DATASHEET

Over
1.5 TH/s

Hyper Performance Multi-GPU solution for the most advanced and resource intensive computational tasks.

AI Researches: Machine Learning, Deep Learning, Inference
Content Creation: Editing, Design, Engineering, Architecture
Production: Video, Virtual, Rendering, Animation
Forensics: Password recovery
And many more!
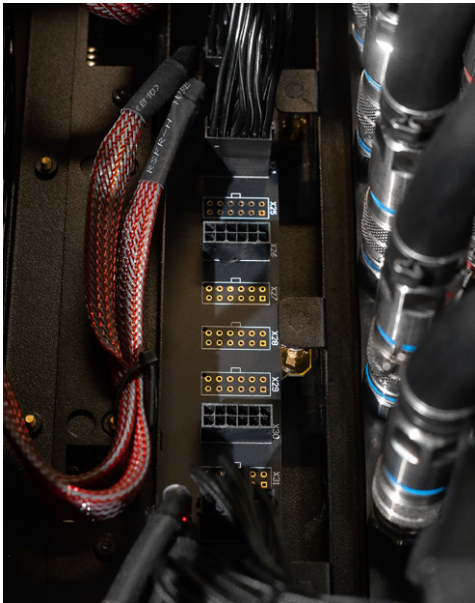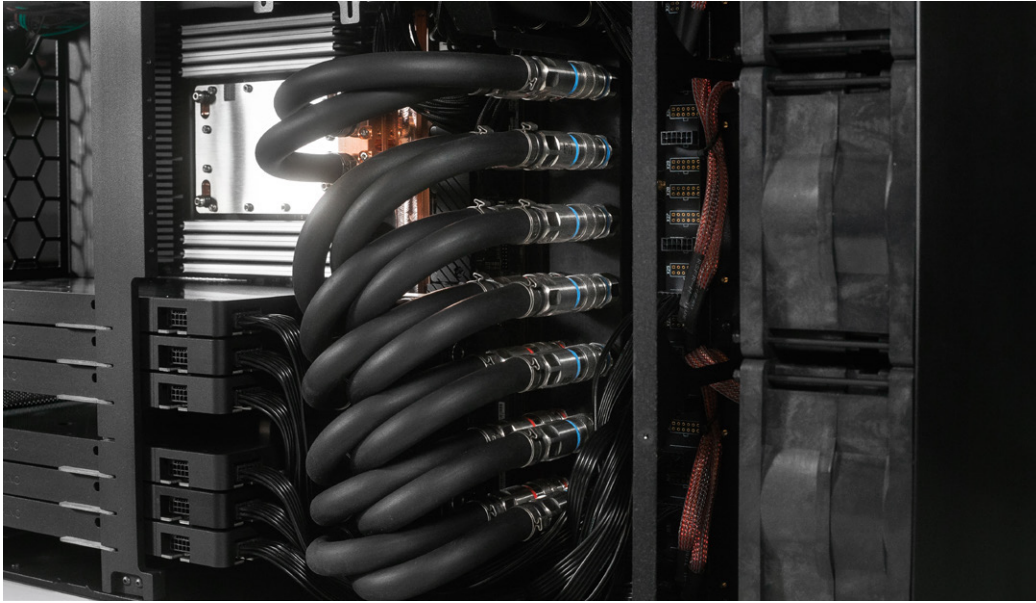
SELACHII™

KEY ADVANTAGES

Best Multi-GPU performance for specialists, workgroups and research teams

Easy configurable, maintainable & scalable bleeding edge hardware!

Engineered for Reliable High Performance 24/7 operation in harsh environments up to 38°C / 100°F

SELACHII™

SELACHII

Up to **7 GPUs & 2 CPUs**

Designed to be **used in a rack** or **put on a table**

Redundant Power supply system up to **4x 1600W** CRPS modules (Redundancy modes: 4+0, 3+1, 2+2). **Power capacity up to 6.4kW**

3x Ultra High Flow fans 6200RPM each (high noise level) or 3x 140mm 5000RPM (medium noise level)

Cooling Capacity up to 4kW

Optional installation of **up to 8 hot swap SSDs** (SATA or NVME)

LIQUID COOLED

Selachii's liquid cooling system unleashes the full performance potential of modern top-tier GPUs and CPUs, and greatly prolongs lifespan of the hardware ensuring 24/7 operation even in harsh environments with no thermal throttling.

QUICK-DISCONNECT COUPLINGS

Quick Disconnect Couplings on each GPU and CPU allows to simplifiy maintaining and reduce maintenance time to increase system availability.

REMOTE MANAGMENT

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

SELACHII'S MONITORING SYSTEM allows collecting cooling system logs

offline to analyze device usage history, log failure events and to monitor the temperature statistics. WEB based GUI allows inspecting several devices remotely. The monitoring system increases system availability.

