

BladeRunner

COMPUTE BLADE ENCLOSURES

The BladeRunner Enclosures were developed to fit as many Compute Blades as possible into the available space by offering efficient and ideal cooling.

They are optimized for heat distribution and airflow, utilizing the least possible space to scale the Compute Blade cluster. The BladeRunner enclosures are engineered to scale and offer you the greatest flexibility without the need to spend any thought on complex cooling or powering.

Key Features



Integrates within
Compute Blade



Integrates within
Fan Unit



Optimal Cooling

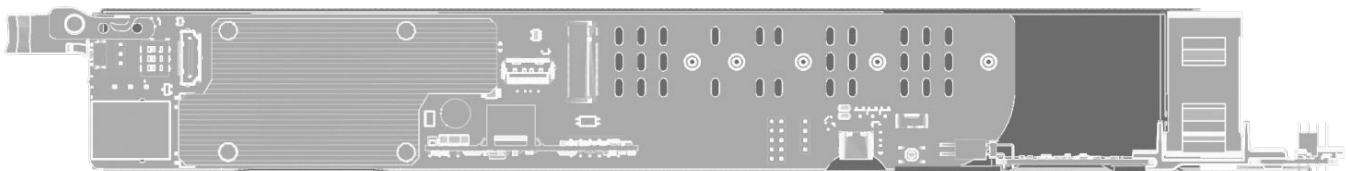


Fit 1U-rack space



Scalable design

Specifications



Compability	Compute Blade V0.9 RC2, V1.0 mk1, V1.0 mk4-k, V1.0 mk4
	Fan Units

Compute Blade Platform Applications



Home labs

An enterprise-level homelab experience that you can use to build, play with, and explore new technologies



Hosting provider

Provide dedicated resources and isolate customer machines on a physical layer, to protect against modern CPU/hypervisor exploits.



Edge servers

Reduce latency and extend compute power to make your processes leaner, more efficient, and more cost-effective.



CI/CD systems and Automated tests

Perform performance tests on dedicated hardware for results far more stable than running tests on virtual machines.



Stateless Computing

Seamlessly deploy specialized stateless computing platforms, such as OpenFaaS, onto the blades to enhance functionality and performance.



High Availability Computing

Deploy robust, high-availability computing to maintain critical operations and services with minimal downtime.



Smart Homes

Make your home server highly available and increase the possibilities e.g by adding more modules like the Uptime AI-Module.



Private Cloud

Create your own secure, scalable private cloud for efficient data management and tailored IT services.

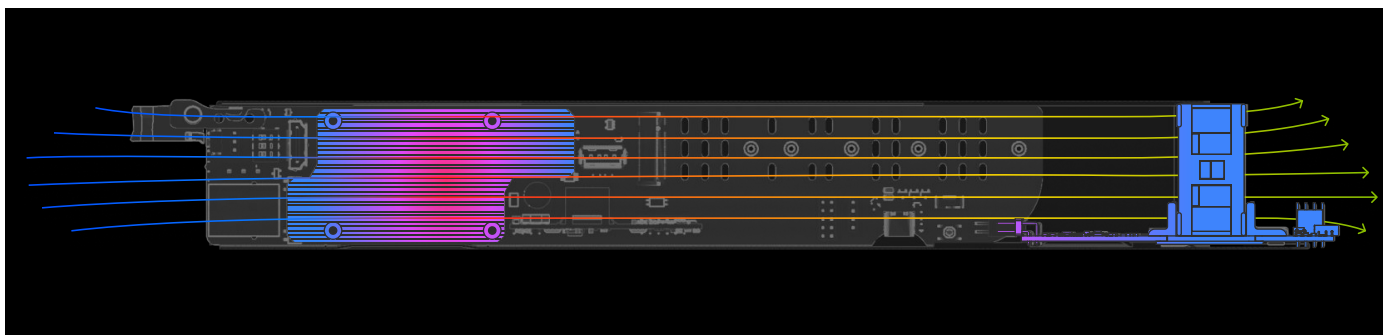


Education

Enhance educational experiences with practical, hands-on tech learning, facilitating innovation and computing skills.

Enclosures Engineered for Flexibility and Ease

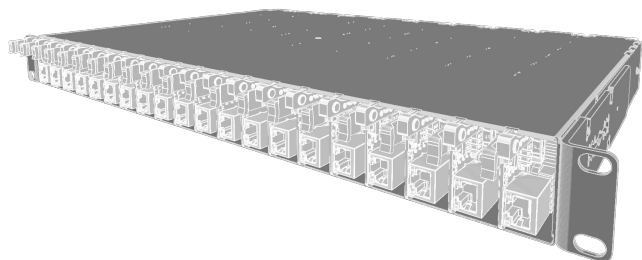
The BladeRunner enclosures are engineered to scale and offer you the greatest flexibility for your project without the need to spend any thought on complex cooling or powering. Thanks to the airflow-optimized design, each BladeRunner meets enterprise-grade cooling requirements.



