

Diamanti G20

Diamanti G20 is purpose-built to support artificial intelligence (AI) and machine learning (ML) use cases with maximum utilization and return on investment (ROI). G20 is offered in two flavors with multiple configurations for model training and inference to cater to the varying AI/ML use cases.

- **G20T:** With a fully-loaded configuration, the G20T is best suited for intensive AI/ML modeling as data scientists can utilize maximum compute capacity for training and retraining their models.
- **G20P:** G20P is intended for AI/ML inference to cater to the varying AI/ML use cases in production. G20P is available in three configurations: Small (S), Medium (M), and Large (L).

Diamanti G20T Specifications

Minimum of 3-node configuration is recommended

HARDWARE SPECIFICATIONS (per node)

NETWORK	Diamanti Ultima Network Card with 4x10 GbE via QSFP+ module
STORAGE	Diamanti Ultima Storage Card DATA STORAGE 16 TB configuration (2x8000 GB NVMe SSD) HOST OS AND EPHEMERAL STORAGE 960 GB (1x960 GB SATA M.2)
COMPUTE	CPU: 2x 2 nd Generation Intel® Xeon® Scalable Processors with 52 physical cores RAM: 768 GB
NVIDIA GPU	4x Nvidia Tesla v100 SXM2 32 GB with NVLink

PHYSICAL SPECIFICATIONS (per node)

SERVER	SuperMicro SuperServer SYS-1029GQ-TVRT
RACKSPACE	1U
DIMENSIONS	17.20"W x 35.20"D x 1.70"H
POWER SUPPLY	Dual redundant 110/220V power supplies
MAX POWER	2004 W
ENVIRONMENTAL	Operating temperature: 50°F to 81°F (10°C to 27°C)

AVAILABLE CONFIGURATION

G20T	2 nd Gen Intel® Xeon® Gold 6230R (2.10 GHz) 52 CPU cores / 768 GB RAM / 16 TB Storage 4x Nvidia Tesla v100 SXM2 32 GB (NVLink)
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Diamanti G20P Specifications

Minimum of 3-node configuration is recommended

HARDWARE SPECIFICATIONS (per node)

NETWORK	Diamanti Ultima Network Card with 4x10 GbE via QSFP+ module
STORAGE	Diamanti Ultima Storage Card DATA STORAGE 4 TB configuration (4x1000 GB NVMe SSD) 12.8 TB configuration (4x3200 GB NVMe SSD) 25.6 TB configuration (4x6400 GB NVMe SSD) HOST OS AND EPHEMERAL STORAGE 960 GB (2x480 GB SATA SSD)
COMPUTE	CPU: 2x 2 nd Generation Intel® Xeon® Scalable Processors with 24 / 40 / 52 physical cores RAM: 192 / 384 / 768 GB
NVIDIA GPU	2x Nvidia T4 16 GB / 4x Nvidia T4 16 GB / 2x Nvidia Tesla v100 PCIe 32 GB

PHYSICAL SPECIFICATIONS (per node)

SERVER	Dell EMC PowerEdge R740xd
RACKSPACE	2U
DIMENSIONS	17.09"W x 28.17"D x 3.42"H
POWER SUPPLY	Dual redundant 110/220V power supplies
MAX POWER	G20P S: 610 W G20P M: 884 W G20P L: 1422 W
ENVIRONMENTAL G20P S, M	Operating temperature: 50°F to 95°F (10°C to 35°C)
ENVIRONMENTAL G20P L	Operating temperature: 50°F to 81°F (10°C to 27°C)

AVAILABLE CONFIGURATIONS

G20P S	2 nd Gen Intel® Xeon® Silver 4214R (2.40 GHz) 24 CPU cores / 192 GB RAM / 4 TB Storage 2x Nvidia T4 16 GB
G20P M	2 nd Gen Intel® Xeon® Gold 5218R (2.10 GHz) 40 CPU cores / 384 GB RAM / 12.8 TB Storage 4x Nvidia T4 16 GB
G20P L	2 nd Gen Intel® Xeon® Gold 6230R (2.10 GHz) 52 CPU cores / 768 GB RAM / 25.6 TB Storage 2x Nvidia Tesla v100 PCIe 32 GB

