

COMINO GRANDO FORENSIC DPR 4090-FT/8

ENGINEERED FOR STABLE 24/7 OPERATION

KEY ADVANTAGES

TOP OF THE LINE SOLUTION FOR PASSWORD RECOVERY

We produce high-end performance systems, based on the quality components, provided by world's top manufacturers. Each system is made to be the leader in its class, showing unmatched performance in password recovery.

CONFIDENCE AND STABILITY.

RESULTS DELIVERED

We don't just liquid-cool chips, like many other manufacturers do. We liquid-cool all the critical components, such as CPU, GPU, and GPU-related components, allowing them to operate in comfortable conditions, which results in long life of our devices.

When it comes to quality builds, look no further.

SILENTLY OUTPERFORMS ANY SIMILAR AIR-COOLED SOLUTION

We work closely with manufacturers of every component which we use in our device, to fine-tune the system for the high performance, silent operation and low power consumption. Simply saying, our systems are fast, silent and effective.



Ultra-compact liquid-cooled GPU accelerated devices for password recovery and decryption

Powered by



FEATURES



LIQUID COOLED

Comino liquid cooling system unleashes the full performance potential of modern top-tier GPUs and CPUs, allows to prolong lifespan of the hardware and ensures 24/7 operation even in harsh environment with no thermal throttling.

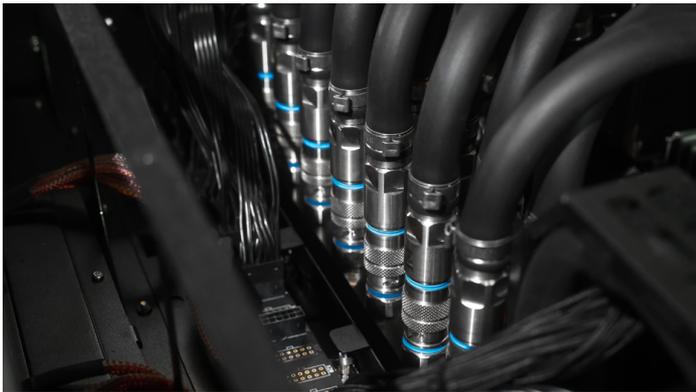
REMOTE MANAGEMENT

Our servers come equipped with an IPMI interface for seamless remote management. Enjoy features like remote KVM access, OS installation, and comprehensive server monitoring. Ensure peak performance and minimal downtime anytime, anywhere.

8 GPUs



8x NVIDIA RTX 4090 in 4090-FT/8 configuration.
Suitable GPUs for acceleration in forensic tasks.



QUICK-DISCONNECT COUPLINGS

Quick release coupling on each GPU and CPU allows to simplify maintaining and reduce maintenance time to increase system availability in case of GPUs failure. Moreover all hardware components and cooling system controller board are easily accessible after top lid is unmounted. All water cooled components and coolant are tested for compatibility in a chemical laboratory.

REDUNDANT POWER SUPPLY

Designed for use in critical IT infrastructure. It provides reliable power for your system without limitation. PSU work at whole spectrum voltage 100-240VAC and 240VDC and provide N+M redundancy.



**SIMPLE MAINTENANCE.
FAST. RELIABLE. ENERGY EFFICIENT.**

PASSWARE 2024v3 BENCHMARK RESULTS*

Encryption	Passwords / second
MS Office 2013+	513 900
RAR 5.x	2 141 200
APFS (encrypted)	1 197 200
Apple iTunes Backup / iOS 10.x+	6 600
MS Windows / BitLocker	79 400
Blockchain wallet version 3	6 982 000
Cryptocurrency wallet	186 000

HASHCAT 6.2.6 BENCHMARK RESULTS*

Encryption	hashes / second
0 MD5	1 212.6 GH/s
100 SHA1	391.1 GH/s
1700 SHA2-512	57 734.0 MH/s
6211 TrueCrypt RIPEMD160 + XTS512	14 966.9 kH/s
7100 macOS v10.8+	23 437.9 kH/s
11300 Bitcoin/Litecoin wallet.dat	261.9 kH/s
11600 7-ZIP	18 786.9 kH/s

* Maximum results achieved in Comino lab

TECHNICAL SPECIFICATIONS

COMINO GRANDO FORENSIC DPR 4090-FT/8

GPU 8x **NVIDIA RTX™ 4090** GPU Base Clock: 2235 MHz
GPU Boost Clock: 2520 MHz
CUDA cores: 16384
Memory Interface: 384-bit
Discrete graphics adapter memory: 24 GB GDDR6X
Memory speed: 1008 Gbit/s

CPU **AMD EPYC™ 9354**
Socket: SP5. Lithography: 5 nm.
Number of Cores: 32. Number of Threads: 64.
Processor Base Frequency: 3.25 GHz. Max Turbo Frequency up to 3.80 GHz.
256MB L3 Cache
PCIe generation: PCIe 5.0 x 128 lines

Motherboard Motherboard Chipset: AMD EPYC 9004
CPU Socket support: SP5 (LGA-6096)
RAM Support: 8 x DIMM, RDIMM: 96GB (2R), RDIMM-3DS: 512GB (2S8Rx4)
DDR5 288-pin RDIMM, RDIMM-3DS
PCIe expansion slots: 7x PCIe 5.0 x16, 1x PCIe 5.0 x8
BMC controller: ASPEED AST2600
IPMI2.0 with iKVM and vMedia support
1x VGA output

RAM 256 GB DDR5 4800 MT/s

Storage NVMe Gen4 SSD 2TB

Power supply Redundant Power supply system up to 4x 1000/1600W @ 110/220V CRPS

Max Power consumption ~4.5 kW

Operation system Linux / Windows 10 Pro

Liquid-cooling 8x fullcover waterblocks for 8x nVidia RTX 4090
1x fullcover waterblock for AMD EPYC™ 9354 CPU + VRM

COMINO GRANDO FORENSIC DPR 4090-FT/8

Dimensions	442 x 690 x 177 mm (without rack-mounting handles)
Weight	Comino Grando Forensic DPR 4090-FT/8 with 4x CRPS and 8x GPUs — 47kg (net), 73kg (gross)
Network Connectivity	2x RJ45 10 Gigabit Ethernet LAN ports + 2x RJ45 1 Gigabit Ethernet LAN ports optional
Operating temperature	Ambient Temperature Range 5-35°C (25°C – full load recommended operating temperature)
Placement Recommendations	19" rack-mountable (4U) or standalone as a Workstation
Rack AC Power Recommendations	220-240V AC power source with 4x C19 or 4x Schuko power sockets for each device setup 5kW power line
Amount of heat	15 350 BTU per hour
Air flow rate	400 CFM

PACKAGING CONTENT

DATASHEET
COMINO GRANDO FORENSIC
DPR 4090-FT/8

- COMINO GRANDO FORENSIC DPR 4090-FT/8 is 19" rack-mountable (4U)
- 4x AC Power Cables (UK (BS 1363) / EU (CEE 7/7) / US (NEMA 5-15 (B)) plug type)
- USB stick with system settings
- Rack handles
- A bottle with additional coolant



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