

# 2020tc Imager

FLEXIBLE SINGLE-HEAD GAMMA CAMERA

DIGIRAD®





Introducing the 2020tc Single-Head Imager from Digirad  
**The ultimate clinical flexibility solution**

# 2020tc Imager

## Ultimate clinical flexibility for hospitals

The 2020tc Single-Head Imager is a compact, lightweight, solid-state gamma camera that is designed to offer maximum clinical versatility, convenience and flexibility virtually anywhere you need to perform nuclear medicine studies within a hospital, imaging facility or academic center.

### NUCLEAR MEDICINE. EVERYWHERE IT NEEDS TO BE.

It is a “workhorse” system that requires no room renovations or floor anchoring, and is available for quick use once you wheel it into a room and plug in the system. Its innovative portable design offers the ability to perform a diverse range of special applications in the nuclear medicine department or in special patient areas within the medical facility (CCU, ICU, ER, OR, pediatrics, bariatrics, trauma centers or in research labs). The system features modern high resolution solid-state imaging detectors (and a variety of collimators) providing the capacity to perform planar, dynamic and SPECT (optional) imaging procedures for small or large organ studies – anywhere within your facility.

### MORE VERSATILITY. A WHOLE NEW LEVEL OF PATIENT CARE.

The most common use of the 2020tc Imager® is as an overflow unit for the large mix of studies requiring the use of a single head camera in the typical nuclear medicine department. Many sites find the system convenient and economically attractive for imaging in special hospital care areas as the camera is easily transported to a patient’s bedside or to surgery. A wide range of procedures can be performed, including thyroid imaging, static bone scans, brain flow, renography, hepatobiliary, gastric emptying, sentinel node imaging, scintimammography, planar cardiac imaging including gated blood pool (MUGA), first pass quantification and cardiac SPECT exams (optional).

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### ONE CAMERA. MULTIPLE USES.

The 2020tc Imager® is a highly cost effective investment: its compact size, all in one architecture with on-board display and image analysis for physician viewing, along with its optional Reach Accessory, make it Digirad's most versatile and flexible gamma camera.

The 2020tc Imager enables nuclear departments to increase productivity substantially without adding more space or undertaking costly renovations. Added capacity means quicker response to your referrers and the ability to keep patient backlogs to a minimum.

### ENHANCED SERVICE. MORE FREEDOM

Many sites find the 2020tc system convenient and economically attractive to use for imaging select patients at their bedsides or in special patient care areas of the hospital.

This unique portability (bringing the camera to the patient) enhances patient comfort, improves workflow and reduces labor costs associated with moving and imaging critically ill patients.

The 2020tc Imager is highly flexible and can be used anywhere nuclear imaging is needed within the medical facility. Its flexibility in use maximizes asset utilization and return on investment (ROI).

### MORE PATIENT FRIENDLY. GREATER SATISFACTION.

The 2020tc Imager maximizes patient comfort: it enables you to adjust the camera to fit the patient's position. It performs patient imaging in hospital beds, wheelchairs, on a stretcher, in the sitting or standing position.

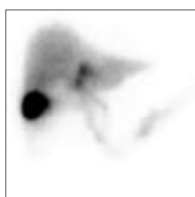
COST  
EFFECTIVE

PORTABLE

PATIENT  
COMFORT



LIVER



HEPATOBILIARY



GI BLEED



SCINTIMAMMOGRAPHY



BONE



LUNG



# 2020tc Imager

**USER  
FRIENDLY**

## SIMPLE - FROM START TO FINISH

Fresh thinking... is what the 2020tc system embodies. Every action involving the patient, the system set-up and operation, data processing and handling, presentation of final clinical results... all were, carefully and thoughtfully considered.

It's why the 2020tc system features advanced acquisition, processing and viewing software that makes performance of exams simple and efficient while ensuring maximum consistency and quality for every patient study with less operative variability.

**ADAPTABLE**

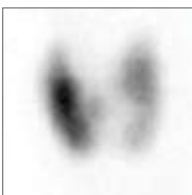
## GREATER FLEXIBILITY. MORE CAPACITY.

The 2020tc Imager delivers state-of-the-art imaging for a wide range of procedures including thyroid imaging, bone scanning, brain flow, renography, hepatobiliary, gastric emptying, sentinel node imaging, scintimammography, lung scans and planar cardiac imaging including gated blood pool (MUGA) and first pass quantification, as well as cardiac SPECT studies (optional).

