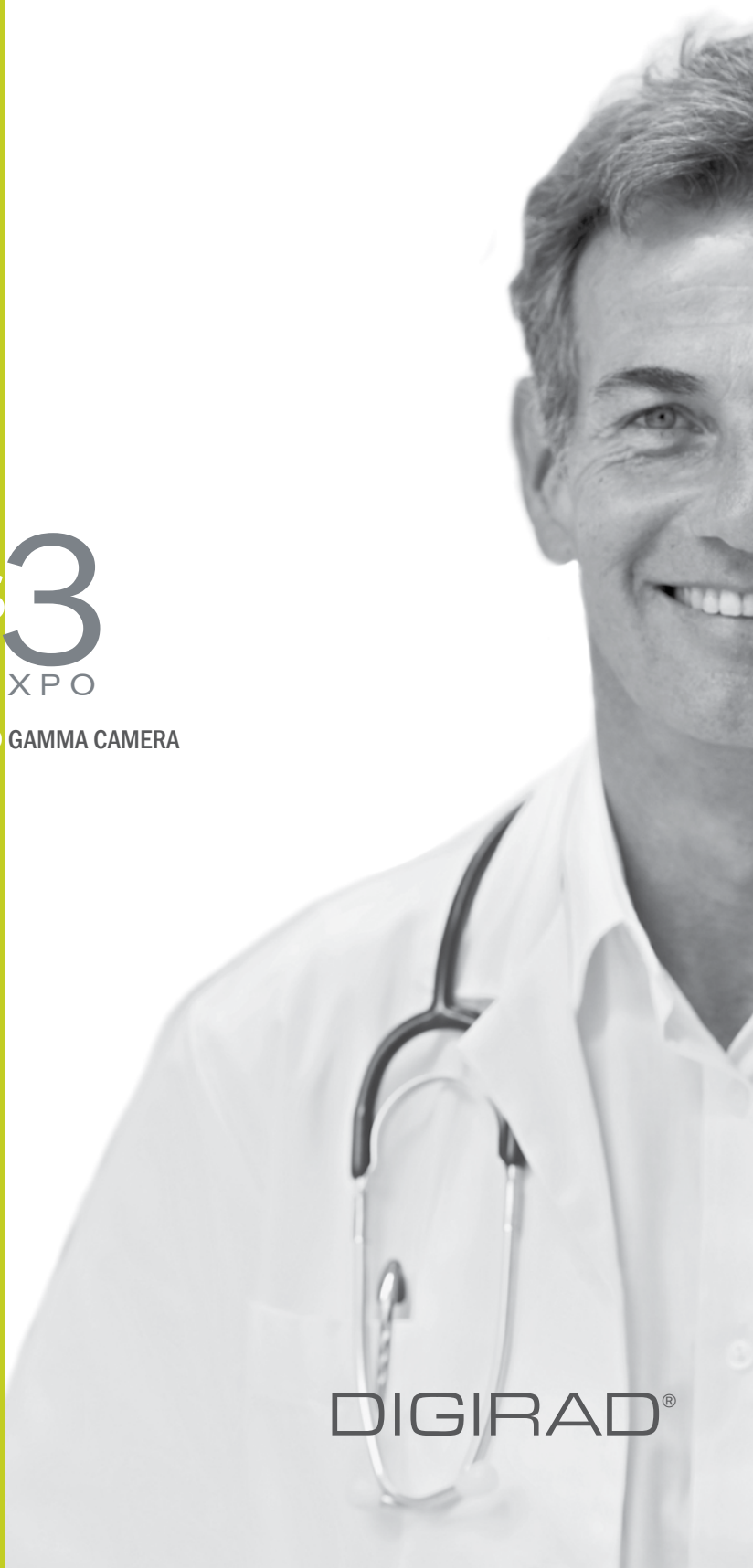


# Cardius3

XPO

DEDICATED CARDIAC 3-HEAD GAMMA CAMERA

DIGIRAD®





**Introducing the Cardius<sup>®</sup> 3 XPO from Digirad**  
**The only dedicated cardiac SPECT 3-head**  
**solid-state technology gamma camera**



## MORE COMFORT, HIGHER CLARITY, FASTER IMAGING

At a time when medical services and practices are looking for ways to improve efficiency and quality, Digirad's new Cardius® 3 XPO imaging system is the only dedicated camera for nuclear cardiology SPECT applications to feature three detectors. The Cardius 3 XPO provides up to a 38% imaging acquisition efficiency advantage over other industry-leading cameras while maintaining comparable image quality.

