

# NVIDIA DGX-2 Pre-delivery Site Survey

Release date

2020-02-28

Completing and submitting this survey for review/approval is a prerequisite for NVIDIA to release the shipment of your NVIDIA DGX-2 system. Completing the document in its entirety will help expedite the process and most importantly help you prepare for the installation and operation of the NVIDIA DGX-2 in your environment.

Once complete, return this survey by email to: [DGX2Install@nvidia.com](mailto:DGX2Install@nvidia.com)

When the NVIDIA DGX-2 system ships, you will receive a notification email with your system's specific details and a registration link. When you register on the NVIDIA Enterprise Support Portal you will get access to all relevant documentation for installation and operation of the NVIDIA DGX-2. Please familiarize yourself with the documentation prior to arrival of the shipment to ensure a smooth installation.

The NVIDIA DGX-2 system will be delivered on a pallet, which will require a pallet jack to move the system through the shipping area and into the staging area or to its destination.

Once in the datacenter, a server lift will be required due to the system's large size and weight. Considerations should be taken when choosing where it will be installed as the server lift and the server will need to fit through the aisles and hallways in the datacenter or server room.

Some examples and things to consider include: loading dock access to the building, elevator door size and weight capacity, room door width and height, and moving the system around corners inside the facility.

Consider any ramps or bumps along the way to the server room.

Use this survey to verify all the necessary accommodations have been made before the system is shipped.

Please specify units when providing measurements, weights, or temperatures.

## Contact Logistics

| Customer Information | End User | IT Contact | Security or Shipping | Other |
|----------------------|----------|------------|----------------------|-------|
| Organization         |          |            |                      |       |
| Name                 |          |            |                      |       |
| Phone                |          |            |                      |       |
| Phone (Alternate)    |          |            |                      |       |
| Email                |          |            |                      |       |

## Location where DGX-2 server will be delivered

|                     |   |
|---------------------|---|
| Street address      | Units 1101-1105 and 1109, Level 11 Cyberport 2, 100 Cyberport Road, Hong Kong |
| Building and Room # |   |

## Location where DGX-2 server will be installed

|   |   |
|---|---|
| Street address  | Units 1101-1105 and 1109, Level 11 Cyberport 2, 100 Cyberport Road, Hong Kong |
| Building and Room #   |   |
| Any visitor requirements to access this site (state issued ID's, multiple ID)?              | Nil   |
| Does the site require federal clearance for entry?  | Nil   |
| Any special instructions that need to be followed (parking, registration, safety equipment, | Nil   |

## NVIDIA DGX-2 system specifications

|                          |  |                    |                 |
|--------------------------|--|--------------------|-----------------|
| Packaged system weight   | 400 lb (181.44 kg)   | Power inlets       | 6               |
| Package size (H x W x L) | 35.6 in (904 mm) x 24.02 in (610 mm) x 40 in (1016 mm)     | Voltage            | 200-240 VAC     |
| System weight            | 360 lb (163.29 kg)   | Current per outlet | 15A             |
| System size (H x W x L)  | 17.3 in (440.0 mm) x 19.0 in (482.6 mm) x 31.3 in (795 mm) | Power Consumption  | 10 kW           |
| Rack Units               | 10   | Heat Output        | 34122 BTU/hr    |
| Operating Temperature    | 5 °C - 35 °C   | Airflow            | 1000 CFM @35 °C |
| Acoustic Noise           | TBD  | Δ T (°C)           | 20 °C           |

## Delivery and Handling Considerations

|   |                          |
|---|--------------------------|
| Loading dock available  | YES                      |
| If yes, what is the height of the loading dock?   |                          |
| Path from loading dock to the staging room is free of bumps   | YES                      |
| Pallet jack available to move the packaged system to the staging area                                 | FALSE                    |
| Doors are large enough to fit the pallet and the pallet jack into staging area                        | Door Size: W72cm, H238cm |
| System can be immediately installed after receiving (no acclimation required)                         | YES                      |
| Server lift available to lift the system into the rack  | YES                      |
| Server lift brand and model   |                          |
| Server lift has weight capacity of 500 lb (226 kg) or greater   | YES                      |
| Server lift has a platform or shelf installed   | YES                      |
| Path from the staging area to the server room is free of bumps  | YES                      |
| Doors large enough to fit the server and server lift into the datacenter or server room               | Door Size: W72cm, H238cm |
| Datacenter/server room is slab floor  | YES                      |
| If no, what is the weight capacity per square foot?   |                          |
| Any other notes or considerations needed to move the system from the delivery area to the datacenter? |                          |

## Space and Rack Considerations

Use the rack diagram in the "Rack Diagram" sheet to sketch out what will be in the same rack as the DGX-2

Note that the DGX-2 length is 31.3 inches (79.5 cm)