REDUNDANT POWER SUPPLY (CRPS)

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

SELACHII™

Maximum Cooling Capacity

4 000 W
Maximum cooling capacity is ensured
@ 20C intake air T and "performance mode" of the cooling system

Motherboard

Up to EATX & EBB

GPUs

Up to 7; NVIDIA: 3090, 4090, RTX A6000, RTX 6000 ADA, A40, L40, L40S, A100, H100; AMD: W7800, W7900

Processors

Up to 2; Intel: Core i9, Xeon-W 2400, 3400, Xeon Scalable 4th & 5th Gen; AMD: Ryzen 7000, Threadripper PRO 5000WX, 7000WX, EPYC 7003, 9004

RAM

Up to 2TB *

Storage

Back panel hot swap cages: up to 4x hot swap SSDs (4x 7mm or 2x 15mm) and up to 4 more (4x 7mm or 2x 15mm) instead of 4th PSU;
Internal 3.5" cage up to 2x 3.5" or 2x 2.5" 15mm or 4x 2.5" 7mm;
Internal 2.5" slots: up to 6x 2.5" SSD 7mm *

Power Supply System

4x 1600W CRPS modules (Redundancy modes: 4+0, 3+1, 2+2).
Power capacity at 180-264V up to 6.4kW
Power capacity at 90-140V up to 4kW

* - depends on the configuration, contact VSPL for clarification
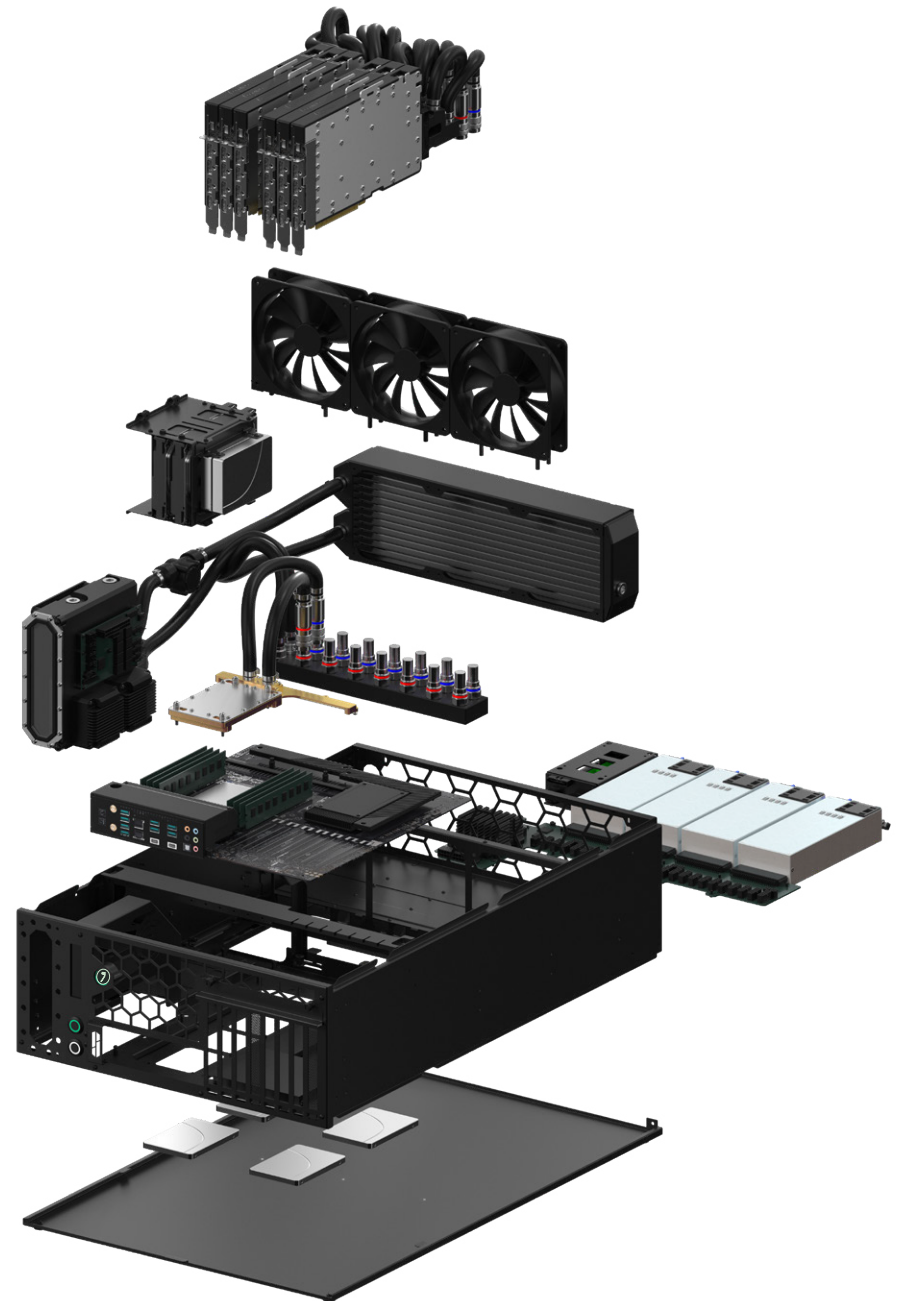
**3x 120mm Ultra High Flow 6200RPM fans
or 3x 140mm High Flow 5000RPM fans**