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### EFFICIENT 3 HEAD DESIGN

Up to 38% more efficient than competitive dual-head system designs and capable of performing a 7-minute stress acquisition study, the Cardius 3 XPO offers enhanced workflow and imaging efficiency while maintaining resolution and image quality.

### HIGH-DEFINITION SOLID-STATE [HSDS] AND TRUACQ COUNT-BASED IMAGING™

Digirad's Solidium® HSDS (high-definition solid-state detectors) offer a number of distinct performance enhancements over conventional Anger (photomultiplier tube-based) detector systems with demonstrated outstanding image quality, consistency and reliability.

Solid-state detectors are more compact, more rugged and conform better to the typical cardiac patient's body geometry. The XPO series cameras introduce new Solidium HSDS (high-definition solid-state detectors) that raise the standard in image quality, reliability and performance to a new level for the industry and the practice of nuclear cardiology.

The XPO series pushes the envelope one step further with the introduction of another Digirad exclusive - TruACQ Count based Imaging™, the first and only count-based SPECT imaging technique that ensures consistent counts for every patient study...regardless of patient size, weight or dose.

### OPEN AND UPRIGHT

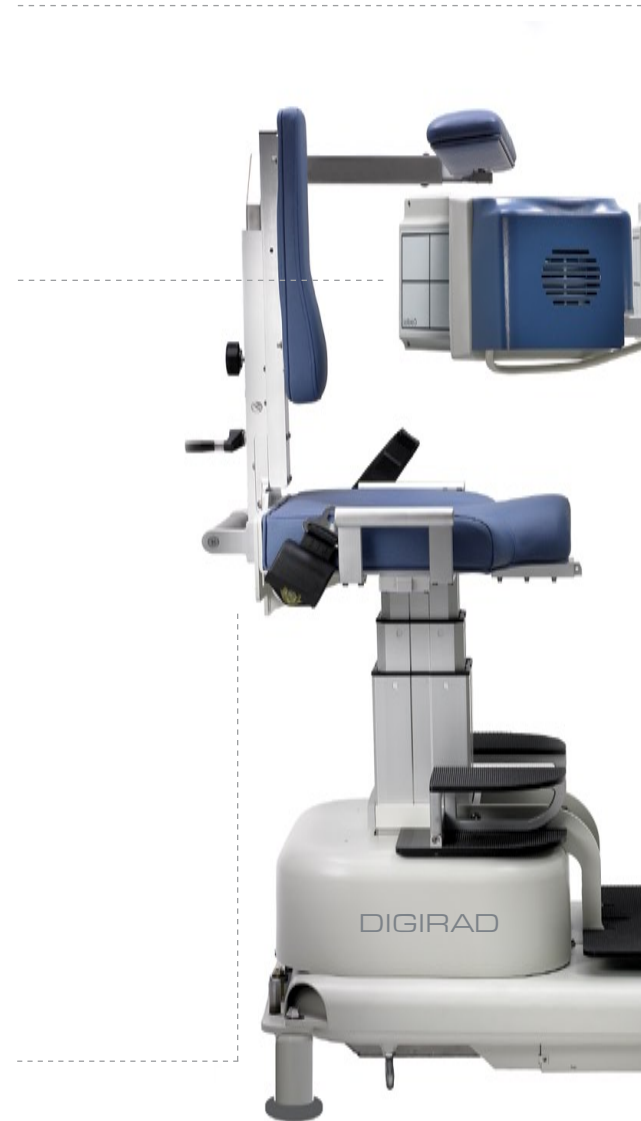
Solid-state technology offers a whole new range of possibilities for innovations in nuclear camera design due to the fact that it is lightweight, rugged and extremely compact. The Cardius 3 XPO system packs more imaging power into a sleeker, smaller design that is more open than other system designs. It's why Cardius systems are more patient-friendly and enable imaging patients up to 500 lbs.

