3")
Pixel Matrix	Total	3,072 (v) x 2,476 (h)
	Active (DRZ+)	3,052 (v) x 2,456 (h)
	Active (Csl)	3,032 (v) x 2,436 (h)
Pixel Pitch		139 $\mu$ m
Limiting Resolution		3.6 lp/mm

### IMAGE QUALITY

	GADOX (typical)	CSI (typical)
DQE @ 0 lp/mm	39%	70%
DQE @ 1 lp/mm	28%	44%
DQE @ 2 lp/mm	17%	38%
DQE @ 3 lp/mm	7%	26%
DQE @ Nyquist	4%	15%
MTF @ 1 lp/mm	56%	57%
MTF @ 2 lp/mm	24%	27%
MTF @ 3 lp/mm	10%	13%
MTF @ Nyquist	6%	10%
Sensitivity	0.54 LSB/nGy	0.55 LSB/nGy
Pixel Noise (1000ms)	9.2 LSB	8.7 LSB
Memory Effect	0.001 (@ 60sec)	0.004 (@ 60sec)

### MAIN FUNCTIONALITIES

Cycle Time @ 550ms (X-ray Window)	7 sec (MSR2, RCT)	7 sec (MSR2, RCT)
X-ray window	350-3500 ms	350-3500 ms

### DOSE RANGE

	DRZ+	Csl
Maximum Linear Dose	100 $\mu$ Gy	69 $\mu$ Gy
NED	0.65 $\mu$ Gy	0.4 $\mu$ Gy
Energy Range - Standard	40 - 150 kVp	
Fill Factor	60%	
Scan Method	Progressive	
Data Output	Wireless	
A/D Conversion	16-bit	
Exposure Control	Inputs: Prepare, Expose-Request Outputs: Expose-OK	
Minimum Signal Strength Required	>-80 dBm or no image will be acquired	

### SOFTWARE

The 4336W v4 embeds the M-series Varex Imaging Smart Panel (VSP) software within the receptor. Developers interface with the receptor through VSP COMM which resides on the workstation. The integrator experience is simplified through the new M-series software interface. An onboard Control Panel is used to manage receptor settings and configuration. The ViVA™ sample imaging application is included. VSP COMM is Windows® 7 (64 bit) or Windows 8.1 (64-bit) compatible.

### WIRELESS

802.11 a/b/g/n/ac, 2x2 MIMO, Wireless Modes STA or AP

### COMPUTER REQUIREMENTS

RAM	2.00 GB
CPU	1 GHz or faster processor (32-bit or 64-bit)

### BATTERY

Lithium polymer smart battery prevents over charging  
 Charge capability 1000 images over 6 hrs  
 Expected Life 300 cycles of charge/discharge  
 Weight (approximately) 0.66 lbs (.3 kg)

### MECHANICAL

Weight (values are typical) (includes battery) DRZ+ - 3.6 kg  $\pm$  0.25 kg  
 Csl - 3.8 kg  $\pm$  0.25 kg  
 Housing Material Aluminum/Magnesium  
 Sensor Protection Material Carbon fiber plate

### POWER

Power Consumption Idle - 3.3 watts  
 Acquisition - 7.8 watts  
 Image Transfer - 10.2 watts

### ENVIRONMENTAL

Shock High-shock tolerance  
 Water Resistant IP51 (horizontal, face up)  
 Temperature Range - Operating (at back cover) 10°C to 35°C (max.)  
 (Ambient) - Storage -20°C to +70°C  
 Humidity - Operating (non-condensing) 10 to 90%  
 Storage (non-condensing) 10 to 90%  
 Atmospheric Pressure - Operating 70 kPa to 106 kPa  
 Storage 70 kPa to 106 kPa

### REGULATORY

U.S. UL 60601-1  
 Canada CSA 22.2 No. 601.1-M90  
 Electromagnetic Capability IEC 60601-1-2



TI-BA ENTERPRISES, INC.



TI-BA Enterprises, Inc. is an Authorized Distributor of Varex Imaging solutions. We maintain a team of factory-trained technicians to provide industry-best support and service. Please contact us with any questions:

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