



# SNTRYPACS™

In medical imaging, picture archiving and communication systems (PACS) are computers or networks dedicated to the storage, retrieval, distribution and presentation of images. The medical images are stored in an independent format. The most common format for image storage is DICOM (Digital Imaging and Communications in Medicine).

QStar is changing the way imaging centers function with a PACS appliance solution that seamlessly integrates all modalities within the radiology department. SntryPACS™ is a fully integrated PACS/DICOM server, router, diagnostic viewer and storage appliance designed for receiving images directly from any DICOM modality.

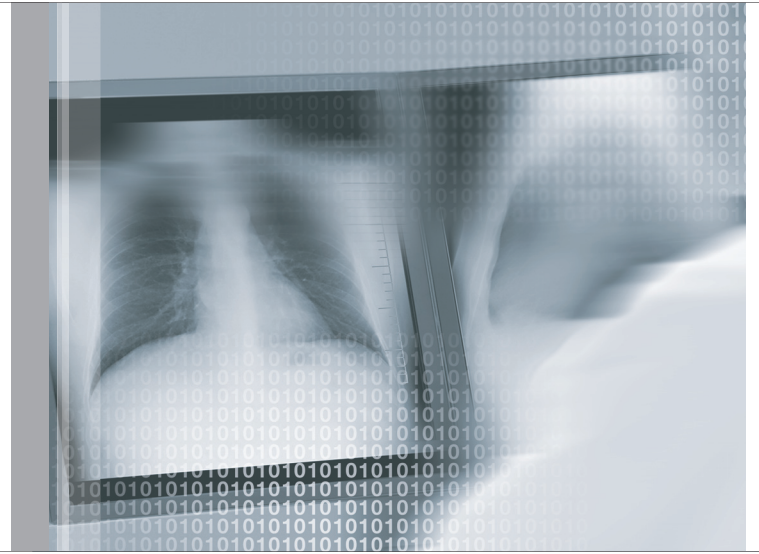
With SntryPACS, the actual capture process for any radiology instrument doesn't change. Digital images from all the modalities are captured and directly pushed into the integrated SntryPACS DICOM server; in addition, non-DICOM images can also be stored on the archive. SntryPACS has an independent work list module of its own, but can also plug into an existing hospital information system.

## Features

- Dual Core Xeon® Processor
- Redundant, hot-swap disks, power supplies & fans
- Scalable RAID 5 storage which can be expanded from 2 TB to 96 TB Raw
- Compatible with most DICOM Viewers & leading 3D Volume Rendering Workstations
- Integrated support for both tape and optical archive hardware for additional cost effective archive expansion
- Web-Based Diagnostic Viewer
- Modality Work List
- Modality Performed Procedure Step (MPPS)
- Integrates with third party Modality Work Lists
- Embedded PACS engine
- Front-panel display for local setup & monitoring
- Installs using DHCP
- Web-based admin GUI
- Self-diagnostics & reporting via E-mail / Pager alerts
- IHE-compliant
- Helps to meet HIPAA

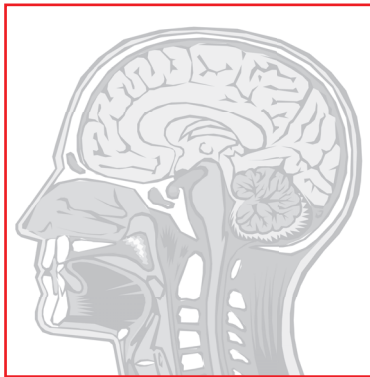


# SNTRYPACS™



## Integration Made Easy

- Integrated, easy-to-use appliance
- Installs in minutes into existing network
- High-performance server and router
- Data center reliability, serviceability and availability



### Making life simpler

Radiology units using SntryPACS can set up multiple user-friendly viewing stations. Every user sitting at his private workstation has extensive viewing and processing tools at their disposal. This means, depending on the access rights assigned to the users through SntryPACS, images can be viewed by every consultant in the hospital.

- Select, mark and type - Annotation made easy
- Improve brightness or contrast for quality
- Get instant access to Hounsfield values

Radiologists can connect to the SntryPACS DICOM server from any remote location to access patient information, reports and images. They can even use the image processing features to analyze data from anywhere.

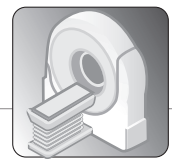
### Intuitive Interface

SntryPACS has an intuitive interface that helps you to enter patient demography information and schedule studies for various imaging modalities.

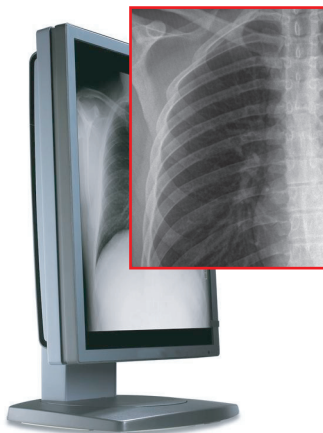


# Medical PACS

## Archive Appliance



### Processing and Viewing



#### **Hospital Wide Viewing**

SntryPACS offers viewing options across the healthcare enterprise to help you access patient studies, images and reports both locally and over the web.

