



Digital Intelligence GPU PowerStation™

## 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™*.

# GPU PowerStation™

## PASSWORD DECRYPTION ACCELERATOR

### Fully Integrated, Dual Xeon and GPU Based Solution

The Digital Intelligence GPU PowerStation is a fully integrated, Dual Xeon based decryption workhorse with capacity for up to eight (8) GPU processor cards. The PowerStation base CPUs are two Intel® Xeon Silver Series 4110 8-core processors clocked at 2.1 GHz. Xeon processor options ranging from 4 cores to 28 cores with corresponding clock speeds are available. Memory, hard drives, and GPU cards are also configurable options.

With a 5U rack-mount form factor, the GPU PowerStation is packaged for easy single unit or multi unit (clustered) installs. Rack rails are included. The GPU PowerStation has been extensively tested including 24-hour decryption tests using Passware Kit Forensic and ElcomSoft Password Recovery. Digital Intelligence GPU PowerStations are built to order using high-quality, proven technology.

### Speed Decryption With Up to Eight RTX 2080 or RTX 2080Ti GPUs

The Digital Intelligence PowerStation is built for ultra-fast computational password decryption performance. The base PowerStation includes four (4) Nvidia RTX 2080 GPU cards (2944 CUDA cores per card). For additional processing power, graphics cards can be upgraded to RTX 2080Ti's (4352 CUDA cores per card). Up to eight (8) graphics cards can be installed in a single GPU PowerStation.

GPU PowerStations can be installed as single unit or multiple unit decryption clusters. Running modern Passware and ElcomSoft decryption software, hundreds of different password types can be processed for decryption. GPU acceleration dramatically reduces the brute-force decryption times.

### Visit the Digital Intelligence Website for Additional Information

Product information including pricing and currently shipping options is available at [www.digitalintelligence.com](http://www.digitalintelligence.com). Contact us through our website for availability, delivery, and other specified information. Our website webstore can also be used to configure, price, and quote the Digital Intelligence GPU PowerStation.

**PowerStation Performance with 8 x GTX 2080 Cards (passwords / second):**

FEATURE	PASSWARE	EDPR
PASSWORD TYPE		
Office 2007	1,340,000 p/s	1,100,000 p/s
Office 2010	702,000 p/s	614,000 p/s
Office 2013-2016	130,000 p/s	109,000 p/s
FileVault/APFS	92,000 p/s	N/A
iTunes Backup 8.3	1,554,400 p/s	1,630,000 p/s
RAR 5.x	530,600 p/s	434,000 p/s

**PowerStation Performance with 8 x GTX 2080Ti Cards (passwords / second):**

FEATURE	PASSWARE	EDPR
PASSWORD TYPE		
Office 2007	1,768,000 p/s	1,580,000 p/s
Office 2010	916,300 p/s	901,000 p/s
Office 2013-2016	166,300 p/s	152,000 p/s
FileVault/APFS	126,000 p/s	N/A
iTunes Backup 8.3	2,476,800 p/s	1,570,000 p/s
RAR 5.x	702,000 p/s	663,000 p/s

Note: The ability to accelerate decryption using GPUs will vary by password type. Consult Passware and ElcomSoft websites for additional information. The above table includes a sample subset of all supported password types and the measured rate of password generation using PowerStation acceleration. Password types used for testing are 1-8 characters, all character sets.

FEATURE	GPU PowerStation™ Technical Specifications
Processor	Dual Xeon Scalable Processor Series: Standard CPU: 2 x Intel® Silver 4110 CPU 8-core, 2.1 GHz, 11 MB Cache CPU Options: Silver 4112 (4-core), 4114 (10-core), and 4116 (12-core) Gold 5122 (4-core), 5115 (10-core), 6132 (14-core), 6146 (12-core), and 6154 (18-core) Platinum 8168 (24-core) and 8180 (28-core)
Memory	64 GB ECC PC4 21300 DDR4-2666 MHz Upgrades to 128 GB, 256 GB, 512 GB, and 768 GB available
Chipset	Intel® C622
OS Software	Windows 10 Pro 64-bit
Graphics Cards	4 x RTX 2080 (standard) with upgrade to RTX 2080Ti. Slots available for up to 8 graphics cards.
Application Software	Passware Kit Forensic and ElcomSoft Password Recovery
OS Hard Drive	512 GB SSD Pro Series
Networking	Dual Port 10 GbE from C622
Graphics	ASPEED AST2500 BMC
I/O	10 x SATA3 (6Gbps); 2 x RJ45 10GBase-T; 1 x RJ45 Dedicated IPMI; 4 x USB 3.0; 1 x VGA; 1 x COM
System Cooling	8 x Hot-swap 92mm cooling fans with air shroud; Heat sink with fully ventilated enclosure
PC Health Monitoring	Monitors for CPU cores, chipset voltages, memory. Fans tach monitoring, speed control status, thermal control for fan connectors
Power Supply	2000W redundant
Warranty and Support	12 Months (from date of purchase). Lifetime Technical Support.
Form Factor	5U Rackmount
Dimensions	8.75" (H) x 17.2" (W) x 29" (D)
Weight	Net: 85.5 lbs (38.6 kg); Gross: 120 lbs (54.5 kg)
Operating Environment	10°C - 35°C (50°F - 95°F); 8% to 90 % (non-condensing) relative humidity