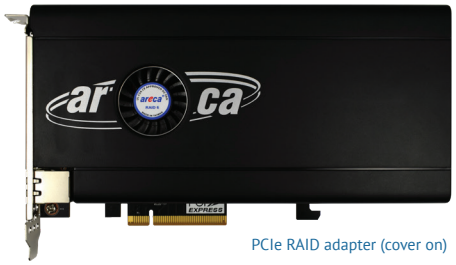
FRED™ AMD

FORENSIC RECOVERY OF EVIDENCE DEVICE

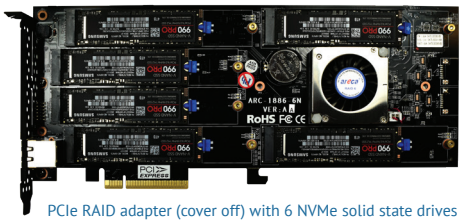


FRED AMD 1R with HotSwap Forensic Drive Trays

FRED PCIe NVMe RAID adapter



PCIe RAID adapter (cover on)



PCIe RAID adapter (cover off) with 6 NVMe solid state drives

Sets the Bar for Digital Forensic Workstations

Digital Intelligence FRED systems are designed, built, and optimized to support the demands of digital forensics. Regardless of forensic task - acquisition, analysis, reporting, archiving - FRED systems are unmatched in features, capabilities, and performance.

FRED AMD - Now with Threadripper Power

Modern digital forensic software is evolving to better utilize processor cores and threads. Forensic investigators with a need for single CPU, core-dense systems can configure their FREDs with AMD® processors. The entry-point FRED AMD ships with a 24-core Ryzen Threadripper™ PRO 9965WX (4.2/5.4 GHz clock, 128 MB cache), 64 GB PC5-38400 RAM, and a NVIDIA® GeForce® RTX 3050 GPU. With a wide range of processor, RAM, and GPU upgrades available, FREDs offer flexibility and custom-built performance.

HotSwap and RAID Storage Options for Effective Processing

Non-RAID FRED AMDs offer up to ten drive locations: four internal M.2 NVMe, two SATA III-connected HotSwap, and four USB 3.2-connected SATA HotSwap. Exclusive to FRED, the USB 3.2-connected drives are switchable read-only / read/write for additional forensic imaging capability.

FRED single (1R) and dual (2R) RAID systems provide extensive local, fault-tolerant data storage for security and application processing speed. Built with ultra-high speed Areca hardware RAID controllers, all FRED RAID systems deliver optimum performance. RAID options now include internal PCIe-connected M.2 NVMe cards (supporting 4 or 6 drives) as well as externally accessible drive chassis with 5 or 10 drives.

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

The UltraBay 4d is the forensic imaging focal point on FRED. Proven, efficient, and recognized by all leading forensic imaging software, the UltraBay 4d supports fast forensic acquisition of SATA, SAS, USB, PCIe, and FireWire devices. Its unique touchscreen allows for independent device information access [or independent access of device information], bypassing the OS. Multiple devices can be imaged simultaneously, and it can be safely switched to read-write mode for general purpose drive maintenance.

Need more write-blocking capacity? Switch a USB 3.2-connected drive tray to read-only, insert a drive, and start imaging. This capability is available only on a FRED.

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 section for additional tray information.

FEATURE	FRED™ AMD - Forensic Recovery of Evidence Device Technical Specifications
Processors	Standard CPU: AMD® Ryzen™ Threadripper™ PRO 9965WX, 24 cores, 48 threads, 4.2/5.4 GHz, 128 MB cache CPU upgrades available. Contact us for details.
Memory	64 GB PC5-38400 DDR5 4800 MHz standard. Upgrades to 512 GB
Chipset	AMD WRX90
Software	Microsoft Windows® 11 Professional 64-bit, Ubuntu Linux 64-bit, Symantec® Ghost
Graphics	NVIDIA® GeForce® RTX 3050 8 GB 128-bit GDDR6, 2560 CUDA® cores. GPU upgrades available.
Hard Drive Storage	Up to ten (10) storage drives in non-RAID FRED systems, including four (4) internal M.2 NVMe storage locations: Operating System - 1 TB internal M.2 NVMe SSD User defined - 1 TB internal M.2 NVMe SSD User defined - 4 TB 7200 RPM SATA III hard drive Extra drive slots: One (1) SATA-connected HotSwap, four (4) USB 3.2-connected SATA HotSwap drive bays, two (2) M.2 NVMe. Many drive capacities/types are available.
Drive Bays	Two (2) native SATA, shock-mounted, keyless, removable Four (4) HotSwap universal USB 3.2 (SATA/IDE compatible), shock-mounted, keyless, removable Hard drive options: rotational or SSD in various capacities
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	One (1) Intel X710-AT2 dual-port 10 GbE controller (RJ45-copper); one (1) 1 GbE port (dedicated LAN for onboard AST2600)
Connections & Expansion	2 USB4 (40 Gbps) Type-C ports - rear access 9 USB 3.2 Gen2 (10 Gbps) Type-A ports - 2 front access / 7 rear access 3 USB 3.2 Gen2 (10 Gbps) Type-C port - 2 front access / 1 rear access 1 USB 2.0 Type-A port - rear access 1 write blocked USB 3.0/2.0 port - front access, read/write switchable through UltraBay 4d 1 write blocked FireWire 1394b port - front access, read/write switchable through UltraBay 4d 1 write blocked SATA port - front access, read/write switchable through UltraBay 4d 1 write blocked SATA/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 IDE 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) M.2 NVMe PCIe SSD (write blocked switchable), and (5) Forensic Media Card Reader.
Storage Controller	2 x M.2 slots (Key M), PCIe 5.0 x4 mode (2242/2260/2280/22110); 2 x M.2 slots (Key M), PCIe 4.0 x4 mode (2242/2260/2280); 2 x slimSAS slots (PCIe 4.0 x4 mode); 4 x SATA 6 Gb/s ports
Audio	Realtek® ALC1220P 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, 1 VGA port, 2 mini DisplayPort inputs
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, USB, microSATA, SATA III to M.2 / mSATA, PCIe SSD M.2 NVMe, FireWire Security screwdriver set: Assorted security bits for opening computer enclosures Restore media containing Windows 11 Pro & Linux OS images. Original OEM SW/HW installation manuals and disks

OPTIONS	FRED AMD - Forensic Recovery of Evidence Device Optional Feature Technical Specifications
RAID Controller	FRED AMD 1R: 8 channel PCIe 12 Gb/s SAS/SATA; FRED AMD 2R: 12 channel PCIe 12 Gb/s SAS/SATA
FRED RAID Capacities	12 channel PCIe 12 Gb/s SAS/SATA RAID Controller; Capacity of RAID systems: A. "1R" has 5 drive single RAID for 110 TB raw, 88 TB RAID5 using 22 TB hard drives B. "2R" as 10 drives in dual RAID for 220 TB raw, 176 TB RAID 5 using 22 TB hard drives C. **PCIe-connected M.2 NVMe RAID internal adapter** with 4 or 6 NVMe solid state drives for 24 or 48 TB raw using 8 TB drives Additional RAID configurations and drive options are available.

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