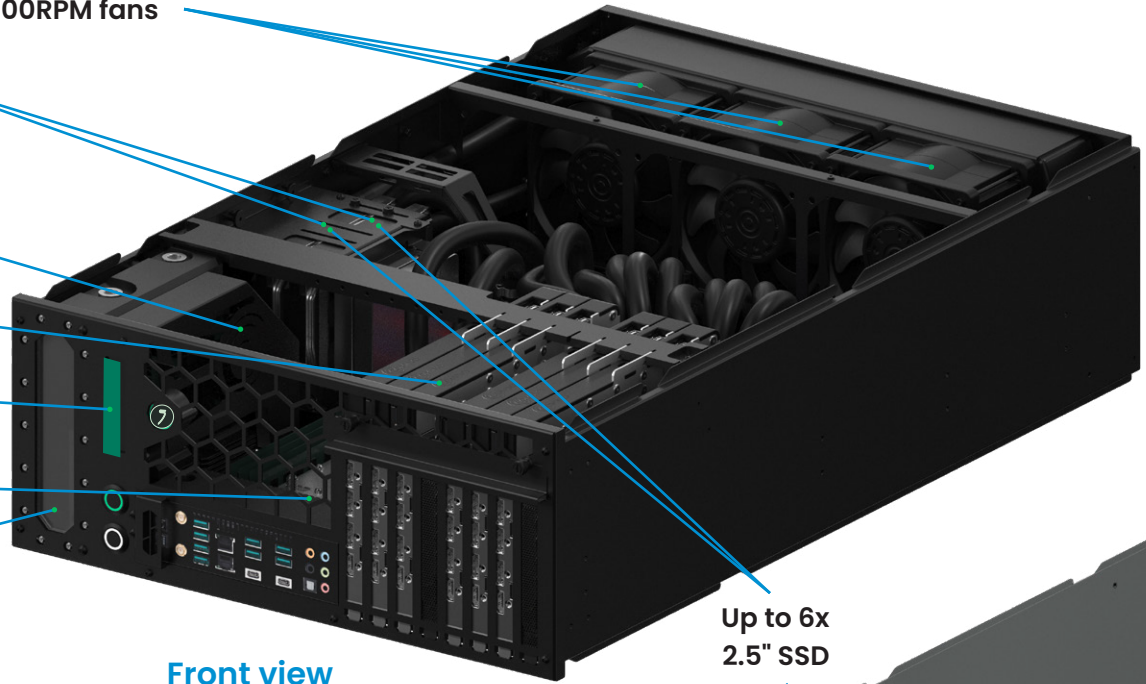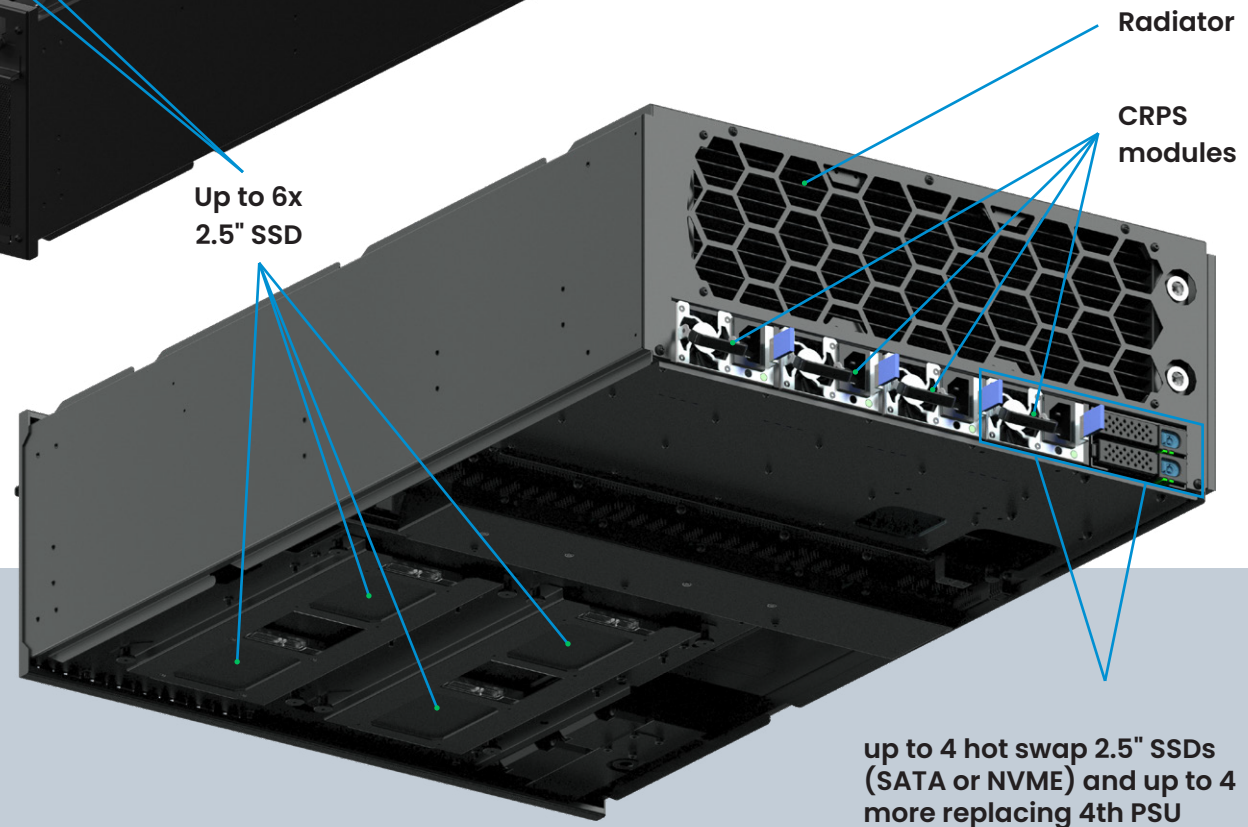**Up to 2x 3.5" HDD**

