



DI FRED SR™ with front panel doors opened

## Our Mission

At Digital Intelligence, we combine the knowledge gained from years of providing digital forensics and eDiscovery services with a deep understanding of digital technology to build and deliver solutions that *Give Voice to Digital Evidence™*.



USB 3.0 Hub (top), Forensic Card Reader (bottom)

# FRED SR™

## FORENSIC RECOVERY OF EVIDENCE DEVICE

### FRED SR™ - Extreme Power and Enormous Data Storage

The Digital Intelligence FRED Sr is a top-of-line, single Xeon® based forensic workstation with enormous local data storage capacity. FRED Sr is designed to optimize the performance of modern multi-threading forensic software while providing large amounts of fault-tolerant, local data storage.

### The Ultimate in Performance and Local Data Storage

Each FRED SR comes standard with a triple RAID chassis containing 15 hard drives for reliable, fault tolerant, high-capacity storage. Using 10 TB drives, the effective RAID5 storage capacity of a FRED SR is 140 TB. Optionally, larger disk drives are available to increase fault-tolerant storage capacity.

FRED Sr is a great solution for forensic departments seeking to transition from local physical hard drive evidence storage to on-line storage in a non-datacenter environment. Cleanup your lab's assortment of individual HDD's with FRED Sr's enormous on-line storage -- and add data redundancy as well.

### Unmatched Forensic Imaging: UltraBay 4d™ and Forensic Drive Trays

FRED Sr systems gain additional forensic imaging capability through innovative FRED HotSwap Forensic Drive Trays. Integrated using USB 3.2 technology, FRED Forensic Drive Trays support imaging of SATA drives in a forensically sound manner. These trays are user-selectable Read/Write or Read Only, doubling their system utility. Using modern forensic imaging software, speeds in excess of 24 GB/min have been attained.

The venerable UltraBay 4d is a proven workhorse used to image SATA, SAS, USB, FireWire, IDE, and PCIe storage devices. The touch-screen UI displays device information independent of the OS. Using Tableau Imager, the UltraBay 4d supports simultaneous or sequential drive imaging when multiple devices are connected. For general purpose drive work, a front panel switch securely manages switching to and from read only to read-write mode.

### Change Features on the Fly with the Drive Bay Ecosystem

The FRED Sr's USB 3.2 connected HotSwap drive trays support interchanging features by simply swapping out a drive tray. All FRED systems ship with USB 3.2 connected SATA trays (read/write or write blocked switchable). See the tech specs section for additional tray information.

FEATURE	FRED SR™ - Forensic Recovery of Evidence Device Technical Specifications
Processors	Intel® Xeon® W5-3435X 16 core, up to 4.7 GHz clocking with 45 MB Cache Processor upgrades with more cores are available. Contact DI or see our website for details.
Memory	128 GB ECC Memory PC5-38400 DDR5-4800 MHz Memory capacity upgrades are available. Contact DI or see our website for more details.
Chipset	Intel® W790 chipset
Software	Microsoft Windows® 11 Professional 64-bit, open SUSE Linux 64-bit, Symantec® Ghost, CD/DVD authoring software
Graphics	NVIDIA® GeForce™ GTX 1050Ti 4 GB 128-bit DDR5, 768 CUDA cores. GPU upgrades are available. Contact DI for details.
Hard-drive Storage	Up to nine (9) storage drives (not including triple RAID chassis): Operating System - 500 GB internal M.2 NVMe SSD Database/Cache/Temp - 1TB M.2/NVMe SSD User defined - 1 TB M.2/NVMe SSD Case/Data - 2 TB 7200 RPM SATA III hard drive Extra drive slots: Two (2) SATA connected HotSwap drive bays, and three (3) USB 3.2 connected HotSwap drive bays. Many drive capacities/types are available
Drive Bays	2 x native SATA, shock mounted, removable trays 3 x hot swap USB 3.2 connected SATA, shock mounted, removable trays Optional IDE tray available for legacy drives
DVD/CD/Blu-ray	BD-R/BD-RE/DVD±RW/CD±RW Blu-ray Burner, Dual-Layer Combo Drive
Forensic Imaging / Write Blocking	DI UltraBay 4d™ forensic bridge - write blocks SATA,SAS,USB3.0/2.0/1.1, IDE, FireWire, and PCIe SSD storage devices; Touch-screen user interface supports local, on-screen access of device information including: <ul style="list-style-type: none"> <li>• Storage media details</li> <li>• LUN selection</li> <li>• Management of HDD protected regions</li> <li>• File system partitions (independent of the FRED OS)</li> </ul> Supports simultaneous and sequential forensic imaging of multiple storage devices; Supports hot-swap device connection; Available exclusively from DI on FRED systems
Hard Drive Cooler Shelf	DI exclusive extendable / retractable imaging work-shelf with integrated ventilation for drive cooling
Media Card Reader	DI Forensic Media Card Reader - user selectable read/write or read only access
RAID Storage	12 channel PCIe 12 Gb/s SAS/SATA RAID controller Qty 3 x 5 bay RAID chassis (15 drives total); Base FRED SR ships with 4 TB SATA drives in all RAID chassis. Many hard drive options available
Networking	Dual Intel® X710-AT2 10 GbE ports (RJ45)
Connections & Expansion	1 USB 3.2 Gen 2x2 Type C 2 USB 3.2 Gen 2 Type C 5 USB 3.2 Gen 2 3 USB 3.2 Gen 1 2 USB 2.0 1 write blocked SATA port - front access, read/write switchable through UltraBay 4d 1 write blocked SATA or SAS port - front access, read/write switchable through UltraBay 4d 1 write blocked PCIe port - front access, read/write switchable through UltraBay 4d 1 write blocked USB 3.0/2.0/1.1 port - front access, read/write switchable through UltraBay 4d 1 write blocked IDE port - front access, read/write switchable through UltraBay 4d 1 write blocked FireWire 1394 A/B (400/800 MB/s) port - front access, read/write switchable through UltraBay 4d
Drive Tray Ecosystem	Five unique USB 3.2 connected HotSwap forensic drive trays: (1) 3.5"/2.5" SATA drive tray (read/write or read only switchable), (2) 3-port USB 3.0 general purpose hub, (3) 5-port Dongle Vault for software license dongles, (4) M>2/NVMe PCIe SSD (read only / read write switchable), and (5) Forensic Media Card Reader
Storage Controller	8 ports Intel® 6 Gb/s SATA Controller, 1x Intel® M.2 x 4 PCIe Socket, 1 x ASMedia® 2 x 6Gb/s SATA port
Audio	Realtek® S1220A 7.1 surround sound high definition audio CODEC
Keyboard / Mouse	Microsoft wireless desktop keyboard and mouse combo
Display	22" (21.5" Vis) ergonomic LED monitor, 1920 x 1080 full HD resolution, height adjust, tilt and swivel functions, built-in speakers
Power Systems	1200 Watt modular power supply
Warranty & Support	Hardware warranty is 36 months from date of purchase. Extended warranty options available. Lifetime technical support
Accessory Toolbox	Adapters and cables: SAS, SATA, IDE, microSATA, SATA LIF, MacBook Air Blade SSD, PCIe SSD m.2 NVMe, PCIe SSD MacBook Pro (2013 and newer), and server class PCIe SSD Security screwdriver set: Assorted security bits for opening computer enclosures
Dimensions and Weight	23.5" H x 16.125" W x 28" D, 140 lbs.