

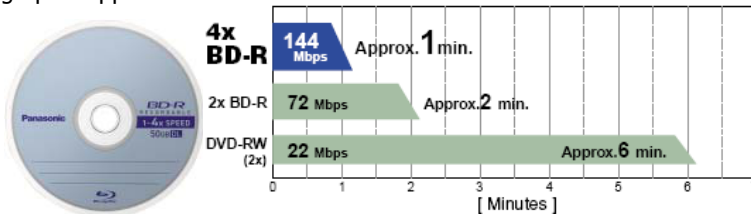


**Introduction**

CIT introduces 120TB Electronic Data Archive System to replace and reduce the currently used physical storage for conventional films with digital archiving system having 50+ years of data life. It is actually a set of 4 Blu-ray jukeboxes each of storage capacity up to 30TB, which are connected to file server through network. This system offers a storage capacity of 120TB to the users to cater the requirement of storing huge amount of data. The biggest advantage of CIT/DRSAM-120TB Electronic Data Archive System is that it completely eliminates the degradation and ageing of currently stored radiographic data.

**Permanent Archive Media**

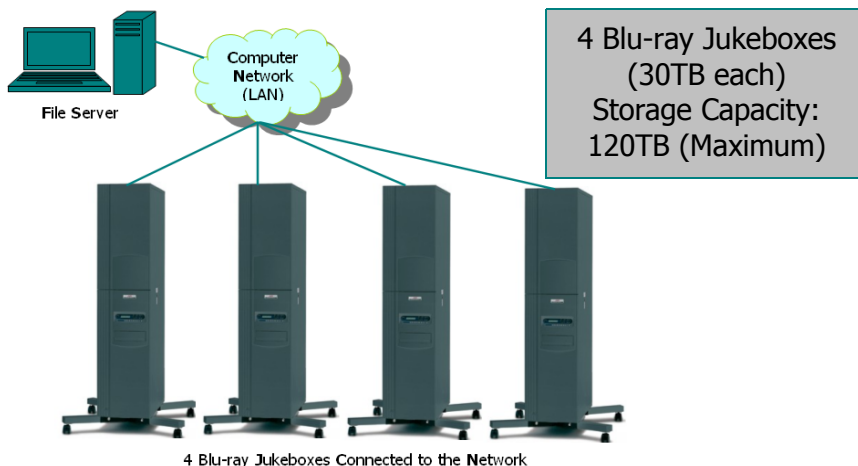
The CIT/DRSAM-120TB Electronic Data Archive System employs Blu-ray disk as the archive media to permanently store NDE data for a longer period of time. Blu-ray disk, which is the next generation optical storage technology, offers larger storage capacity and more data reliability as compared to other optical storage disks. Another vital benefit provided by Blu-ray disks is the fast 4x recording speed (upto 144 Mbps), which is accomplished through phase change technology. Therefore, Blu-ray is considered to be the best archive media for digital radiographic applications.



**Overview**

The CIT/DRSAM-120TB Electronic Data Archive System has been designed to meet the challenging requirements to store vast amount of NDE digitised and digital radiographic data. This system enables you to archive 120TB of your radiographic data on 4 jukeboxes each containing 600 Blu-ray disk media. The Blu-ray disk media used in this product is of storage capacity 50GB (single sided).

The CIT/DRSAM-120TB Electronic Data Archive System can be used seamlessly with the CIT/DR4200 NDE retrieval management system, which is actually a system used for retrieving the data from electronic permanent archives efficiently and speedily. Multiple DRSAMs may also be setup in a distributed or centralized way with synchronisation among several archives connected to various CIT's digitised or digital radiographic systems. This enables the enterprise to manage multiple projects and the product life cycles.



**What Does It Do?**

Replaces the conventional film radiographs archives system with electronic archiving.

