

DECRIPTUM PR 2080TI/12 4U

TECHNICAL SPECIFICATION

DECRIPTUM FREECOOLER 4U

Dimensions	482 (440) mm x 175mm (4U) x 942 (858) mm 19.0 (17.3) in x 6.9in (4U) x 37.0 (33.8) in
Consumption	110w
Pipe Connection Spec	G1/4" threads on back panel Non-Spill Flat-Face Quick Decoupling Fittings with internal diameter of 6mm included
Power input	110-230VAC
Cooling capacity	4000W with 25°C liquid-ambient delta
Fans	2 manual levels (9V, 12V)
Operating temperature	Ambient Air 10-35°C (20°C - recommended) Coolant temperature 10-55°C

DECRIPTUM PR 2080TI/12 4U

Dimensions	Each system consists of 4U GPU-Server and 4U Freecooler module (1 system), total of 42U for 5 systems with 19" Racks 100-120cm deep
Pipe Connection Spec	G1/4" threads on back panel Non-Spill Flat-Face Quick Decoupling Fittings with internal diameter of 6mm included

GPU	ASUS Turbo GeForce RTX™ 2080 Ti 11GB GDDR6
Graphics processor family	NVIDIA
Graphics processor	TU102-300-K2-A1
GPU Base Clock	1350 MHz
GPU Boost Clock (OC mode)	1560 MHz
CUDA cores	4352
CUDA support	Yes
Maximum resolution	7680 x 4320 pixels
Memory Interface	352-bit
Discrete graphics adapter memory	11 GB
Memory speed	14 Gbit/s
Memory clock speed	14000 MHz
Memory bus	352 bit
Graphics adapter memory type	GDDR6
CPU	Intel® Core™ i9-9900K
Socket	LGA 1151v2
Lithography	14 nm
Number of of Cores	8
Number of Threads	16
Processor Base Frequency	3.60 GHz
Max Turbo Frequency	5.00 GHz
Cache	16 MB SmartCache

Bus Speed	8 GT/s DMI3
Motherboard	Intel LGA-1151 ATX
Motherboard Chipset	Intel® H370 Chipset
CPU Socket support	LGA 1151v2 (14nm Processor support)
RAM Support	2 x DIMM, Max. 32GB, DDR4 2666/2400/2133 MHz Non-ECC, Un-buffered Memory (Supports Intel® Extreme Memory Profile (XMP))
PCIe expansion slots	1x Full size 16x PCIe Slot 20x PCIe-over-USB ports
Storage	2x SATA 6Gb/s port(s)
Graphic	Integrated Graphics Processor Multi-VGA output support: HDMI/DVI-D ports - Supports HDMI with max. resolution 4096x2160 @ 24Hz/ 2560x1600@ 60 Hz - Supports DVI-D with max. resolution 1920x1200 @ 60 Hz Maximum shared memory of 1024 MB (for iGPU exclusively)
LAN	Intel® I219V, 1x Gigabit LAN Controller(s)
Form Factor	ATX Form Factor 30.5 cm x 23.1 cm 12 in x 9.1 in
RAM	32GB, DDR4 2666MHz Non-ECC, Un-buffered Memory
Storage	2.5 SATA-3 6Gb/s 256 Gb SSD 3.5 SATA-3 6Gb/s 1TB HDD 7200rpm
Power Supply	
Backplane monitoring interface	USB
Backplane monitoring protocol	SMB/I2C
Backplane connectivity	ATX

Maximum installed CRPS modules	3
Maximum total powerload	4800w
Length of CRPS modules	185mm
CRPS modules power	1600w max
CRPS modules certificate	80 Plus Platinum
Input conditions	100-240v 50/60Hz
Liquid-cooling	6 double-sided fullcover waterblocks for 12x nVidia RTX2080Ti (copper coldplates remove heat from GPU chip, memory, VRM) 1 CPU waterblock
Operating System	Linux/Windows 10 Pro
Network Connectivity	1 LAN port 1000Mbps (1 per 1)
Operating temperature	Ambient Air 10-35°C (20°C - recommended)
Lan Network Recommendations	1x Switch per one rack cabinet (3 in Total) Switch: Switch Juniper EX2300-24t or similar GbE Port Density per System: 28 (24 host ports + four-port SFP/SFP+ uplinks) GbE Certified rj45 patch cords
Rack Recommendations	19" Rack 120cm deep with 42U available Mounting holes are provided for installing manifolds for the liquid cooling system on both sides of the rack
Rack AC Power Recommendations	220V AC power source with 4x C13 or 4x Schuko power sockets for each device setup Total: 4x for 1 System (3x 1600W for each 4U GPU-Server and 1x 110W for each 4U Freecooler module) 20 sockets total for 1 rack, 24kW for 5 device setup