FRED 1R with HotSwap Forensic Drive Trays

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™-MII

FORENSIC RECOVERY OF EVIDENCE DEVICE - MAKE IN INDIA

Sets the Bar for Digital Forensic Workstations

Digital Intelligence FRED systems are designed, built, and optimized for digital forensics work. Regardless of forensic task - acquisition, analysis, reporting, or archiving - FRED systems are unmatched in features, capabilities, and performance. Now, these powerful workstations are assembled in India, ensuring compliance with the Make in India initiative and catering to the needs of Indian customers.

FRED MII - A Feature Packed Forensic Powerhouse

In 2023, we redefined the base FRED forensic workstation for greater processing power. Packed with unmatched evidence acquisition and a potent CPU, FRED helps you work faster and smarter. The standard base FRED system specs include an Intel® i9-14900K 24-core processor (8 performance / 16 efficiency) and 128 GB of DDR5-4800 MHz RAM. Up to nine (9) drives are available in non-RAID versions:

- Three (3) internal M.2 NVMe drive slots including the 500 GB OS drive
- Two (2) SATA connected HotSwap drive bays (2.5"/3.5" SATA drives)
- Four (4) USB 3.2 connected HotSwap drive bays (2.5"/3.5" SATA drives)

Many hard drive options are available. FREDs can be configured with one ("1R") or two ("2R") five-drive RAID chassis.

Unmatched Forensic Imaging: UltraBay 4d and Forensic Drive Trays

FRED systems gain additional forensic imaging capability through the innovative FRED HotSwap Forensic Drive Trays. Integrated using USB 3.2 technology, FRED Forensic Drive Trays support imaging of SATA or M.2 NVMe PCIe SSD 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 touchscreen 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.

UltraBay 4d™ - a FRED Exclusive

Change Features On the Fly with the Drive Tray Ecosystem

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

FEATURE	FRED™ - Forensic Recovery of Evidence Device Technical Specifications
Processors	Standard CPU: Intel® Core i9-14900K, 24 core (8 performance / 16 efficiency), 32 threads, up to 6 GHz, 36 MB Smart Cache Contact us for additional CPU options
Memory	128 GB PC5-38400 DDR5 4800 MHz standard. Contact us for memory upgrade options
Chipset	Intel® Z790
Software	Microsoft Windows® 11 Professional 64-bit, openSUSE Linux 64-bit, Symantec® Ghost
Graphics	NVIDIA® GeForce™ GTX 1050Ti 4GB 128-bit DDR5, 768 CUDA cores. GPU upgrades available. Contact DI for details.
Hard-drive Storage	Up to nine (9) storage drives in non-RAID FRED systems, including three (3) internal M.2 NVMe storage locations: Operating System - 500 GB internal M.2 NVMe SSD Database/Cache/Temp - 1 TB M.2 NVMe SSD User defined - 1 TB M.2 NVMe SSD Case/DATA - 4 TB 7200 RPM SATA III hard drive Extra drive slots: One (1) SATA connected HotSwap and four (4) USB 3.2 connected SATA HotSwap drive bays. Many drive capacities/types are available.
Drive Bays	2 native SATA, shock-mounted, keyless, removable 4 HotSwap universal USB 3.2 (SATA/IDE compatible), shock-mounted, keyless, removable Hard drive options: rotational or SSD in various capacities
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, USB 3.0/2.0/1.1, IDE, FireWire and PCIe SSD storage devices Touchscreen user interface supports on-screen access of: • Connected storage device information • LUN selection • Management of HDD protected regions • File system and partitions (independent of the FRED OS) Supports simultaneous or sequential drive imaging of multiple storage devices, supports HotSwap 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
Networking	Realtek 2.5 Gigabit Ethernet port (RJ45); WiFi 6 (802.11 a/b/g/n/ac/ax) / Bluetooth® v5.2
Connections & Expansion	1 USB 3.2 Gen 2x2 Type C 1 USB 3.2 Gen 2 Type C 2 USB 3.2 Gen 2 5 USB 3.2 Gen 1 4 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 (5) 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) NVMe/M.2 PCIe SSD (write blocked switchable), and 5) Forensic Media Card Reader.
Storage Controller	3 x M.2 slots (Key M), PCIe 4.0 x 4 mode type (2 slots: 2242/2260/2280/22110, 1 slot: 2242/2260/2280); 4 x SATA 6 Gb/s ports
Audio	Realtek® 7.1 surround sound high definition audio CODEC
Keyboard / Mouse	Microsoft wireless desktop keyboard and mouse
Display	Optional: 22" (21.5" Vis) ergonomic LED monitor, 1920 x 1080 full HD resolution, adjustable height, tilt and swivel, built-in speakers
Power	1200 watt modular power supply
Warranty and Support	36 months from date of purchase, extended warranty options available, lifetime technical support
Dimensions and Weight	24" High x 8" Wide x 25" Deep, 80 lbs
Accessory Toolbox	Adapters and cables - SAS, SATA, IDE, microSATA, PCIe SSD m.2 NVMe, PCIe SSD MacBook Pro (2013 and newer), server class PCIe SSD, SATA LIF, and MacBook Air Blade SSD Security screwdriver set: Assorted security bits for opening computer enclosures Restore DVD containing Windows 11 Pro & Linux OS images. Original OEM SW/HW installation manuals and disks

OPTIONS	FRED™ - Forensic Recovery of Evidence Device Optional Feature Technical Specifications
FRED 1R and 2R Raid Options	12 channel PCIe 12 Gb/s SAS/SATA RAID Controller 5 bay RAID chassis (Qty 1 - 1R, Qty 2 - 2R) 1R - Baseline 10 TB (8 TB RAID5); Maximum RAID capacity is 50 TB (40 TB RAID5) 2R - Baseline 20 TB (16 TB RAID5); Maximum RAID capacity is 100 TB (80 TB RAID5) Additional hard drive options available