**Cooling system
controller**

GPU*

Display

CPU*

Reservoir

*Different configurations
available

Front view

**Up to 6x
2.5" SSD**

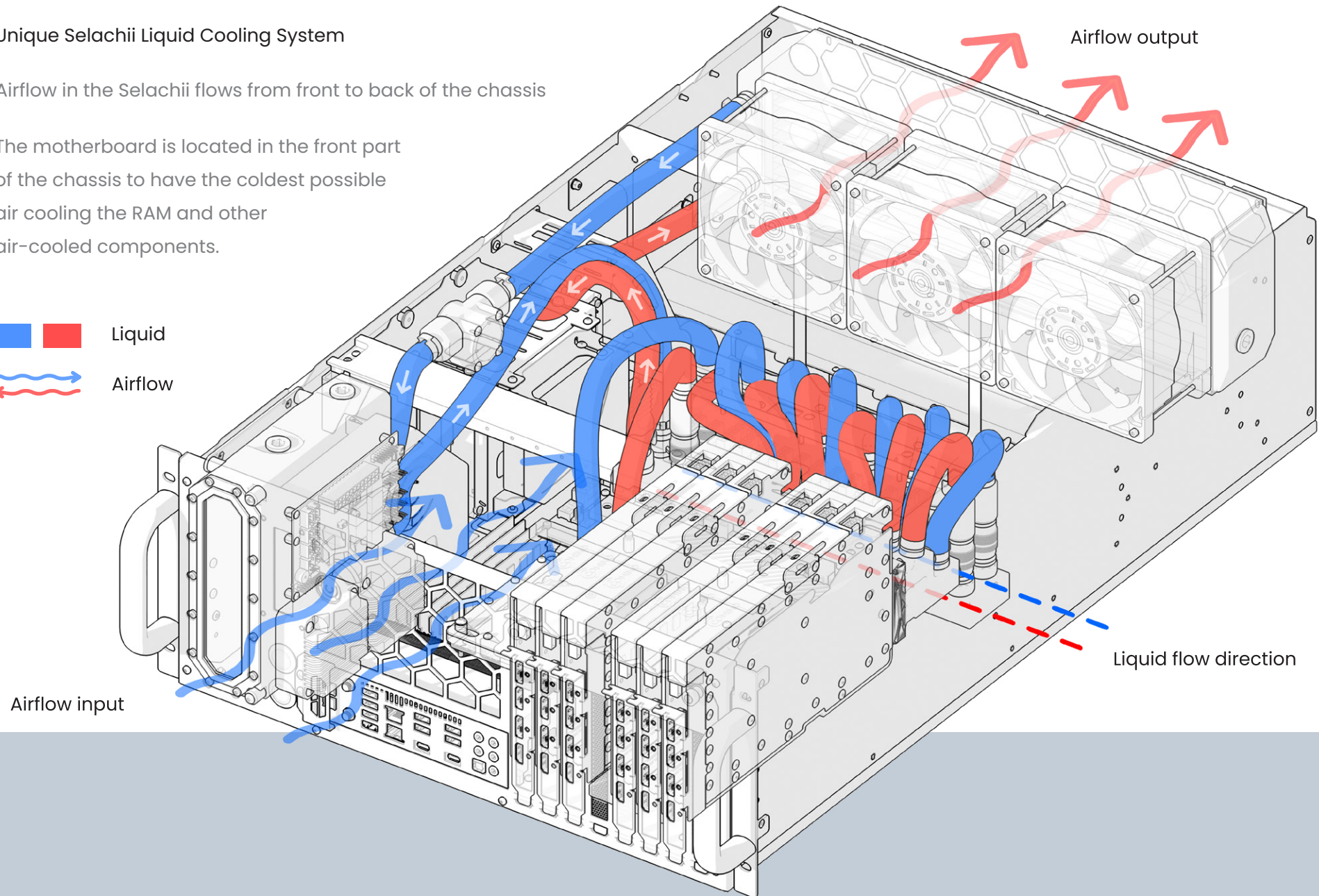**Radiator**

**CRPS
modules**

Back view

**up to 4 hot swap 2.5" SSDs
(SATA or NVME) and up to 4
more replacing 4th PSU**

