

Construction cost of a 500-rack IDC data center



Overview

Delays often come from permitting and long-lead equipment. The best sites offer strong grid access, fiber connectivity, fast approvals, and room. The construction cost of a data center is typically 3-5x higher per square foot than a Class A office building. Both have been trending upward. Data center construction costs vary widely based on scale, location, and execution strategy. Before we unpack the line items and benchmarks, it's worth grounding the conversation in one question every. The data centre market is entering a new era, driven by the explosive growth of artificial intelligence (AI) and surging global demand. Your actual cost depends mostly on power availability, land, redundancy level, and MEP scope, with electrical systems taking 40% to 45% of spend and cooling. Calculate comprehensive construction costs with detailed breakdown of electrical, cooling, civil, and infrastructure components Building a data center is not a spreadsheet exercise — it's a bet worth millions where every wrong assumption compounds. A 10 MW facility can swing between \$80M and \$200M+. As a general rule, it costs between \$600 to \$1,100 per gross square foot or \$7 million to \$12 million per megawatt of commissioned IT load to build a data center. Therefore, if a 700,000-square foot, 60-megawatt data center were to be built in Northern Virginia, the world's largest data center.



Article Content

Data Center Pricing Calculator | TierPoint

This TierPoint Data Center pricing calculator will help you compare costs of building your own data center and moving your equipment to a data center provider.

Data Center Construction: Costs, Timeline, and Delivery Steps

Data center construction builds secure facilities for servers, power, and cooling systems. Get costs, timelines, key steps, and tips to manage your project. Use this data center project plan

Data Center Construction Costs Explained

Data center construction costs millions. Don't let budget blindness catch you by surprise on your next build with this complete guide.

Data Center Construction Cost Guide

Data center costs move first with land and power. Site prices, utility access, and electrical systems consume a large share of the budget before a single server

AI Data Center Statistics 2026: Electricity, Spending & Power Crisis

Global AI data center Statistics 2026: 485 TWh electricity, \$725B hyperscaler capex, 9.3 GW U.S. power shortfall. Primary sources only. Dataset CC BY 4.0.

How Much Does it Cost to Build a Data Center?

How Much Does it Cost to Build a Data Center? How much does it cost to build a data center, including construction of the building, and equipping the facility with

Data centre construction cost index 2025-2026 | Turner & Townsend

This year's report draws on a global survey of 250 experts. It covers 52 markets, providing a broader view of construction costs across both established and emerging hubs. It includes an index ranking

Data Center Construction Costs: Complete Budgeting

Building a data center costs millions, if not billions. Discover the key cost components, hidden logistics expenses, and how technology investment

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Data Centre Build Costs: Budgeting and Cost

Understand the real costs of building a data centre, from land and power to cooling infrastructure. A practical cost breakdown for facility planners

Data Center Development Cost Guide

Our Data Center Development Cost Guide provides insights across U.S. markets, including building, material, land and labor costs and more.

Data Center Buildout Cost: Complete Pricing Guide

The basic structure of a data center including the foundation, walls, flooring, and roof makes up a large portion of the total construction cost. There

Data Center Buildout Cost: Complete Pricing Guide

Data center cost per square foot: Construction costs now range from \$600 to \$1,100 per square foot for standard facilities. AI-ready data centers can

Data Center CAPEX Calculator | Construction Cost

Calculate comprehensive construction costs with detailed breakdown of electrical, cooling, civil, and infrastructure components. Building a data center is not a

AI Market Trends 2026: Global Investment, Risks, and

With ~\$2.9 trillion in global data center construction projected through 2028, AI has become a structural force in economic expansion Although 21% of

AI Data Center Statistics (2026): Latest Research

Our in-depth market data report on ai data center statistics. Explore verified statistics and the latest research.

Data Center Cost Per Rack / KW / MW / SQFT / Cooling

Get detailed info about Data center cost as per no. of racks and all others information like total it load in MW, area required (sqft), IBMS load, required

The complete Data Center build vs Buy Calculator

* This tool uses a minimum internal data center space for 10 cabinets. The equipment needed to build a data center do not scale below this capacity. ** The

How Much Does it Cost to Build a Data Center?

As a general rule, it costs between \$600 to \$1,100 per gross square foot or \$7 million to \$12 million per megawatt of commissioned IT load to build a data center.

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5 Factors for Assessing Total Data Center Cost

We break down the main data center cost variables, where they affect total spending, and how they impact total cost of ownership.

Measuring the Data Center Boom: Facts and Statistics

Rapid adoption of AI among enterprises and consumers is fueling the growth of data centers, the massive structures that provide the necessary

Data Center Construction Cost | 2025 Cost Breakdown | Cortex

Detailed breakdown of data center construction costs. Per MW, per square foot, cost categories, regional variations, and strategies to control construction budgets.

How Much Does a Data Center Cost? The Complete

See what a data center really costs in 2026, from build price per megawatt to monthly operating costs. A clear breakdown of every line item, with

How Much Does It Cost to Build a Data Center?

It will cost you about \$1000 a square foot to build a small data center. That's not taking into account that it can often cost in excess of \$10,000 per mile that it

Data Center Construction Cost | 2025 Cost Breakdown | Cortex

Data center construction is expensive. These are not standard commercial buildings — they are highly engineered facilities packed with complex electrical and mechanical infrastructure.

Contact Us

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