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INTELLIGENCE UPDATE

What makes a data center DGX-Ready?

Max Smolaks 22 Dec 2025

Nvidia introduced the DGX-Ready certification program in 2019 to recognize the colocation providers that meet the requirements of its eponymous GPU-based server systems. The certification is aimed specifically at ensuring that certain specific technical specifications are met for its own equipment to function — it does not address the wider issues of design, resiliency, commissioning, or the use of other equipment. To date, it has certified facilities operated by 38 colocation organizations worldwide. Of these, 10 have also obtained the additional Liquid Cooled Ready designation, which was introduced in late 2024.

However, little publicly available information exists on how exactly the program functions. This report sheds light on the inner workings of DGX-Ready certification, based on discussions with colocation providers that have gone through the process, including Equinix, Global Switch and Verne Global.

Coming to grips with GPU servers

Nvidia launched the first DGX server system in 2016 — the name stands for Deep GPU Xceleration. These machines combined eight Nvidia GPUs, two CPUs and large amounts of memory to create a new type of compute block that was larger and denser than typical enterprise IT systems.

Over the years, DGX systems have continued to evolve, with each new generation requiring more power and cooling. Today, DGX systems enable rack densities of up to 60 kW when using four 10U air-cooled chassis in a rack, and up to 150 kW in a rack-scale system.

Housing such equipment imposes facility requirements that are not typical. Besides upgraded power and cooling delivery to match rack densities, such sites must also accommodate the increased weight of the hardware (see *AI has a weight problem*) and the sheer volume of equipment in compact spaces. This includes high-capacity busways and tap-off units, as well as pipework for coolant distribution.

There are also airflow management considerations. One of the initial challenges in hosting DGX systems is that they eject large volumes of hot air at high velocity, similar to some early blade server systems. Without careful attention to DGX rack placement, nearby IT hardware may experience thermal events across the hot aisle.

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Table 1 shows the power consumption of DGX reference systems, all of which require at least 1 kW per rack unit.

Table 1 Key Nvidia DGX reference systems

Server system	Launch year	Architecture	Size (rack units)	Sustained maximum power
DGX-1	2016	Pascal/Volta	3U	3.2 kW
DGX-2	2018	Volta	10U	10 kW
DGX A100	2020	Ampere	6U	6.5 kW
DGX H100	2022	Hopper	8U	10.2 kW
DGX B200	2024	Blackwell	10U	14.3 kW
DGX GB200	2024	Blackwell	48U-52U	120 kW

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Nvidia's DGX-Ready certification pre-qualifies colocation providers, ensuring that their electrical, cooling and control systems meet minimum facility standards for hosting GPU server systems. However, Nvidia points out that certification does not constitute an endorsement of the certified companies or their services. In part, the certification was a response to issues that were causing problems for NVidia: customers ordered servers but were not ready to accommodate them; customers sought answers to installation questions after, not before, they had ordered the products; or they failed to meet some of the tight specifications and suffered failures as a result.

DGX certification attempts to anticipate these specific issues. It is arranged directly with Nvidia and is free of charge. Initially limited to North America, it is now available to colocation providers worldwide.

The process takes several weeks and involves multiple online meetings with Nvidia engineers. The primary certification tool is a detailed survey document (30-plus pages) that checks whether the data center has the prerequisites for hosting DGX systems. The certification does not involve a site visit and does not require the facility to support all GPU rack configurations. Nor does it consider non-Nvidia systems, business resiliency requirements, or future requirements. It is not an overall AI readiness certification, but specifically, a check on whether the company can support the DGX systems it is ordering.

Some of the information requested during the process includes:

- Topology drawings and site schematics.
- Numbers of redundant components and paths.
- Width of the hot aisles.
- Pipe diameters.

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- Types of valves.
- Floor loading capacities.
- Elevator loading capacities.
- Door clearances.

Overall, there is more emphasis on cooling than on power delivery. As part of the process, Nvidia provides documentation and reference guides.

Operators that have gone through the certification process say it is neither onerous nor overly prescriptive and does not require a lot of human resources. It can be thought of as an approval process for a technical customer who is committed to conducting due diligence prior to a DGX systems deployment. Some operators, such as Equinix and Digital Realty, have certified their entire data center portfolios, while most others certify individual facilities or specific geographic markets.

The core DGX-Ready certification does not require a facility to support liquid cooling or reach exceptionally high rack densities; air-cooled facilities capable of accommodating up to 35 kW per rack can carry the DGX-Ready badge.

Liquid Cooled Ready is an additional certification introduced in 2024 for facilities that support DLC. It adds another four to six pages of requirements on top of the standard DGX-Ready specification. Liquid Cool Ready is always applied to individual facilities rather than entire portfolios.

Notably, neither of the certifications expire, which means there is no expectation of keeping up with the requirements of future GPU server systems. This is not a certification in the traditional sense of the term, as it is based on self-reporting.

The shifting value of DGX-Ready

A DGX-Ready colocation certification helps customers easily identify data centers that are suitable for rack densities commonly associated with high-performance computing. The program has clear marketing benefits — although operators may face diminishing returns as more providers join, as companies begin to host non-Nvidia systems, or as the expertise across the market increases.

When DGX-Ready was introduced, it provided some operators with training on handling new and unfamiliar equipment — information that was difficult to obtain elsewhere at the time. From Nvidia's point of view, the program helped ensure that the initial implementations of DGX systems were successful and did not encounter operational challenges. Today, the behavior of GPU-based servers is more broadly understood, and many operators have extensive experience running them in production. Many operators are as much concerned with wider issues, such as space, commissioning, and overall data center construction and design — given the changing scale and density profiles. It also does not address other strategic issues, such as resiliency or longer-term requirements.

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Because of this, the benefits have changed. For operators in 2025, the primary advantage of the certification is having a direct relationship with Nvidia — the ability to discuss the specific data center designs with the company's engineers and to understand what facilities need in order to meet the infrastructure demands of Nvidia's GPU servers today. However, a DGX-Ready certification obtained in 2021 is not distinguished from one obtained in 2025, even though the underlying hardware has changed considerably over that time. A certified data center may not be able to support all types of DGX hardware — at least not in the highest-density configurations. It is likely that only Liquid Cooled Ready data centers will be able to support current and future rack-scale systems, particularly those coming in 2026 (codename Vera Rubin), with expected densities reaching 300 kW per cabinet.

Still, interest in the program appears to be rising. Nvidia is said to be extremely busy with certifications — timelines for obtaining the badge have increased and can now take several months. In some cases, operators have been denied large-scale certification projects and told to wait until the backlog is cleared.

The Uptime Intelligence View

Like the DGX systems themselves, the DGX-Ready certification program has evolved. It started as a way to indicate the ability to house high-density IT, but today it is prized chiefly for helping to build deeper technical and commercial relations with the world's most valuable company. Provided operators understand it is a specific, one-time evaluation of a company or facility's readiness to support specific DGX systems, it can serve as a useful part of the deployment process.

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