



## Introducing the Mirage Data Recorder(MDR)

The **Mirage<sub>DR</sub>** is designed to meet the requirements for Mission Critical Data Recording Applications such as Seismic Data Acquisition. Tape drives and cartridge(s) are replaced by two disk drives in removable canisters, delivering increased performance and superior reliability. The **Mirage<sub>DR</sub>** provides fault tolerant recording to two removable disk modules (RDM) in a RAID level one configuration. Recording continues in the event of a single drive failure. The MDR copies data from the virtual volumes on the RDM to physical tape cartridges for processing or archive as required.

**Transparent Operation** – The **Mirage<sub>DR</sub>** appears as an IBM 3590 tape drive to the system providing plug and play compatibility. The ability to process directly from disk greatly increases throughput of existing acquisition systems. The MDR implements a Virtual Tape Autoloader with Multiple Virtual Tape Volumes. MDR automatically loads the next virtual tape volume upon executing the unload command from the server. Each virtual volume can be loaded manually using the operator front panel.

**RDM Features** - RDMs are managed as a pair with automatically generated unique matching identification numbers. Each disk drive is enclosed in a rugged removable disk module rated at 25,000 insertions. The data on the disk is recorded in actual tape format. All tape formats are supported including SEG-D, Rev. 2 Technical Standards. RDMs can be written to, retrieved from, stored, archived to physical tape, erased and returned to the field like conventional tape cartridges.

**Tape Drive Archive** –The **Mirage<sub>DR</sub>** copies data from the virtual volumes on the RDM to physical tape cartridges. Operations include Archive, Archive and Verify and Verify Only. The tape cartridges created are 100% compatible with an identical tape drive connected directly to a seismic processing system.

**Higher Data Protection** – Mirrored RDMs provide an instant backup copy. The **Mirage<sub>DR</sub>** also offers additional data protection by automatically write-protecting Virtual tape volumes until they are successfully archived.



MDR Desktop System



MDR Rackmount System



# Mirage<sub>DR</sub> Specifications

## Mirage Data Recorder

The Mirage Data Recorder is packaged in a 4 bay tower or 2U rackmount which includes a Mirage Data Recorder controller, two disk modules with 146/300/750GB removable disks and one archive port.

### Product Highlights :

- Designed specifically for Seismic Acquisition Data Recording
- Replace tape drives & cartridges
- RAID Level-1 fault tolerance against data loss
- 100% emulation of IBM 3590 tape drive with built-in autoloader emulation.
- Removable disk modules rated at 25,000 insertions
- Operator Control via Front Panel

## Interfaces

Host Interface	LVD SCSI U160 HVD SCSI 40 Optional	
Hard Drive Interface	LVD SCSI U160/U320 SATA	147/300 GB 750 GB
Archive Tape Interface	LVD SCSI U160 HVD SCSI 40 Optional	

## Performance

Burst transfer rate	160 MB/sec
Sustained read/write speed	70 MB/sec

## Packaging

4 Bay Tower	15.5 x 7 x 10.25 inches	25 lbs	100 – 240V (50/60)Hz
2U Rackmount	19 x 18 x 3.5 inches	27 lbs	115/230V (50/60)Hz selectable

## MDR ENVIRONMENT

### RELIABILITY

MTBF	50,000 HRS (power on)
MTTR	30 minutes

### TEMPERATURE

Operating	5 degrees C to 50 degrees C
Non-operating	-40 degrees C to 60 degrees C

### HUMIDITY

Operating	10% to 80% non-condensing
Non-operating	10% to 90% non-condensing

One Year Warranty

Number of 3590 Tape Volumes	10 to 70
Number of 3580 Tape Volumes	1 to 7
Number of Hard Drives	2 Mirrored
Hard Drive Capacities	147/300/750GB

## Archival Devices

IBM3580/3590/3592
Fujitsu M8100