WHICH SERVERS FIT?

ANY SERVER, 1U TO 21U.



NexisImmersion tanks take standard 19" rack servers, not proprietary hardware. Any server from **1U up to 13U** fits the 13U tank (LCT-04, LCT-06, LCT-10). Any server from **1U up to 21U** fits the 21U tank (LCT-10, LCT-20, LCT-40). Mix heights freely in the same tank.

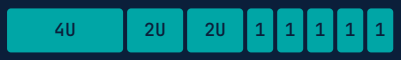
TWO THINGS DECIDE THE FIT

Both must be true

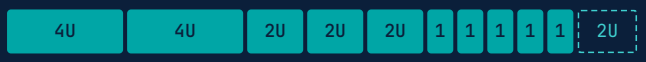
1 SPACE

The rack units of all servers added together must not exceed the tank: **13U or 21U**. U positions are customisable, so any mix of heights works.

13U TANK · 1×4U + 2×2U + 5×1U



21U TANK · 2×4U + 3×2U + 5×1U



2 HEAT

The maximum power draw of all servers added together must not exceed the tank's rated heat exchange: **4 to 40 kW**. Size for peak load, not average.

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Σ server peak W ≤ tank kW
4 × 4U at 4.5 kW = 18 kW · 16U
→ LCT-20, 21U tank, 20 kW ✓
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POWER BUDGET BY MODEL

Oil in/out 40 / 50 °C · PUE close to 1.0

MODEL	TANK	RATED HEAT	SERVER HEIGHT	KW PER U, FULL	EXAMPLE FILL	LOAD · SPACE
LCT-04	13U	**4 kW**	1U – 13U	0.31	8 × 1U edge servers at 450 W	3.6 kW · 8U
LCT-06	13U	**6 kW**	1U – 13U	0.46	6 × 2U servers at 900 W	5.4 kW · 12U
LCT-10	13U	**10 kW**	1U – 13U	0.77	3 × 4U GPU servers at 3 kW	9.0 kW · 12U
LCT-10	21U	**10 kW**	1U – 21U	0.48	20 × 1U servers at 450 W	9.0 kW · 20U
LCT-20	21U	**20 kW**	1U – 21U	0.95	4 × 4U GPU servers at 4.5 kW	18 kW · 16U
LCT-40	21U	**40 kW**	1U – 21U	1.90	5 × 4U GPU servers at 7.5 kW	37.5 kW · 20U

kW per U = average budget per rack unit with the tank full. Examples are planning illustrations, not validated configurations.

SERVERS THAT GAIN MOST FROM IMMERSION

GPU & AI SERVERS

2U–8U accelerator nodes for training and inference. Highest heat per U, quietest result.

DENSE COMPUTE

1U and 2U dual-socket nodes packed tight for virtualisation, HPC and edge workloads.

ALL-FLASH STORAGE

NVMe and SSD storage nodes. Sealed solid-state drives only, no spinning disks.

TELECOM & BBU

5G baseband units and edge appliances on the universal server and BBU mounting.

BEFORE IT GOES IN THE TANK

PREPARING A SERVER FOR IMMERSION

Most standard servers need only a few changes to run submerged. Semita prepares servers at commissioning, or your team can follow this list.

1 FANS OUT
Remove or disable server fans. Set BMC/firmware so missing fans do not raise alarms or throttle.

2 SOLID-STATE STORAGE
SSD and NVMe only. Unsealed spinning hard drives cannot run submerged.

3 THERMAL INTERFACE
Replace standard paste with an immersion-rated compound, or use indium or graphite pads.

4 LABELS & FOAM
Remove paper labels, stickers and foam inserts. They lift and float in the oil.

5 SILICONE OIL CHECK
With silicone oil, confirm silicone-based pads, gaskets and cable jackets are rated for it.

6 OPTICS ABOVE THE OIL
Keep optical transceivers and fibre connectors above the surface. Use DAC copper inside the tank.

7 POWER SUPPLIES
Confirm each PSU is suitable for immersion, or use the tank's power distribution.

8 WARRANTY
Confirm immersion warranty terms with the server vendor before deployment.

VALIDATED CONFIGURATIONS

Semita keeps a list of server configurations tested in NexisImmersion tanks with silicone oil, covering make, model, firmware settings and warranty position. **The current list is available on request.**

PHYSICAL FIT

Standard 19" rack width. Server depth, rail type and cable routing are checked against the tank at site survey. Top access door; pipes exit at the side or bottom.

PRE-DEPLOYMENT CHECKLIST

Fill in and send to sales@semita.in

COMPANY & SITE

SERVER MAKE & MODEL

HEIGHT (U) × QUANTITY

MAX POWER PER SERVER (W)

STORAGE TYPE

IN-TANK NETWORK

TARGET LCT MODEL

SITE POWER AVAILABLE

PLAN YOUR NEXISIMMERSION

Send us your server list. We size the tank and confirm the fit.

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