SELACHII

Unique Selachii Liquid Cooling System

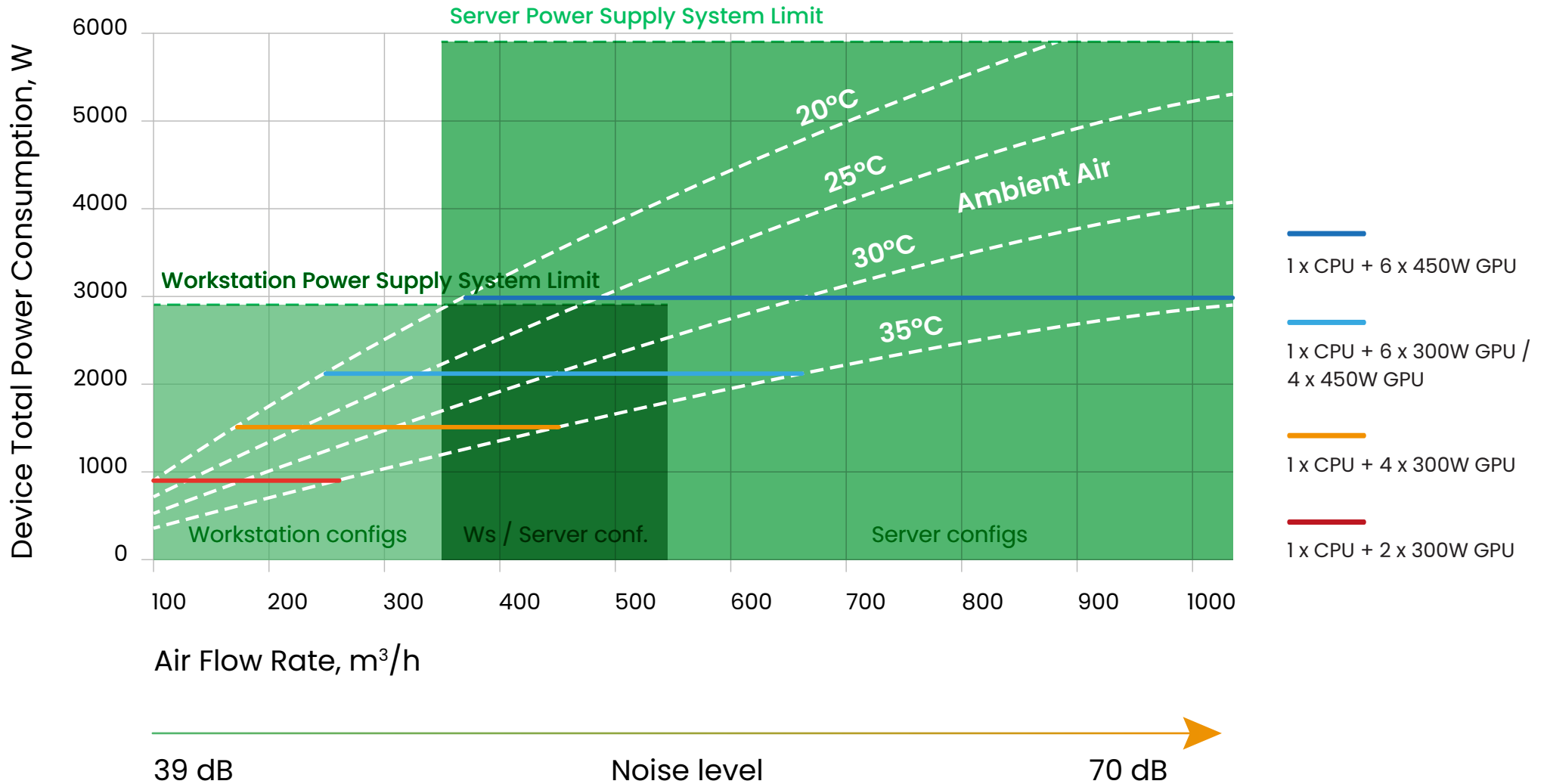Airflow in the Selachii flows from front to back of the chassis

The motherboard is located in the front part of the chassis to have the coldest possible air cooling the RAM and other air-cooled components.

