

Article Overview

A 1U chassis has a standard height of 1.75 inches (44.45 mm) and fits a 19-inch (482.6 mm) wide rack with standardized mounting hole spacing.

Height

The nominal height of a 1U chassis is 1.75 inches (44.45 mm), but actual equipment height is slightly less--typically 1.72 to 1.745 inches (43.66-44.3 mm)--to allow for airflow, thermal expansion, and safe insertion/removal in a rack (EIA-310-D standard) . The formula for calculating panel height is $h = 1.75n - 0.031$ inches for n rack units, ensuring proper spacing between adjacent equipment .

Width

The standard width for a 1U chassis is 19 inches (482.6 mm), which corresponds to the mounting width of a 19-inch rack. The actual distance between the mounting holes on the rack rails is slightly less, approximately 18.313 inches (465.14 mm) center-to-center, to accommodate the hardware and cage nuts .

Mounting Hole Spacing

1U chassis are designed to mount on 4-post or 2-post racks using standardized hole patterns. Mounting rails can have:

- o No. 10-32 tapped holes (Unified Thread Standard)
- o No. 12-24 tapped holes
- o Metric M6 threaded holes
- o Universal square holes (most common, allowing cage nuts for different thread types) The vertical spacing between mounting holes follows the EIA-310-D standard, typically with three holes per U, spaced to align with the 1.75-inch unit height.

Practical Considerations

- o Ensure the chassis height does not exceed 1.75 inches to avoid binding or interference with adjacent units .
- o Allow for airflow and thermal expansion, especially in dense rack deployments.
- o Verify thread type compatibility with the rack rails or use cage nuts for flexibility .
- o Depth is not standardized by U; check chassis depth to ensure proper fit in the rack . By adhering to these dimensions and mounting conventions, a 1U chassis can be reliably installed in standard 19-inch racks, ensuring compatibility, safety, and optimal airflow.



1U Standard Chassis Mounting Dimensions

Below is a comprehensive, fully detailed guide covering all standard server rack sizes, form

The different sizes of rackmount servers from 1U to 7U and understand their dimensions for optimal server hosting

A 1U server rack measures exactly 1.75 inches (44.45 mm) in height and fits standard 19

What Are Server Rack Sizes? Three main dimensions define server rack sizes: Height

A rack unit, U or RU is a unit of measurement that describes the height of equipment designed to mount in a 19" rack. Racks offer

The standard was adopted worldwide as IEC 60297 Mechanical structures for electronic equipment - Dimensions of mechanical

19 inches is the standard width of a mountable server rack. In this guide, we'll cover everything you need to

Server racks have their own measuring unit, which is associated with the height of the device that will be installed. While the width

Height: Exactly 1.75 inches (44.45 mm) -- no rounding, no variation. This is the maximum allowable vertical footprint

Cable Bar Note: Cable Bar cannot be used on Racks less than 24" deep Tolerance ± 0.01 ALL DIMENSIONS ARE IN INCHES.

1u (1 3/4") Heavy-Duty Rack-Mount Chassis Introducing the STRONGBOX[®] 1 3/4" high (1 rack unit) by

A "U" rack dimension stands for a rack unit and refers to the height of a device that can be mounted in the

Some companies also use 1RU instead of just using 1U to represent the height of a rack mount system. These heights

Portable 19-inch racks filled with audio processing outboard gear are a common sight at concerts with amplified sound. A full-height

But what exactly does this mean? In simple terms, a rack unit is a standard measurement used to describe the vertical

There are two 1U standards: Intellijel and Pulp Logic. The main difference is height - Pulp Logic 1U measures 43.18 mm, while

Web: <https://bssoda.pl>