#### **Reporting**

A powerful template-based reporting module allows you to create customized templates for all different study types, and lets you add images as part of your reports.

#### **Image Acquisition**

The SntryPACS has a robust, scalable architecture that supports all relevant DICOM 3.0 functions. It's a DICOM server, database server and web server – all rolled into one!

#### **Acquisition From DICOM Sources**

Your DICOM modalities can seamlessly push patient image studies to the SntryPACS server, where the study information and images are sorted and stored in a database.

#### **Acquisition From Non-DICOM Sources**

SntryPACS DICOM converter component supports DICOM query and work list functions for associating images with the right patient information.

#### **Routing**

SntryPACS routing component provides for an intelligent rule-based system to route patient images and studies to other workstations and PACS systems.

#### **Archiving**

SntryPACS has preconfigured built in support for the following archive solutions: RAID, CAS, DAS, MOD, Blu-ray, UDO, DVD, CD, and Tape libraries and drives

#### **Distribution**

SntryPACS supports the following distribution formats:

- **CD Writing:**  
Write images and reports onto Blu-ray, DVD and CDs with a built-in DICOM viewer that can be distributed to patients for viewing on their PCs.
- **DICOM Printing:**  
Compose, preview, and push images to print on DICOM printers.
- **Windows Printing:**  
Print images in pre-defined formats on printers compatible with Microsoft® Windows®.



QPACS - 2000



QPACS - 6000



## SYSTEM FEATURES

<b>Capacity (Raw)</b>	<ul style="list-style-type: none"> <li>From 1.5 to 2 TB</li> </ul>	<ul style="list-style-type: none"> <li>From 2 to 96 TB</li> </ul>
<b>Drive</b>	<ul style="list-style-type: none"> <li>Max 2 drives (hot swappable)</li> </ul>	<ul style="list-style-type: none"> <li>Max 6 drives (hot swappable)</li> </ul>
<b>Model #</b>	<ul style="list-style-type: none"> <li><b>QPACS - 2000/01:</b> 1 TB (2 x 500 GB)</li> <li><b>QPACS - 2000/02:</b> 1.5 TB (2 x 750 GB)</li> <li><b>QPACS - 2000/03:</b> 2 TB (2 x 1 TB)</li> </ul>	<ul style="list-style-type: none"> <li><b>QPACS - 6000/01:</b> 2 TB (4 x 500 GB)</li> <li><b>QPACS - 6000/02:</b> 3 TB (6 x 500 GB)</li> <li><b>QPACS - 6000/03:</b> 3 TB (4 x 750 GB)</li> <li><b>QPACS - 6000/04:</b> 4.5 TB (6 x 750 GB)</li> <li><b>QPACS - 6000/05:</b> 4 TB (4 x 1 TB)</li> <li><b>QPACS - 6000/06:</b> 6 TB (6 x 1 TB)</li> </ul>
<b>RAID</b>	<ul style="list-style-type: none"> <li>RAID 1</li> </ul>	<ul style="list-style-type: none"> <li>RAID 5</li> </ul>
<b>Built-in Storage</b>	<ul style="list-style-type: none"> <li>CD-RW/DVD ROM</li> </ul>	<ul style="list-style-type: none"> <li>CD-RW/DVD ROM</li> </ul>
<b>Setup and Configuration</b>	<ul style="list-style-type: none"> <li>Web Based user interface for system administration</li> </ul>	<ul style="list-style-type: none"> <li>Web Based user interface for system administration</li> </ul>
<b>Storage Management</b>	<ul style="list-style-type: none"> <li>Policy based tiered storage management</li> <li>Integrated support for on, near, and off line data management</li> <li>Policy based data retention and deletion</li> </ul>	<ul style="list-style-type: none"> <li>Policy based tiered storage management</li> <li>Integrated support for on, near, and off line data management</li> <li>Policy based data retention and deletion</li> </ul>
<b>Network Connection</b>	<ul style="list-style-type: none"> <li>Dual port auto-sensing gigabit NIC</li> <li>Automatic IP address assignment</li> <li>Supports DHCP, ARP</li> </ul>	<ul style="list-style-type: none"> <li>Dual port auto-sensing gigabit NIC</li> <li>Automatic IP address assignment</li> <li>Supports DHCP, ARP</li> </ul>
<b>Interface</b>	<ul style="list-style-type: none"> <li>Fibre card (optional)</li> <li>iSCSI Standard</li> <li>Adaptec 29320 SCSI PCI Express Adapter</li> </ul>	<ul style="list-style-type: none"> <li>Up to 6 expansion storage units with 15 drives (hot swappable)</li> <li>Fibre card (optional)</li> <li>iSCSI Standard</li> <li>Adaptec 29320 SCSI PCI Express Adapter</li> </ul>
<b>CPU</b>	<ul style="list-style-type: none"> <li>Intel Dual Core Xeon Processor</li> <li>Up to 4 MB DDR RAM</li> </ul>	<ul style="list-style-type: none"> <li>Intel Dual Core Xeon Processor (supports up to two)</li> <li>Up to 4 MB DDR RAM</li> </ul>
<b>RAM (Included)</b>	<ul style="list-style-type: none"> <li>2 GB</li> </ul>	<ul style="list-style-type: none"> <li>2 GB</li> </ul>
<b>Graphics</b>	<ul style="list-style-type: none"> <li>Integrated ATI ES1000 controller with 16MB of SDRAM</li> </ul>	<ul style="list-style-type: none"> <li>Integrated ATI ES1000 controller with 16MB of SDRAM</li> </ul>