Unlike conventional blade servers, our system eliminates a single point of failure as it doesn't rely on a server platform. While it still uses a PoE network switch (also necessary for blade servers), switches are simpler to replace or keep as spares compared to entire server platforms.

Individual blades can be rebooted or power-cycled by momentarily disabling their switch port power. Thanks to the CM4's network boot feature, re-provisioning and system rescue are straightforward. Each blade is compact, devoid of moving parts, and can be easily shipped without special handling.

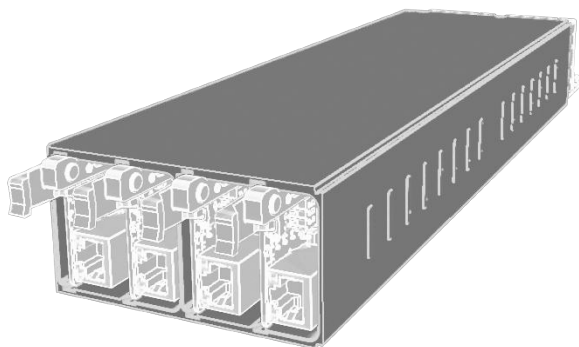
Versions



19-inch 1U Rack

If you want to scale your cluster or if you have rack space available, Uptime Industries offers a 1U 19-inch metal enclosure.

Tested and developed for enterprise-grade usage and rack mounting. The 19-inch version can accommodate up to 20 Compute Blades and 10 Fan Units.

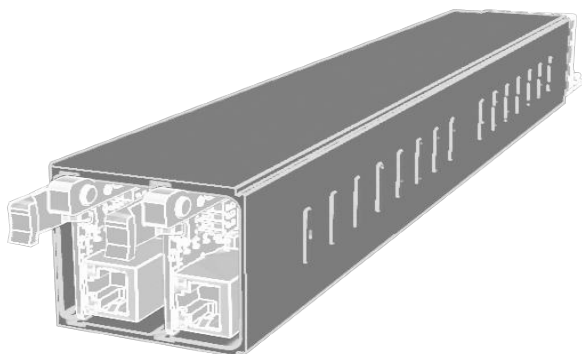


4-node

This enclosure fits 4 Compute Blades and 2 Fan Units (STM or Smart).

This is akin to 2x the 2-node 3D print version but is injection molded.

Allowing you to side-mount multiple 2-node and 4-node BladeRunners together.



2-node

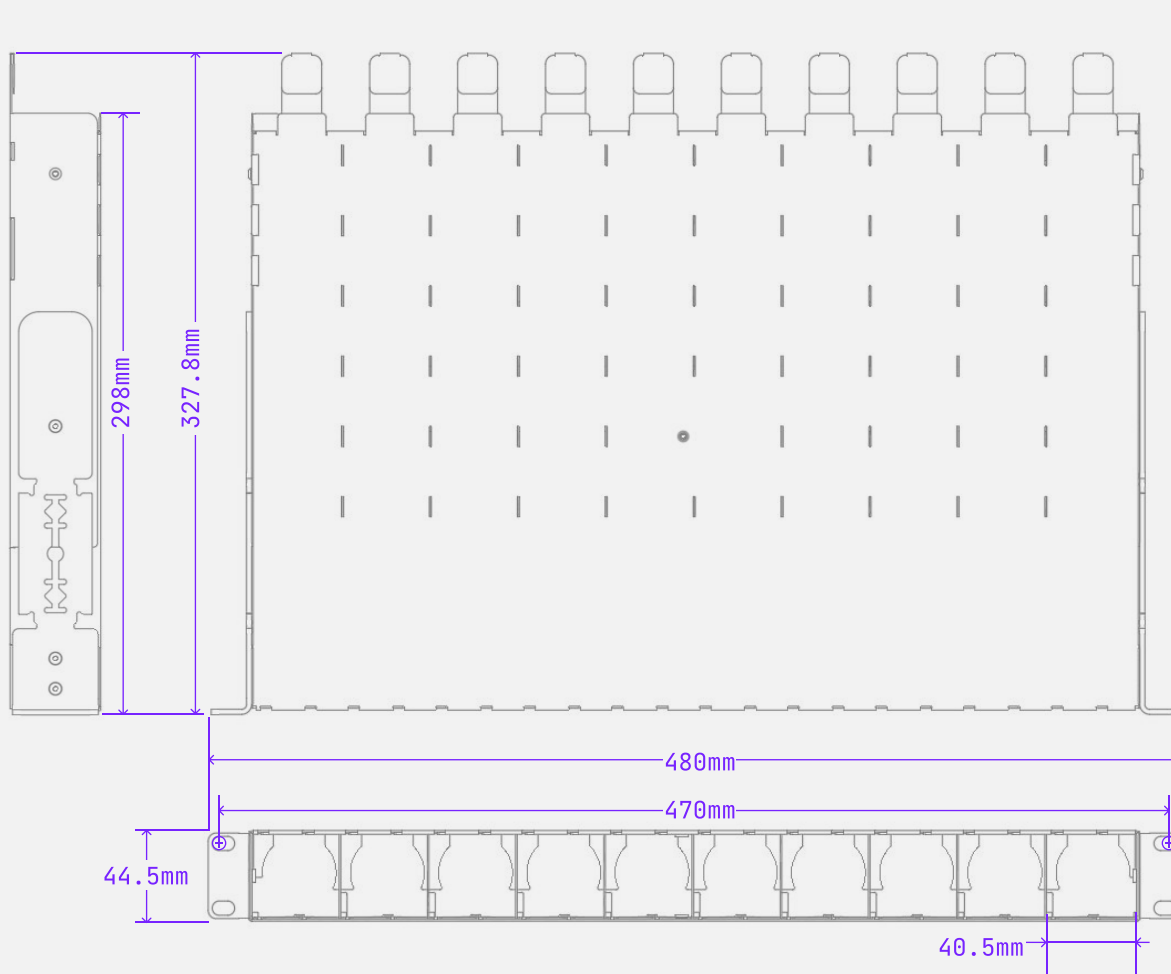
The smallest version is a 2-node enclosure that can be stacked and scaled to the size your cluster requires.