Liquid

Airflow

Airflow output

Airflow input

Liquid flow direction

Server Power Supply System Limit

Device Total Power Consumption, W

6000
5000
4000
3000
2000
1000
0

20°C
25°C
Ambient Air
30°C
35°C

Workstation Power Supply System Limit

Workstation configs

Ws / Server conf.

Server configs

100 200 300 400 500 600 700 800 900 1000

Air Flow Rate, m³/h

39 dB   Noise level   70 dB

— 1 x CPU + 6 x 450W GPU

— 1 x CPU + 6 x 300W GPU / 4 x 450W GPU

— 1 x CPU + 4 x 300W GPU

— 1 x CPU + 2 x 300W GPU

All the data is a rough estimation and provided only for informational purposes, please contact VSPL for clarification.

up to 300W
NVIDIA A100 40Gb (250W)
NVIDIA A100 80GB (300W)
NVIDIA RTX A6000 / A40 (300W)
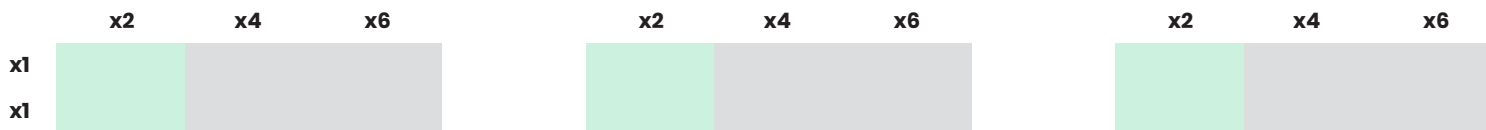NVIDIA RTX 6000 ADA / L40 (300W)
AMD Radeon PRO W7900 (300W)

up to 350W
NVIDIA H100 80Gb (350W)
NVIDIA 3080 (320W)
NVIDIA 3090 (350W)
NVIDIA L40S (350W)

up to 450W
NVIDIA 3090 Ti (450W)
NVIDIA 4090 (450W)

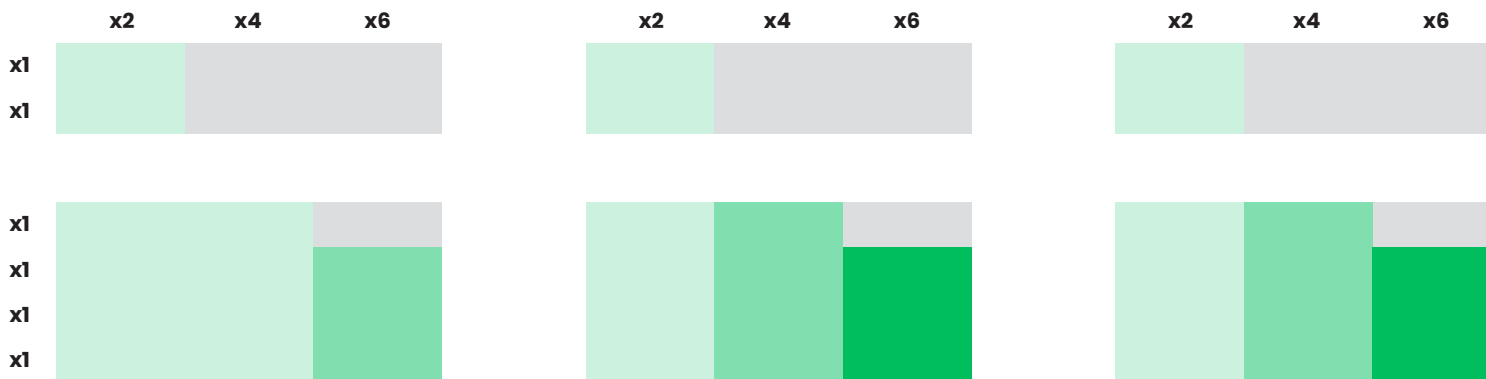|		up to 300W			up to 350W			up to 450W		
		x2	x4	x6	x2	x4	x6	x2	x4	x6
Consumer Grade										
Intel Core-i9	x1									
AMD Ryzen	x1									
Workstation										
Intel Xeon-W 2400	x1									
Intel Xeon-W 3400	x1									
AMD Threadripper PRO 5000WX	x1									
AMD Threadripper PRO 7000WX	x1									
Server										
Intel Xeon Scalable 4th & 5th Gen	x1									
	x2									
AMD EPYC 7003	x1			*PCIe x8			*PCIe x8			*PCIe x8
	x2									
AMD EPYC 9004	x1									
	x2									
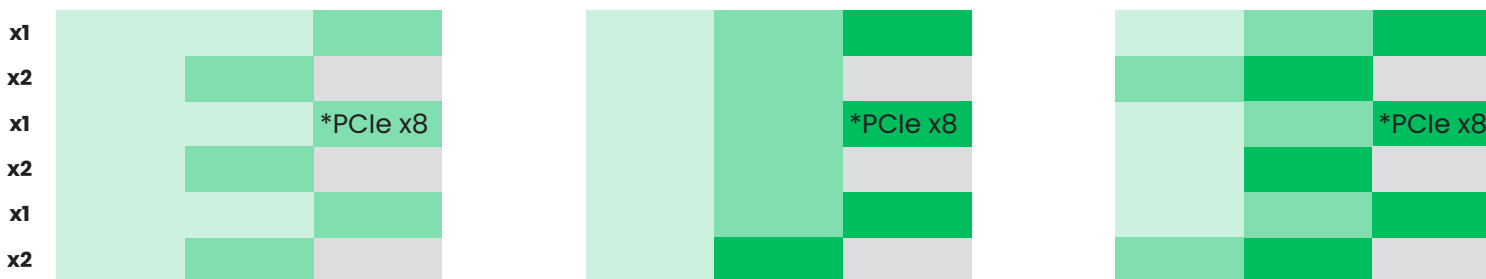
Selachii Workstation
Selachii Workstation/Server
Selachii Server