The upright design makes patient ingress and egress so easy; it also offers a significant clinical advantage as the upright position lowers the diaphragm, providing better separation between the heart and gut, and improving both clinical quality and physician confidence.

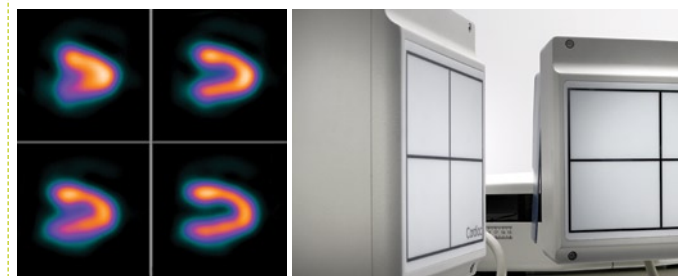
FASTER  
IMAGING

HIGHER  
CLARITY

MORE  
COMFORT



Cardi





USER FRIENDLY

### FROM START TO FINISH

Every action involving the patient, set-up and operation, data processing and handling, presentation of final clinical results and reporting... all were optimized on the Cardius 3 XPO.

Digirad's SeeQuanta™ advanced acquisition software makes performance of exams simple and efficient, while ensuring maximum consistency and quality for every patient study with less operative variability.

#### SeeQuanta™ features:

- AcqSmart™ workflow tools
- TRUACQ Count-Based Imaging™ acquisition
- Advanced Windows XP .Net platform
- User-friendly modern interface
- Persistence ROI drawing capability
- Seamless database integration

EASY TO SITE

### SMALL SIZE

The small size and low weight of the Cardius 3 XPO system offers siting possibilities that are virtually off-limits for other camera designs. The system can be sited in a room as small as 7 X 8 feet (56 square feet) and can be placed on nearly any floor (weighs less than 900 pounds).

Generally no room modifications are required and the system's electrical requirements are modest. Note: For California, as the system does not require floor mounting, no changes are required to meet OSHPD requirements. Installation can occur immediately.

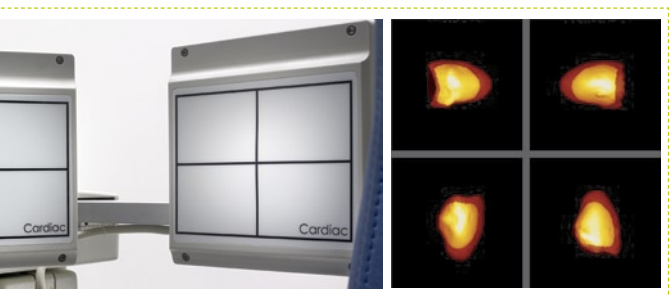
MORE FLEXIBILITY

### ADAPTABLE FOR THE FUTURE

The Cardius 3 XPO system offers flexibility in ways that might not be readily imagined, such as the ability to simply relocate the system to another office or room, if the need arises. The XPO series cameras are built on modular upgradeable foundations, permitting easy migration from single to fixed dual or triple-head configurations.

The solid-state detectors' high count rate performance offers the reserve capacity to meet the potential demands of proposed future radiopharmaceuticals and higher speed imaging techniques.

