

BRIT**Systems**

Leader of the PACS

BRIT Systems

BRIT Scan

**Beyond
Roentgen
Imaging
Technologies**

BRIT SYSTEMS' BRIT SCAN is a high-quality film digitization system that allows standard radiographs to be converted into electronic images for transmission to PACS and teleradiology systems. When used with a DICOM printer, the BRIT Scan can also produce high-quality duplicate films that are vastly superior to those produced by conventional film copying methods. The BRIT Scan includes a PC controller with a Lumiscan S75 or Vidar Diagnostic Pro.

Patient exam data is entered into the system by manually typing the information into the appropriate data fields, selecting the patient from the Modality Work List (requires Modality Worklist Server), or via an optional barcode reader. Configurable pull-down menus provide quick and efficient access to consistent exam descriptions.

The BRIT Scan is configurable with either a Kodak laser-based digitizer or a Vidar CCD-based digitizer (See the table on the reverse side for details on resolution, optical density, and scan times). Digitizers can be configured for low-volume (single sheet feed), medium (multi-sheet feeder), or high volume (multiple computers combined with a digitizer) applications, allowing the users to match the digitizer equipment to the clinical and volume requirements.

PRODUCT POSITIONING

- Lumiscan S75: Highest quality film digitizer for general radiology
- Vidar Diagnostic Pro: Cost / quality compromise for primary diagnosis
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After the film has been digitized, the technician can view the resulting image to verify that image quality is acceptable, change image orientation, window and level, and accept or reject individual film images for transmission. After the QC process is complete, the images are transmitted to the desired receiving locations as configured in the image transmission setup. With the appropriate monitor configuration, on-site doctors can also use this system to review images during a consultation.



The BRIT Scan provides image addressing and transmission capabilities. This allows the system to be setup with dynamically selectable compression algorithms (DICOM lossy or lossless) as required for the specific medical application (teleradiology vs. PACS), as well as dynamically selectable DICOM Storage SCP destinations (single or multiple), such as archives, local or remote viewing stations, or printers. For destinations outside the local facility, secure communications protocols are used as per HIPAA requirements for patient data confidentiality.

BRIT Scan

BRIT APPLICATION CO-LOCATION

The Referral Workbench, a 12-bit DICOM viewer, is included with the application. The following BRIT applications can be co-located on the host PC running the BRIT Scan (subject to performance limitations based on volume):

- DICOM Mini-Server (Storage SCP/SCU)
- Capture Workbench (Video Frame Capture)
- BRIT Quality Workbench
- Roentgen CD Burner
- Paper Digitizer - optional application allows digitized paper to be added to a study as an additional series.

DICOM SUPPORT

The BRIT Scan provides the following DICOM-3 support:

- DICOM Store SCU (standard)
- DICOM Print SCU (standard)
- DICOM Compression Transfer Syntaxes (standard)
- DICOM Modality Worklist Client - additional integration costs may apply
- DICOM Storage Commitment
- DICOM Performed Procedure Step - additional integration costs may apply

The BRIT Scan allows the users to integrate standard radiographic studies, which are often used for comparison studies, into the PACS strategy. This makes distribution of the physical films, and the associated costs, a thing of the past. As with all of BRIT's applications, the BRIT Scan can be customized to fit the hospital specific workflow and security requirements.

Scanner Specifications

Model	Type	Scan Rate	O.D.	Spot Size	Resolution	Film Feed	Barcode
Lumiscan S75	Laser	~115 lines/sec	0 – 3.8	100 µm	2.8 lp/min@2Kx2.5K	6 Sheets	Yes
Vidar Diag Pro	CCD	~125 lines/sec	0 – 3.85	170 µm	3.0 lp/min@2Kx2.5K	~10 Sheets*	No

*Vidar lists more on their specification sheet for this product; this is a more conservative number that assures reliability.

POWER REQUIREMENTS

Film Digitizer: 100/120/230/240 VAC, 50/60 Hz, (1A @ 1220V)

Computer: 120 VAC, 60 Hz, (1A @ 1220V)

Monitor: 120 VAC, 60 Hz, (1A @ 1220V)

SPACE REQUIREMENTS

Maximum Dimensions 40"W x 30"D x 40"H

FILE FORMATS

Raw DICIM

DICOM JPEG 8-bit Lossey DICOM 8-bit Losses DICOM

JPEG 16-bit Lossey Variable quality on lossey compression

NOTE: DICOM Conformance Statement for this device can be found at www.brit.com