Legend:
- Low noise
- Medium noise
- High noise
- Not Applicable
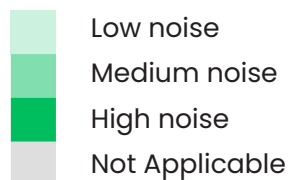
* In this configuration at least one GPU operates with decreased to PCIe x8 bandwidth

Motherboards	Up to EATX & EBB	**Liquid cooling**	CPU with VRM and GPU with DDR and VRM
RAM	Up to 2TB *	**Reservoir**	Selachii custom 450ml with integrated pumps
M2 drives	Up to 8x NVME *	**Pumps**	2x **Laing DDC 20W**
	Back panel hot swap cages: up to 4x hot swap SSDs (4x 7mm or 2x 15mm) and up to 4 more (4x 7mm or 2x 15mm) instead of 4th PSU; Internal 3.5" cage up to 2x 3.5'' or 2x 2.5'' 15mm or 4x 2.5" 7mm; Internal 2.5" slots: up to 6x 2.5'' SSD 7mm	**Radiators**	1x **120x360mm core**
		Fans	3x Ultra High Flow **140mm 6200RPM** (high noise level) or 3x High Flow **140mm 5000RPM** (medium noise level)
PSU and operating voltage	Up to 4x **1600W CRPS** @ 180-264V Up to 4x **1000W CRPS** @ 90-140V Redundancy modes: 4+0, 3+1, 2+2	**Installation**	**19"** rack-mountable or standalone as a Workstation
Cooling Capacity	4kW	**Required rack space**	4U
Noise level	**39dB – 70dB**	**Size**	439 x 681 x 177mm (without handles and protruding parts)
Lan	Up to 2x **10 Gbit/s** on the MoBo and up to **400Gbit/s** in PCIe	**Weight**	Selachii Server with 4x CRPS and 6 GPUs — **44kg** (net), **70kg** (gross)
OS	Ubuntu / Win10 (Pro/Home) / Windows Server	**Operating & storage temperature range**	**Storage:** –5..50°C / 23..122°F **Operating:** 3..38°C / 38..100°F *

* - depends on the configuration, contact VSPL for clarification

SELACHII™

A ⌒ 90° (1:5)

B ⌒ 90° (1:5)