Cardius 3 XPO



# Cardius 3 XPO - Faster speed. Larger patients. Higher quality.

## COMFORTABLE

Compact and open design



## SIMPLE

Patient access



## VERSATILE

Imaging of patients up to 500 lbs



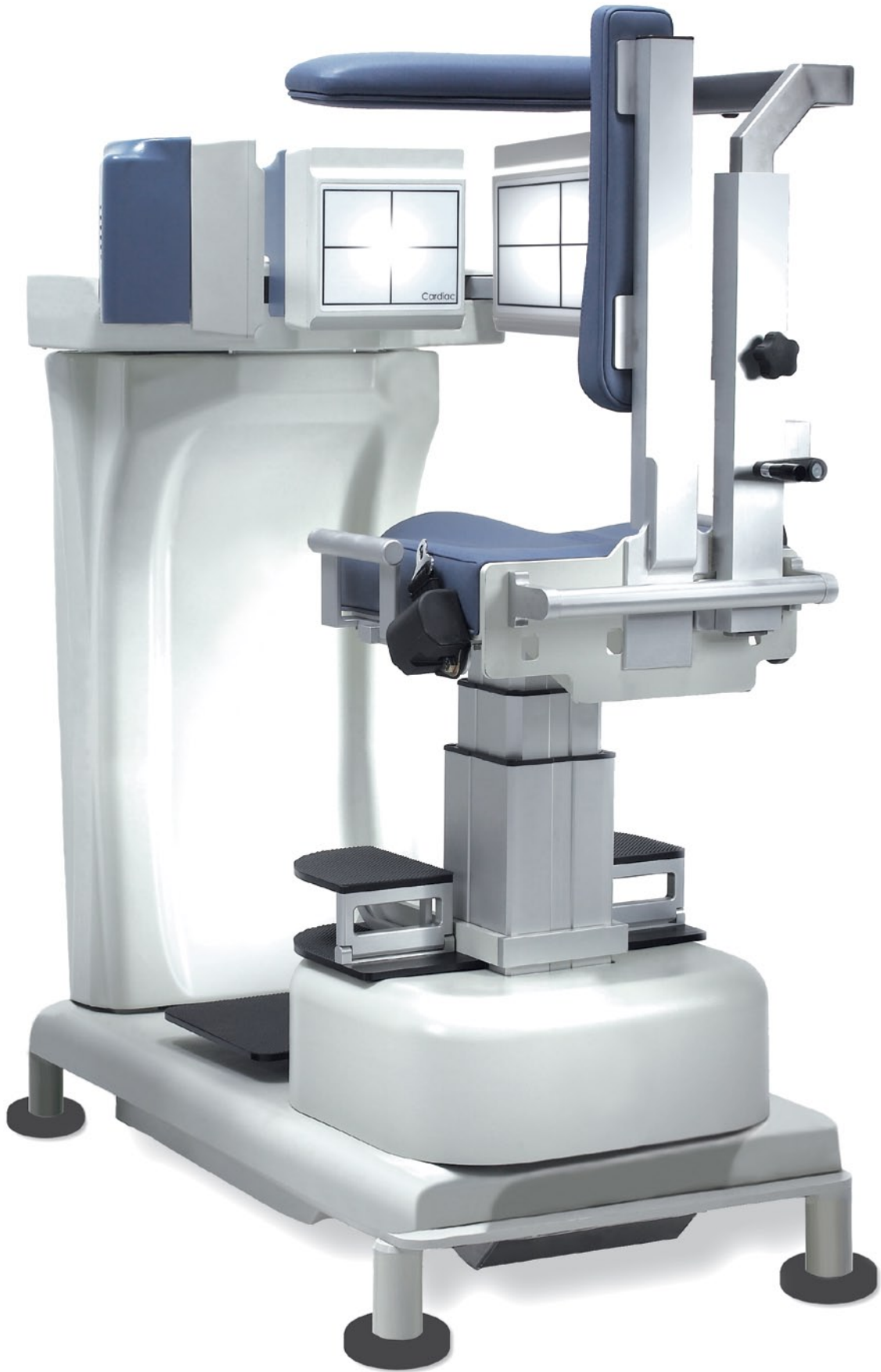
## EFFICIENT

3-head design



[www.digirad.com](http://www.digirad.com) 800-947-6134

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## CARDIUS 3 XPO TRIPLE-HEAD CAMERA

### DETECTORS

|  |                                      |
|--|--------------------------------------|
| detector technology                                  | solid-state                          |
| crystal type   | pixelated crystals                   |
| detector material                                    | CsI [TI]                             |
| physical dimensions [cm, in]                         | 24 x 25.4 x 10 cm [9.5 x 10 x 4"]    |
| wt. w/ collimator [lbs, kg]                          | 19 kg [42 lbs]                       |
| type   | triple head camera                   |
| field-of-view [rectangular] [cm, in]                 | 15.8 x 21.2 cm [6.2" x 8.3"]         |
| useful field-of-view                                 | 15.8 x 21.2 cm [6.2" x 8.3"]         |
| number of pixels per detector                        | 768                                  |
| pixel size [voxel]                                   | 6.1 mm x 6.1 mm                      |
| lead shielding                                       | 170 keV                              |
| reconstructed spacial resolution [FWHM] with scatter | 11.00 mm @ 20 cm orbit radius [LEHR] |
| energy resolution                                    | < 10.5 %                             |
| energy range   | 50 - 170 keV                         |
| sensitivity [cpm/uci]                                | 160 cpm / uci [LEHR]                 |

