

# **NVIDIA DGX H100**

The Gold Standard for Al Infrastructure



Artificial intelligence has become the go-to approach for solving difficult business challenges. Whether improving customer service, optimizing supply chains, extracting business intelligence, or designing cutting-edge products and services across nearly every industry, AI gives organizations the mechanism to realize innovation. And as a pioneer in AI infrastructure, NVIDIA DGX $^{\text{M}}$  systems provide the most powerful and complete AI platform for bringing these essential ideas to fruition.

NVIDIA DGX H100 powers business innovation and optimization. The latest iteration of NVIDIA's legendary DGX systems and the foundation of NVIDIA DGX SuperPOD™, DGX H100 is an AI powerhouse that features the groundbreaking NVIDIA H100 Tensor Core GPU. The system is designed to maximize AI throughput, providing enterprises with a highly refined, systemized, and scalable platform to help them achieve breakthroughs in natural language processing, recommender systems, data analytics, and much more. Available on-premises and through a wide variety of access and deployment options, DGX H100 delivers the performance needed for enterprises to solve the biggest challenges with AI.

#### The Cornerstone of Your Al Center of Excellence

Al has bridged the gap between science and business. No longer the domain of experimentation, Al is used day in and day out by companies large and small to fuel their innovation and optimize their business. As the fourth generation of the world's first purpose-built Al infrastructure, DGX H100 is designed to be the centerpiece of an enterprise Al center of excellence. It's a fully optimized hardware and software platform that includes full support for the new range of NVIDIA Al software solutions, a rich ecosystem of third-party support, and access to expert advice from NVIDIA professional services. DGX H100 offers proven reliability, with DGX systems being used by thousands of customers around the world spanning nearly every industry.

#### Break Through the Barriers to AI at Scale

As the world's first system with the NVIDIA H100 Tensor Core GPU, NVIDIA DGX H100 breaks the limits of AI scale and performance. It features 9X more performance, 2X faster networking with NVIDIA ConnectX®-7 smart network interface cards (SmartNICs), and high-speed scalability for NVIDIA DGX SuperPOD. The next-generation architecture is supercharged for the largest, most complex AI jobs, such as natural language processing and deep learning recommendation models.

#### **SPECIFICATIONS**

GPU	8x NVIDIA H100 Tensor Core GPUs
GPU memory	640GB total
Performance	32 petaFLOPS FP8
NVIDIA® NVSwitch™	4x
System power usage	~10.2kW max
CPU	Dual x86
System memory	2ТВ
Networking	4x OSFP ports serving 8x single-port NVIDIA ConnectX-7 VPI 400 Gb/s InfiniBand or 200 Gb/s Ethernet
	2x dual-port NVIDIA ConnectX-7 VPI 1x 400 Gb/s InfiniBand 1x 200 Gb/s Ethernet
Management network	10 Gb/s onboard NIC with RJ45 50 Gb/s Ethernet optional NIC Host baseboard management controller (BMC) with RJ45
Storage	OS: 2x 1.9TB NVMe M.2 Internal storage: 8x 3.84TB NVMe U.2
Software	NVIDIA AI Enterprise – Optimized AI software NVIDIA Base Command – Orchestration, scheduling, and cluster management Ubuntu / Red Hat Enterprise Linux / CentOS – Operating system
Support	Comes with 3-year business-standard hardware and software support
Operating temperature range	5–30°C (41–86°F)

## Powered by NVIDIA Base Command

NVIDIA Base Command powers every DGX system, enabling organizations to leverage the best of NVIDIA software innovation. Enterprises can unleash the full potential of their DGX investment with a proven platform that includes enterprise-grade orchestration and cluster management, libraries that accelerate compute, storage and network infrastructure, and an operating system optimized for AI workloads. Additionally, DGX systems include NVIDIA AI Enterprise, offering a suite of software optimized to streamline AI development and deployment.

### Leadership-Class Infrastructure on Your Terms

Al for business is about more than performance and capabilities. It's also about fitting neatly into an organization's IT envelope and practices. DGX H100 can be installed onpremises for direct management, colocated in NVIDIA DGX-Ready data centers, and accessed through NVIDIA-certified managed service providers. And with the DGX-Ready Lifecycle Management program, organizations get a predictable financial model to keep their deployment at the leading edge. This makes DGX H100 as easy to use and acquire as traditional IT infrastructure, with no additional burden on busy IT staff—which lets organizations leverage AI for their businesses today instead of waiting for tomorrow.

## **Ordering Information**

Contact your NVIDIA sales representative for more details.

## Ready to Get Started?

To learn more about NVIDIA DGX H100, visit nvidia.com/DGX-H100

