



COMINO GRANDO FORENSIC DPR 4090-FT/6

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.

373K

Passwords/sec in
Office 2013-2019
with Passware



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

Powered by



FEATURES

DATASHEET
COMINO GRANDO FORENSIC
DPR 4090-FT/6

LIQUID COOLED

More performance compared to similar air-cooled systems. Better cooling means less mistakes made by the chip which equals in more things done right.

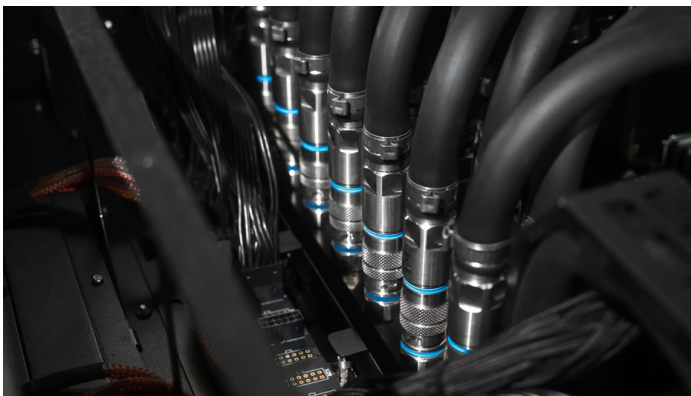
REMOTE MANAGEMENT

iKVM remote management: BMC chip to provide intelligence for its IPMI architecture for out-of-band management to enhance hardware-level control for improved IT efficiency.

6 GPUs



6x Nvidia RTX 4090 in 4090-FT/6 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.

Common Redundant Power Supply (CRPS)

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 BENCHMARK RESULTS*

Encryption	Passwords / second
MS Office 2013+	373 000
RAR 5.x	1 600 600
APFS (encrypted)	893 700
Apple iTunes Backup / iOS 10.x+	4 900
MS Windows / BitLocker	60 200
Blockchain wallet version 3	5 026 900
Cryptocurrency wallet	140 900

HASHCAT 6.2.6 BENCHMARK RESULTS*

Encryption	hashes / second
0 MD5	914.3 GH/s
100 SHA1	300.3 GH/s
1700 SHA2-512	44 155.6 MH/s
6211 TrueCrypt RIPEMD160 + XTS512	11 448.3 kH/s
7100 macOS v10.8+	18 343.5 kH/s
11300 Bitcoin/Litecoin wallet.dat	200.8 kH/s
11600 7-ZIP	14 476.0 kH/s

* Maximum results achieved in Comino lab

TECHNICAL SPECIFICATIONS

COMINO GRANDO FORENSIC DPR 4090-FT/6

GPU	6x 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 Ryzen™ Threadripper™ PRO 3975WX Socket: sWRX8 Lithography: 7 nm Number of Cores: 32 Number of Threads: 64 Processor Base Frequency 3.50 GHz Max Turbo Frequency Up to 4.20 GHz Cache 128MB L3 Cache PCIe generation PCIe 4.0 128 lines
Motherboard	Motherboard Chipset: AMD WRX80 CPU Socket support sWRX8 RAM Support: 8 x DIMM, up to 2048GB, DDR4 3200/3000/2933/2800/2666/2400/2133 MHz ECC and Non-ECC, buffered and Unbuffered, U-DIMM, R-DIMM and 3DS R-DIMM PCIe expansion slots 7x PCIe 4.0 x16/x8 BMC Aspeed 2500 chipset IPMI 2.0-compliant and supports KVM over LAN (1x RJ45)1 x VGA output
RAM Storage	256 GB DDR4 3200MHz
Storage	NVMe Gen4 SSD 2TB
Power supply	Redundant Power supply system up to 4x 1000/1600W @ 110/220V CRPS
Max Power consumption	~3.6 kW
Operation system	Linux / Windows 10 Pro
Liquid-cooling	6x fullcover waterblocks for 6x nVidia RTX 4090 1x fullcover waterblock for AMD threadripper sWRX8 CPU + VRM

COMINO GRANDO FORENSIC DPR 4090-FT/6

Dimensions	442 x 690 x 177 mm (without rack-mounting handles)
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	100 - 240V AC power source with 4x C19 or 4x Schuko power sockets for each device setup 4kW power line.
Amount of heat	12 300 BTU per hour
Air flow rate	130 CFM minimal

PACKAGING CONTENT

DATASHEET
COMINO GRANDO FORENSIC
DPR 4090-FT/6

- COMINO GRANDO FORENSIC DPR 4090-FT/6 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



COMINO HOLDING LTD

30 Churchill Pl, London, England, E14 5RE
+44 203 670 9833

For more product information visit: www.comino.com

Email us: info@comino.com

GET SOCIAL

Instagram [@cominotech](https://www.instagram.com/cominotech)
Facebook [@cominotech](https://www.facebook.com/cominotech)
YouTube [@cominotech](https://www.youtube.com/cominotech)