Available only as an open-source 3D print file, allowing you to print one case for 2 Compute Blades and one Fan Unit (STM or Smart, both are supported).

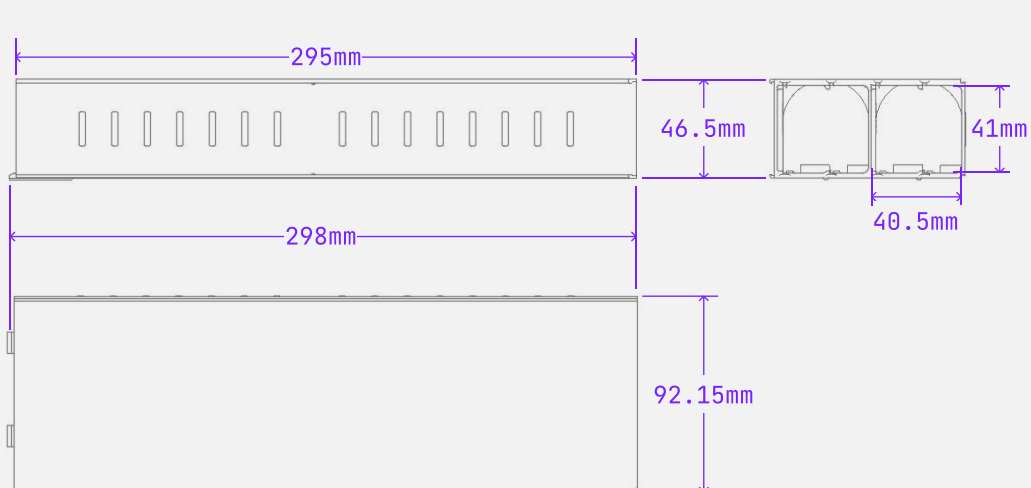
Allowing you to side-mount multiple 2-node and 4-node BladeRunners together.

Versions

19-inch 1U Rack



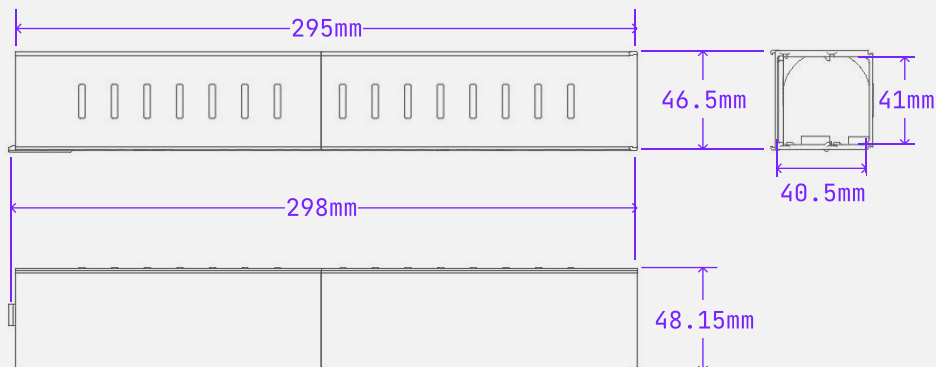
4-node



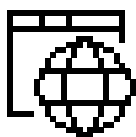
Mechanical

2-Node

Available only as an open-source 3D print file.

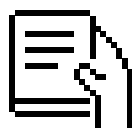


Documentation



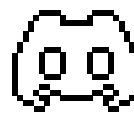
DOCUMENTATION

docs.computeblade.com



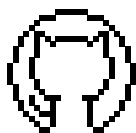
GET STARTED

docs.computeblade.com/getting-started



DISCORD

uplab.pro/discord



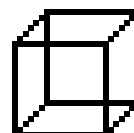
GITHUB

github.com/uptime-industries



DATA SHEETS

<https://docs.computeblade.com/data-sheets>



3D MODELS

docs.computeblade.com/models



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