## SPECIFICATIONS

<b>Built in Support for Archive Storage</b>	<ul style="list-style-type: none"> <li>2.5 TB</li> </ul>	<ul style="list-style-type: none"> <li>5.5 TB</li> </ul>
<b>Agency Certifications</b>	<ul style="list-style-type: none"> <li>CAN/CSA C22.2 No. 60950-1, CSAAus, FCC Class A, CE IHE, VCCI, BSMI, C-Tick Class A, SABS, Class A, CCC Class A, MIC Class A, UL 60950-1, EN 60950-1, IEC 60950-1</li> </ul>	<ul style="list-style-type: none"> <li>CAN/CSA C22.2 No. 60950-1, CSAAus, FCC Class A, CE IHE, VCCI, BSMI, C-Tick Class A, SABS, Class A, CCC Class A, MIC Class A, UL 60950-1, EN 60950-1, IEC 60950-1</li> </ul>
<b>Physical</b>	<ul style="list-style-type: none"> <li>1U Rack-mountable chassis</li> <li>Width: 16.7" (42.6cm)</li> <li>Height: 67" (4.26cm) with bezel attached</li> <li>Depth: 30.4" (77.2cm)</li> <li>Weight: 35.8 lbs (16.3 Kg), maximum configuration</li> </ul>	<ul style="list-style-type: none"> <li>2U Rack-mountable chassis</li> <li>Width: 17.5" (44.43cm)</li> <li>Height: 3.4" (8.64cm) with bezel attached</li> <li>Depth: 29.31" (74.4cm)</li> <li>Weight: 50.71 lbs (23 Kg), maximum configuration</li> </ul>
<b>Power</b>	<ul style="list-style-type: none"> <li>AC configuration with standard single or redundant 750W hot-plug auto-switching universal 110/220V AC power supplies</li> </ul>	<ul style="list-style-type: none"> <li>AC configuration with standard single or redundant 750W hot-plug auto-switching universal 110/220V AC power supplies</li> </ul>
<b>Operating Environment</b>	<ul style="list-style-type: none"> <li>Operating Temperature: 10° C to 35° C (50° F to 95° F)</li> <li>Operating Relative Humidity (non-condensing twmax=29C): 20% to 80% non-condensing</li> <li>Operating Vibration: 0.26G at 5Hz to 350Hz for 2 minutes</li> <li>Operating Shock: 1 shock pulse of 41G for up to 2ms</li> <li>Operating Altitude: -16 to 3,048m (-50 ft to 10,000 ft)</li> </ul>	<ul style="list-style-type: none"> <li>Operating Temperature: 10° C to 35° C (50° F to 95° F)</li> <li>Operating Relative Humidity (non-condensing twmax=29C): 20% to 80% non-condensing</li> <li>Operating Vibration: 0.26G at 5Hz to 350Hz for 2 minutes</li> <li>Operating Shock: 1 shock pulse of 41G for up to 2ms</li> <li>Operating Altitude: -16 to 3,048m (-50 ft to 10,000 ft)</li> </ul>
<b>Non-operating Environment</b>	<ul style="list-style-type: none"> <li>Storage Temperature: -40° C to 65° C (-40° F to 149° F)</li> <li>Storage Relative Humidity: 5% to 95% non-condensing (twmax=38C)</li> <li>Maximum humidity gradient: 10% per hour, operational and non-operational conditions.</li> <li>Storage Vibration: 1.54Grms Random Vibration at 10Hz to 250Hz for 15 minutes</li> <li>Storage Shock: 6 shock pulses of 71G for up to 2ms</li> <li>Storage Altitude: -16m to 10,600m (-50 ft to 35,000 ft)</li> </ul>	<ul style="list-style-type: none"> <li>Storage Temperature: -40° C to 65° C (-40° F to 149° F)</li> <li>Storage Relative Humidity: 5% to 95% non-condensing (twmax=38C)</li> <li>Maximum humidity gradient: 10% per hour, operational and non-operational conditions.</li> <li>Storage Vibration: 1.54Grms Random Vibration at 10Hz to 250Hz for 15 minutes</li> <li>Storage Shock: 6 shock pulses of 71G for up to 2ms</li> <li>Storage Altitude: -16m to 10,600m (-50 ft to 35,000 ft)</li> </ul>

