

Standard 1U and 2U chassis height



Overview

U (rack unit, RU) is a unit of equipment height in a 19" rack. Important: U describes height only, but a server's real "capabilities" are also determined by chassis depth, internal layout, airflow, rails, power, and expansion (PCIe/risers, NVMe). A rack unit (abbreviated U or RU) is a unit of measure defined as $1\frac{3}{4}$ inches (44.45 mm). It is most frequently used as a measurement of the overall height of 19-inch and 23-inch rack frames, as well as the height of equipment that mounts in these frames, whereby the height of the frame or the equipment is measured in U's. The industry-standard for racks is 19" (482.6 mm) or 23" (584.2 mm) wide, but they come in a range of heights, depending on their intended use. If you have spent any time looking at rackmount devices, you will have seen them described as a number followed by a U. This guide will give you a strong. You'll instantly know how tall your server rack needs to be—and whether your gear will fit—once you understand that 1U = 1. This standardization allows IT equipment like servers, switches, routers, and patch panels to fit seamlessly into racks, regardless of manufacturer or brand. For instance: A 1U server is 1.75 inches tall.



Article Content

10 Best Rackmount GPU Servers Under \$10000 for 2026: Powerful

This barebone platform pairs a 2U chassis with a single SP5 socket, dual full-height dual-slot GPU support, and 2000W 1+1 Titanium redundant power, making it a strong fit for builders who

Cantilever Rack Server: Heavy-Duty Storage Solutions

The most promising product candidates are single-unit (1U) and two-unit (2U) vented cantilever shelves, which demonstrate the highest sales velocity and consumer trust, followed by complete server rack

Server Rack Sizes & Dimensions Guide 2026

What Is a Rack Unit (U)? A rack unit, or U, is the standard way to measure rack height. One rack unit (1U) equals 1.75 inches (44.45 mm) in

HTF DWDM equipment,OTN Solution,QSFP28 OSFP

Standard 1U chassis supports 3.2T (4×800G service slots); 2U chassis scales to 6.4T (8×800G service slots), reaching industry-leading density. It features flexible

cPCIS-6230R/ 6240R Series | 6U Enclosures & Systems | ADLINK

The chassis is 2U height and standard 19" rack mount width. The cPCIS-6230R supports one dual-slot system module and two expansion cards, while the cPCIS-6240R supports one single-slot system

Supermicro expands AI systems with NVIDIA RTX PRO

Supermicro systems with NVIDIA RTX PRO Blackwell GPUs can directly replace standard 1U and 2U rackmount enterprise servers to provide

1U vs. 2U vs. 3U: Rack Units Explained | EDN

EDN Explores Rack Units and Explains The Height Difference Between 1U vs. 2U vs. 3U. Plus, Find Practical Examples and Helpful

What Are Server Rack U Sizes? A Practical Guide to Rack Unit

Confused by 1U, 2U, 42U? Learn how rack units (U) work—exact height conversions, standard rack sizes, equipment fit planning, and why depth/width matter just as much.

ThinkSystem D3 Chassis | Lenovo India

The 2U Lenovo ThinkSystem D3 Chassis adds flexibility and density to a standard server rack. With support up to 4 multi-node servers and the ability to mix node types in a 1U / 2U combination within

Rack unit

A rack unit (abbreviated U or RU) is a unit of measure defined as 1+3/4 inches (44.45 mm). It is most frequently used as a measurement of the overall height of 19-inch and 23-inch rack frames, as well as the height of equipment that mounts in these frames, whereby the height of the frame or equipment is expressed as multiples of rack units. For example, a typical full-size rack cage is 42U high, while equipment is typically 1

Rack Units (RU): Sizes, Standards & Uses 2026

One rack unit (1U) equals exactly 1.75 inches or 44.45 millimeters in height. So, if you're installing a 2U server, it will take up 3.5 inches (88.9 mm) of

U Rack Dimensions — What Is U in Server Rack?

For equipment with non-standard heights, round up to the next whole number to determine the required rack units. This calculation ensures proper

10 Best Server Chassis for Home Lab Setups (May

Discover the best server chassis for home lab setups with our 2026 guide. We tested 10 models for performance, storage capacity, and value.

Rack unit

Definition The rack unit size is based on a standard rack specification as defined in EIA -310. The Eurocard specifies a standard rack unit as the unit of height; it also defines a similar unit, horizontal

What are rack unit (U) measurements in data center

A server's height in rack units (U) is the amount of space needed to house the equipment. The width and depth of standard data center racks slightly vary by

Server Rack Sizes & Dimensions Guide 2026

Servers and IT equipment are designed to match this sizing—like a 1U firewall or a 2U server—so you can stack and plan easily. Quick math tip: 10U

Understanding Rack Units (U) in Server Racks [July 2026]

What Is a Rack Unit (U / RU)? A Rack Unit (U or RU) is the standard height measurement used for mounting equipment in server racks. One rack unit equals 1.75 inches (44.45

Choosing the Right Rackmount Server Case: 1U, 2U,

Understand how 1U, 2U, 3U, and 4U rackmount server units vary in order to optimize your server requirements to select the most appropriate piece

7 Best 2U Rack Shelf | Venting That Actually Works

After extensive analysis of steel gauge, load capacity, and compatibility with standard 19-inch rails, here is the definitive list of the best 2u rack shelf options for any setup.

Rack Server Sizing Guide: 1U vs 2U vs 4U and Which to Pick

Its height is measured in rack units, written as U. One U equals 1.75 inches. You stack many of these machines in a single cabinet to save floor space and centralize power, cooling, and

What Is 1U Server Rack Size? Exact Dimensions in Inches & mm

This guide answers every variation of “1U server rack size in inches,” “1U rack size in mm,” and “what does 1U, 2U, 3U mean?” using industry-standard references and field-verified

Understanding Rack Mount System Sizing

This unit has been defined by Electronic Industries Alliance (EIA) as the standard for sizing rack mount equipment. 1 Rack Unit or 1U is 1.75 inches

What is U Height: Rack Units Explained

A 1U server is 1.75 inches tall. A 2U device is twice as tall as a 1U device (3.5 inches). A 4U system occupies 7 inches of vertical rack space. This

Custom Rackmount Chassis 2026: Build Your Perfect Fit

Hot-selling Product Candidates—custom rackmount chassis The organic results reveal a market segmented primarily by chassis size (1U, 2U, 3U, 4U) and specialized features. The most promising

Server Racks and Their Sizes

That said, it is possible to understand the notation used for server rack sizing: 1U, 2U, 3U and so on. For example, a 9U rack has a width of 19 inches (for a

Server Rack Sizes: The Complete Guide to Standard,

Below is a comprehensive, fully detailed guide covering all standard server rack sizes, form factors, height considerations, depth classifications, and

1U vs 2U vs 4U Servers: What “U” Means & How to Choose in 2026

Learn what a rack unit (U) is, how 1U/2U/4U differ, and how to pick the right chassis height for disks, PCIe/GPU, noise, power, rails, and airflow. ☑☑ Checklist included.

What's the difference between 1U, 2U, 3U and 4U rackmount systems?

Devices designed to fit into rackmount server cabinets come in a range of heights, from 1U to 4U. A 1U panel is 1 Rack Unit tall, a 2U is 2 Rack Units tall and so on.

Choose the Perfect Rackmount Server Case: 1U to 4U

The “U” in 1U, 2U, 3U, and 4U rackmount chassis refers to a standard unit of measurement (1.75 inches or 44.45 millimeters) that defines the

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