Carrier Backbone Network 19-inch Chassis Dimensions



Overview

A 19-inch rack is a standardized frame or enclosure for mounting multiple electronic equipment modules. Each module has a front panel that is 19 inches (482.6 mm) wide. The 19 inch dimension includes the edges or ears that protrude from each side of the equipment, allowing the module to be fastened to the rack frame with screws or bolts.

Key Takeaways

Standard 19-inch carrier network chassis typically have a width of 19 inches (482. 6 mm), variable depth (600–1200 mm), and heights ranging from 1U to 11U or more depending on the model. Standard 19-Inch Rack DimensionsA 19-inch rack is a globally standardized frame used for mounting servers, network equipment, and telecom devices.

The front panel width is 19 inches (482. 6 mm), while the height is measured in rack units (U), where 1U = 1. 75 inches (44.

45 mm). Depth varies depending on equipment and cooling requirements, typically ranging from 600 mm to 1200 mm (24–48 inches). This standardization ensures compatibility across different manufacturers and allows for modular stacking of devices in data centers or telecom rooms.



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Example Carrier Chassis DimensionsFiberHome AN5516-01 OLTWidth: 19 inches (standard rack width)Height: 11U (≈19. 25 inches / 488 mm)Depth: Not explicitly specified, but designed to fit standard 19-inch racksSlot Capacity: 20 slots (2 for core switching/control, 2 for power supply, 16 for service line cards)Use Case: Central office deployments with high subscriber aggregation, supporting GPON, XG-PON, or P2P optical boards Cisco NCS 4009 ChassisWidth: Compatible with ANSI 19-inch racks, minimum front opening 17. 72 inches (450 mm) for insertionHeight: Typically 7–10U depending on configurationDepth: Varies; installation requires planning for power and coolingFeatures: Integrated power and cooling systems, fan trays, and support for multiple route processor cards Lantronix ION219 ChassisWidth: 19 inchesHeight: 19-slot chassis (height depends on slot spacing, typically 6–10U)Depth: Standard rack-compatible depthFeatures: High-density multi-protocol system for fiber integration, managed via ION Management Module Key ConsiderationsRack Unit Height (U): Determines how many devices can be stacked vertically.

Carrier-class chassis often range from 6U to 11U. Depth: Must accommodate cabling, airflow, and cooling; deeper chassis may require additional rack space. Slot Layout: Critical for planning service line cards, power modules, and management/control cards.

Power and Cooling: Carrier backbone chassis include integrated AC/DC power and fan trays; ensure rack space allows for airflow and maintenance access. In summary, carrier backbone network chassis conform to the 19-inch rack standard, with widths fixed at 19 inches, heights in multiples of 1U (commonly 6–11U), and depths ranging from 600 mm to 1200 mm depending on equipment and cooling requirements. Specific models like the FiberHome AN5516-01, Cisco NCS 4009, and Lantronix ION219 illustrate these dimensions while providing high-density slot configurations for optical and network modules.

Article Content

19-Inch Rack Size and Dimensions Explained: The Complete Guide to ...

Its standardized rack size and dimensions — 19 inches wide, 1.75-inch rack unit (U) high, and 600–1200 mm deep —provide the interoperability required for modern IT, telecommunications,

19-inch rack

OverviewOverview and historyEquipment mountingCoolingSpecificationsRelated standardsGallery

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A 19-inch rack is a standardized frame or enclosure for mounting multiple electronic equipment modules. Each module has a front panel that is 19 inches (482.6 mm) wide. The 19 inch dimension includes the edges or ears that protrude from each side of the equipment, allowing the module to be fastened to the rack frame with screws or bolts. Common uses include computer servers, telecommunications equipment and networking hardware

19" rack equipment dimensional data

19" rack equipment dimensional data as specified by BS5954 (1980) and IEC 297 (1975). Single and double gang electrical plate dimensions. Fibre installation and patching convention according to

Chassis 19" Atlas | Atos Racks

Dimensional characteristics Width: 19" standard Depths: 360, 460 and 563 mm Heights: 2U to 12U Load: 40 Kg Standards: IEA-310D, IEC-60297, DIN-41494

19 inch Rack | Essential Guide to the 19-Inch Data Rack Standard in ...

19 inch racks are a standard equipment mounting system used widely in data centers and server rooms. The racks provide a modular frame for mounting various information technology (IT) and networking

FiberHome AN5516-01 OLT 19inch Chassis Guide

Unlike smaller edge-oriented hardware, the AN5516-01 is a massive 10U to 11U platform designed to fit seamlessly into a standard 19-inch equipment rack. This specific form factor is critical

The different dimensions of a 19 inch rack

By making the right planning and knowing which 19 inch accessories and other devices will be mounted in a 19 inch rack, the height and depth can be determined. The width depends on

Atlas Chassis

19" Chassis provided for the integration of non-standardised elements (coils, power supplies, measurement enclosures, etc.). Product that can withstand large loads. Design in zinc plated steel,

Server Rack Sizes: The Complete Guide to Standard,

Whether deploying a small office network or building a hyperscale data center, understanding rack height, width, depth, equipment compatibility,

Standards of 19-Inch Rack: depth, width ⚡ —

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When designing and choosing 19-inch cabinets, it is important to consider 19U rack dimensions: height, width, and depth. The dimensions of a 19

The different dimensions of a 19 inch rack

What is 19 inch in mm? In order to show the dimensions of a server cabinet, it is important to know that a server cabinet or wall mount rack, regardless of its width, always consists of

What Is a 19-Inch Rack? Full Guide for IT & AV Use

Learn what a 19-inch rack is, key dimensions, types, use cases, and expert tips for choosing the right rack for IT, telecom, AV, and more.

Standard Rack Size

Rackmount server dimensions, particularly their height and depth, impact the physical infrastructure of a data hosting facility by influencing rack layout, cooling systems, and cable

19 inch Rack | Essential Guide to the 19-Inch Data Rack Standard in ...

The 19-inch rack supports hardware configurations in data centres and other facilities. IT equipment comes in standard dimensions.

Server Rack Sizes: Understanding the Differences

Server Rack Depth Illustration of rack depth Unlike height, server rack depth is commonly measured in inches and has is much less variation in sizes. Server racks can range from

Rack Mounting FAQ

ETSI rack vs. EIA-310 rack dimensions, CC-BY-SA, by Jahoe ETSI bracket An ETSI bracket is an adapter used to install EIA-310 (19-inch rack equipment), which is about 2 inches less wide, into the

Data Center Rack Standards

EIA-310-D: Standardizes rack unit dimensions, vertical and horizontal hole spacing, rack opening, and front panel width. IEC 60297: Provides mechanical structure dimensions and design aspects for the

19-Inch Racking | 19-Inch Rack Units | RS

19-Inch Racking We have a wide range of server racking for mounting and storing electronic and networking equipment that includes 19-inch racks, sub-racks, transit cases and telescopic sides for

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