### PATIENT CHAIR

|   |                       |
|---|-----------------------|
| type                                      | upright chair         |
| attenuation                               | 0 %                   |
| length                                    | 142 cm [56 in]        |
| width                                     | 73 cm [29 in]         |
| height [from floor to top of seat - low]  | 85 cm [33.5 in]       |
| height [from floor to top of seat - high] | 115 cm [45.5 in]      |
| weight [with out detectors]               | 284 kg [624 lbs] est. |
| patient weight limit                      | 227 kg [500 lbs]      |

### ACQUISITION/PROCESSING STATION [A/PS]

|                           |  |
|---------------------------|--|
| acquisition console       | flexible positioning                           |
| acquisition workstation   | PC with single monitor and keyboard            |
| height [work surface]     | adjustable 76.2 cm [30 in] to 101.6 cm [40 in] |
| width                     | 51 cm [20 in]                                  |
| depth / length            | 66 cm [26 in]                                  |
| system speed              | Min. 2.8 GHz P4, 1 GB RAM                      |
| operating system          | Windows XP                                     |
| spectrum analyzers        | 10 bit [part of detector head]                 |
| acquisition matrix        | 64 x 48  |
| count rate [max.]         | > 3.5 million counts / sec                     |
| persistence scope         | 32 x 24  |
| display features          | frame or cine display                          |
| display color depth       | true color                                     |
| multitasking              | simultaneous acquisition and processing        |
| isotopes imaged           | TI-201, Tc-99m, Co-57                          |
| A / PS weight with laptop | 34 kg [75 lbs] est.                            |

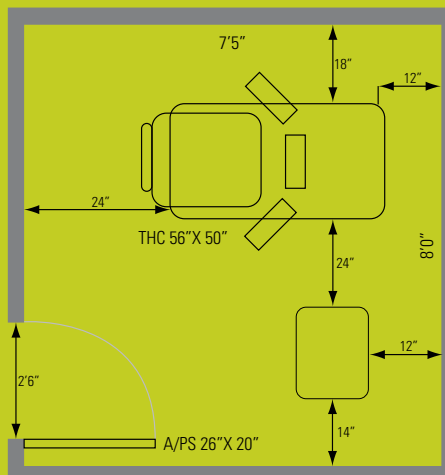
### CARDIAC IMAGING

|                            |   |
|----------------------------|---|
| applications               | MUGA, SPECT, Gated SPECT                          |
| tomographic rotation       | 202.5°  |
| start angle                | -45° or -38° LAO                                  |
| angular sampling           | 3.375 deg. or 6.75 deg.                           |
| speed of rotation          | 0.8 sec dwell between frames                      |
| heart orientation          | cardiocentric imaging, heart in axis of rotation  |
| orbit radius               | 18.8 - 35.5 c, [7.4 - 14 in]                      |
| arm rest height (min, max) | 61 cm - 86.3 cm [24 in - 34 in] from seat surface |
| acquisition frames         | 30 or 60 frames                                   |

### ENVIRONMENTAL/OPERATION REQUIREMENTS

|   |   |
|---|---|
| system total weight                     | 370 Kg [815 lbs] est.                                   |
| minimum room size                       | 8'x 7'  |
| power requirements                      | 20A [dedicated line] @ 120 VAC, 60 Hz                   |
| recommended operating temperature range | 18 - 27°C [65-80°F]                                     |
| relative humidity [non-condensing]      | 30 - 75%  |
| architectural modifications             | not required  |
| environmental storage [system]          | 2 - 35°C [35 - 95°F]                                    |
| shipping [factory packaging]            | 0 - 50°C [32 - 122°F] /humidity 10-80% [non-condensing] |
| HVAC                                    | 2800 BTU/hr   |

### CARDIUS 3 XPO MINIMUM RECOMMENDED ROOM LAYOUT 7'6" X 8'0"



note: specifications are subject to change. All photos and images may vary lightly from actual product.

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