**While Conventional Film Archive Requires**

- ✦ Physical space (buildings, storage spaces)
- ✦ Environment controlled
- ✦ Radiography ancillary items wrappers, labels, films, shelves
- ✦ Transportation cost for referral
- ✦ Complicated archive retrieval
- ✦ Slower exchange of or access to data
- ✦ Misfiling
- ✦ Cumbersome operations
- ✦ Time consuming
- ✦ Expensive retrieval

**CIT/DRSAM-120TB Offers**

- ✦ Computing solutions on Blu-ray disks
- ✦ Information archived in structured data format
- ✦ Minimum storage space requirement
- ✦ Local or remote data retrieval
- ✦ Maximum system availability
- ✦ Same information can be reviewed and shared by more than one person at the same time from different locations around the globe operating on the same objective
- ✦ 50+ years of data life
- ✦ Comfortable operating facility
- ✦ Time efficient
- ✦ Extremely powerful
- ✦ Cost-effective solution
- ✦ Faster retrieval



# Computerised Information Technology Limited

## **Technical Specifications**

### **1. Product Archival**

- Digitised radiograph films
- Digitally captured radiographs
- Digitised NDE documents and reports
- Other digital records

### **2. Disk Storage Capacity and Details**

- Blu-ray: 50GB (Single Sided)
- Media Type: High-density optical disk
- Encoding: MPEG-2, H-264/MPEG-4 AVC, VC-1
- Laser wavelength: 405nm (blue laser)
- Data transfer speed: 9MB/s
- Disk diameter: 120mm
- Disk thickness: 1.2mm
- Protection layer: 0.1mm
- Media life: 50+ years
- Media supplier: Multiple

### **3. DRSAM Physical Architecture**

- 4 jukeboxes connected to file server via network
- A jukebox of 30TB storage capacity
- Each jukebox containing 600 Blu-ray disk media
- Estimated formatted: 120TB Maximum
- Bar code disk identity

### **4. Media Capacity**

- 600 disks per jukebox

### **5. Total Storage Capacity**

- 30TB per jukebox
- 120TB overall (maximum)

### **6. Number of Magazines**

- 12 per jukebox

### **7. Number of Disks per Magazines**

- 50

### **8. Number of Drives**

- 6 (Max 12) per jukebox

### **9. Changeover Time**

- 4.5 Sec per jukebox

### **10. Interface Drives**

- High speed LVD SCSI interface (160MB/sec) shielded 68P (Pin Type, SCSI III compliant)

### **11. Robotics Interface**

- High Speed LVD SCSI Interface

### **12. Other Interfaces**

- RS-232 (for diagnosis); 10/100BaseTX(NAS)

### **13. Media Handling**

- Tray based media handling for optimal lifespan

### **14. Housing Features**

- Dust proof housing with internal air filter mechanism

### **15. Dimensions (W \* H \* D)**

- 777 \* 1641 \* 807 per jukebox

### **16. Weight (Empty)**

- 104 Kg per jukebox

### **17. Power Consumption**

- 140w per jukebox

### **18. MSBF (Mean Swaps Between Failures)**

- 2.5 million swap cycles

### **19. DRSAM Storage Functions**

- Mounts/dismounts of disk media
- Houses 600 disk slots in one jukebox
- Formatting of disk media utility
- Disk space utilization management
- Disk media identification via bar code
- Project information management and segregation of disk details
- House keeping quality statistics
- Disk status
- Fault logging and log in statistics
- Archive management statistics add in
- Remove volume
- Historic logs

### **20. Radiographic Image Data Storage**

File Size	Number of Files Stored
25MB	5033165 (Approx)
50MB	2516582 (Approx)
100MB	1258291 (Approx)

### **21. Product Ordering Code**

Part Code	Description
CIT/DRSAM-30TB+ [Blu-ray]	CIT Digital Radiography Scalable Archive Management 600 Disk Slots per jukebox
CIT/DRSAM Blu-ray disk	50GB media with bar codes
CIT/DRSAM UPS	Uninterruptible power supply unit for DRSAM

**For further details contact sales at:**  
**Computerised Information Technology Ltd**  
20, Potters Lane, Kiln Farm  
Milton Keynes, Bucks, MK11 3HF, UK  
Tel: +44 (0)1908 260082  
Fax: +44 (0)1908 260084  
E-mail: [info@cituk.com](mailto:info@cituk.com)  
Visit us at [www.cituk.com](http://www.cituk.com)