COOLING SYSTEM
STANDBY

WI-FI

10G

VECTOR+SCALAR
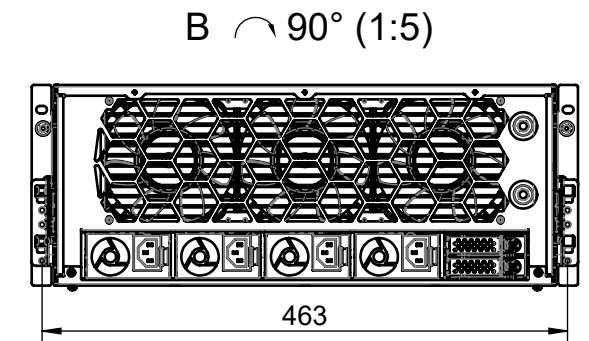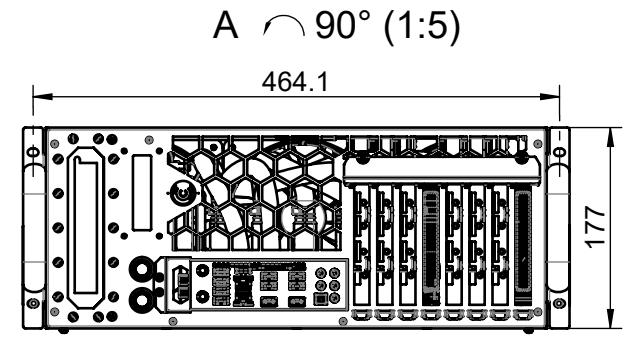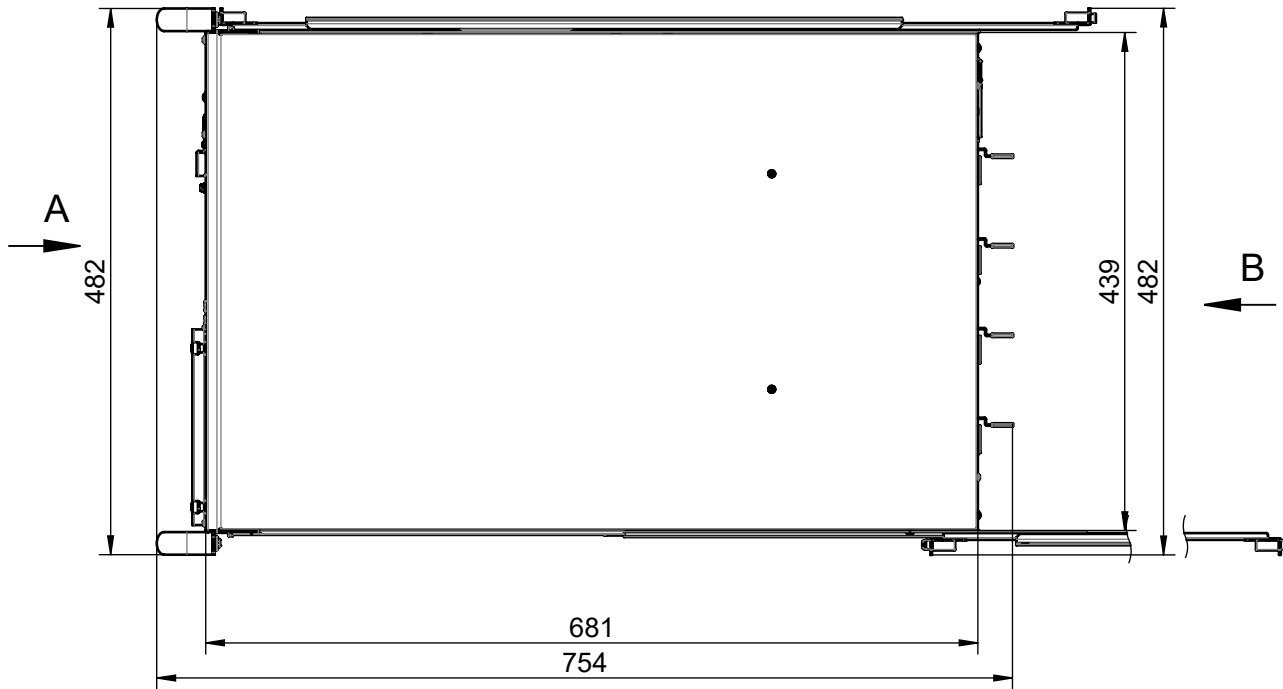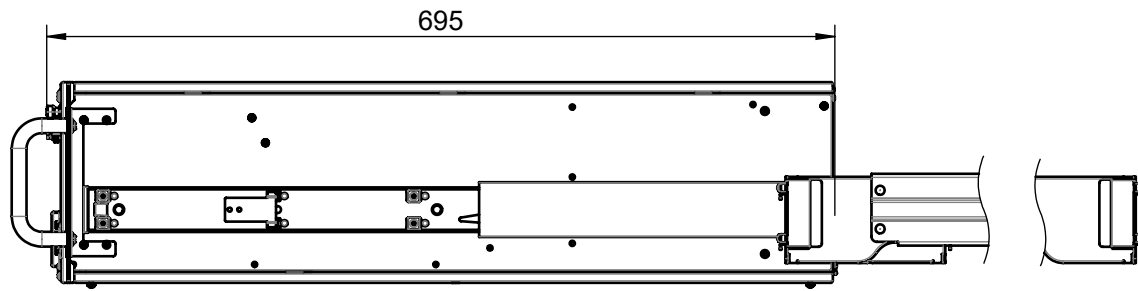
Since 1988

The Old Court House
Trinity Road
Marlow
Bucks
SL7 3AN

Email: sales@vspl.co.uk

Web: www.vspl.co.uk

Tel: +44 (0)1628 891616