**IMAGE  
CLARITY**

## HIGH IMAGE CLARITY. CONSISTENT HIGH PERFORMANCE.

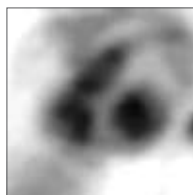
Digirad's proprietary solid-state technology combined with Direct Position Sensing results in exceptional intrinsic spatial resolution that increases image contrast and image clarity with consistent high performance for every patient... every day.



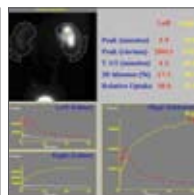
THYROID



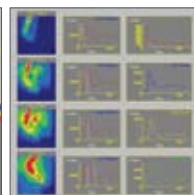
BRAIN STATIC/FLOW



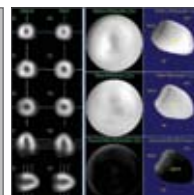
CARDIAC MUGA



RENAL



1ST PASS



CARDIAC SPECT (OPTIONAL)

# 2020tc - Everywhere it needs to be

## LUNG IMAGING

Sitting, standing, or on a stretcher



## THYROID IMAGING

Sitting or lying down



## SCINTIMAMMOGRAPHY

Sitting, or on a stretcher



## BEDSIDE IMAGING

Imaging in CCU, ICU, ER, pediatrics, surgery or bariatrics



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## 2020tc Imager™

### DETECTORS

technology	solid-state
crystal type	pixelated crystals
detector material	CsI (TI)
physical dimensions	33 x 28 x 10 cm [13 x 11 x 4 in]
weight with collimator	25 kg [55 lbs]
type	single head mobile camera
field of view	21.2 cm x 21.2 cm [8.3 in x 8.3 in]
useful field of view	21.2 cm x 21.2 cm [8.3 in x 8.3 in]
number of pixels per detector	4096
pixel size	3 mm x 3 mm
lead shielding	300 keV
reconstructed spacial resolution [FWHM] with Scatter	18 mm @ 15 cm orbit radius [LEAP]
energy resolution	< 14%
energy range	60 - 300 keV
sensitivity [cpm / uci]	295 cpm / uci [LEAP]

### 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]	79 cm [31 in]
height [from floor to top of seat - high]	79 cm [31 in]
weight	182 kg [401 lbs] est.
patient weight limit	159 kg [350 lbs]

### CARDIAC IMAGING

applications	MUGA, SPECT, Gated SPECT
tomographic rotation	180°
arm rest height [min, max]	40.6 cm - 81.3 cm (16 in - 32 in) from seat surface
acquisition frame	32 or 64 frames

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

acquisition console	flexible positioning
acquisition workstation	PC with single monitor and keyboard
system speed	min. 2.4 GHz P4, 1GB RAM
operating system	Windows 2000 / Windows XP
spectrum analyzers	10 bit [part of detector head]
acquisition matrix	64 x 64
count rate [max.]	250k counts / sec [PLX], 170k counts / sec [USB]
persistence scope	64 x 64
display features	frame of cine display
display color depth	true color
multitasking	simultaneous acquisition and processing
isotopes imaged	Tl-201, Tc-99m, Co-57, I-123, Xe-133
A / PS weight	182 kg [401 lbs] est.

### ENVIRONMENTAL / OPERATION REQUIREMENTS

system total weight	386 kg [851 lbs] est.
camera dimensions	
height	150 cm [59 in]
width	73 cm [29 in]
length	142 cm [56 in]
A / PS Dimensions	
height	150 cm [59 in]
width	73 cm [29 in]
depth / length	142 cm [56 in]
minimum room size	8' x 7'
power requirements	8A [dedicated line] @120 VAC, 60 Hz
temperature	18 - 29°C [65 - 84°F]
relative humidity	30 - 75 %
architectural modifications	not required
environmental storage	0 - 50°C [32 - 122°F]
HVAC	2400 BTU

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

Discover Digirad's range of solutions

C1 XPO : Single-head cardiac SPECT imaging

C2 XPO : Dual-head cardiac SPECT imaging

C3 XPO : Triple-head cardiac SPECT imaging

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