Note that the DGX-2 height is 10 RU

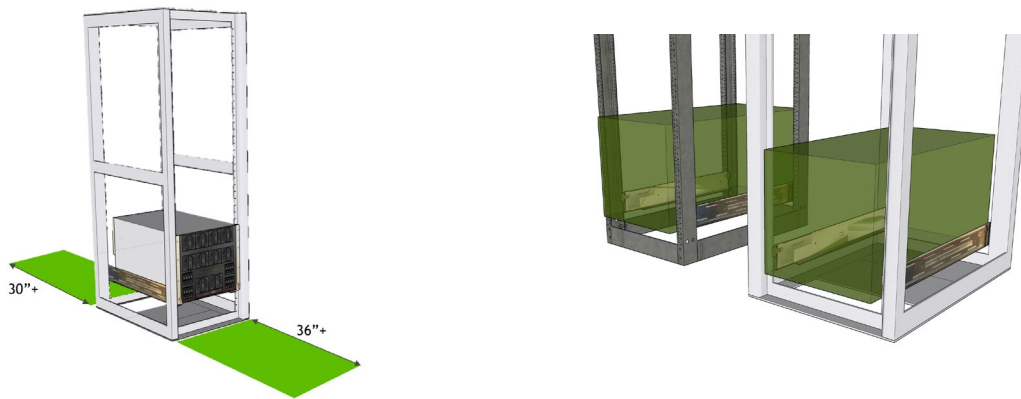
It is recommended that the system is rack mounted near the floor of the rack and in the bottom 30 RU.

Note that the DGX-2 power and I/O cabling is at the rear of the system

Note that a VGA monitor and USB keyboard will be required - see Known Issues section on the last page

|  |  |
|--|--|
| "Rack Diagram" sheet completed   | YES, U4-U15 Reserved for DGX-2 already |
| Aisles have room to move and maneuver the DGX-2 in the server room or datacenter to get to the rack where the system will be installed | YES                                    |
| Rack doors allow necessary airflow (1000 CFM) to cool system and components  | YES                                    |
| Server lift can be maneuvered and used with the server in the aisle  | YES                                    |
| Rack depth is 1000mm or 1200mm   | YES                                    |
| Rack width is 19 inches (482mm) between posts  | YES                                    |
| Rack has distance between front/rear posts of 29-35 in (.74m - 0.9m)   | 0.72m                                  |
| Where are the PDU's installed (rear, side, top, bottom)?   | Rear, Side                             |
| Do the racks have active/chilled doors? If yes, do they have humidity sensors?   | FALSE                                  |
| PDU's allow full use of the rack depth   | FALSE                                  |
| Cables will be routed using the rack's cable management system   | YES                                    |
| Cables can be routed away from rear of system  | YES                                    |
| Front and rear clearance is available to service the system in the rack (diagrams below)   | YES                                    |

The diagrams below illustrate the rear of different racks and the clearance needed to install the system and to execute service procedures. Note no power cables should obstruct access to the rear components so that boards and power supplies can be serviced



#### Power Considerations

Note that the DGX-2 requires six outlets rated at 200VAC-240VAC.

Note that the DGX-2 ships with six C20 to C19 power cords.

The power supplies of the DGX-2 are N+1 redundant; a single power supply can be failed without effecting DGX-2 functionality or performance.

Refer to DGX-2 User Guide document for "What's in the Box".

|   |                   |
|---|-------------------|
| Six (6) C19 outlets available                                   | 6 UK Plug (13AMP) |
| Each C19 outlet can supply 200 - 240 VAC @ 15 A                 | 6 UK Plug (13AMP) |
| Power cables will be connected to two independent power sources | YES               |

#### Thermal Considerations

Note that the DGX-2 can generate up to 10kW / 34122 BTU/hr of heat.

Note that for installation locations other than a datacenter (e.g., equipment closet) post-installation testing is recommended to assure adequate cooling.

|  |       |
|--|-------|
| Air flow will be from front to back (the DGX-2 will get cool air from the front of the rack) | YES   |
| Cooling system (CRAC, etc.) has capacity for the DGX-2 system(s)                             | YES   |
| Running environment will be between 5C and 35C   | YES   |
| Running environment will have relative humidity between 20% and 80%                          | YES   |
| Expected inlet temperature of the rack where the DGX-2 will be installed (C/F)?              |       |
| Cooling system has redundancy built-in   | FALSE |

#### Userid and passwords for setup (optional). These passwords should be changed as soon as the installation process is complete

|           |          |
|-----------|----------|
| Full Name |          |
| Userid    | Password |

#### NVIDIA GPU Cloud account (optional, but recommended)

|                             |       |
|-----------------------------|-------|
| Current NGC user            | FALSE |
| If yes, current NGC user ID |       |

#### Existing DGX-2 customers

|  |       |
|--|-------|
| New DGX-2 system firmware versions must match existing installed DGX-2 | FALSE |
| If yes, firmware versions needed (BIOS/VBIOS/BMC/etc.)                 |       |

**Network Considerations (access to these services is not needed for air-gapped systems - systems that do not have a way to connect to the Internet)**

Note that the DGX-2 in-band and out-of-band management requires 100/1000 RJ45 copper Ethernet.  
 Note that Storage and Cluster network access is by via QSFP28 ports. Cables and optics modules are not included with DGX-2.  
 If using DHCP, indicate it in the IP Address field. If network information is privileged, please indicate the information is documented by the customer.  
 Note that for OS upgrades and container downloads, DGX-2 requires access to content from the following locations:

<http://international.download.nvidia.com/dgx/repos/>  
<http://security.ubuntu.com/ubuntu/>  
<http://us.archive.ubuntu.com/ubuntu/>  
<https://nvcv.io/nvidia/>  
<https://download.docker.com/linux/ubuntu/>  
<https://apt.dockerproject.org/repo>

The NVIDIA DGX-2 shipping box includes the following:  
 NVIDIA DGX-2 Bezel  
 Rackmounting hardware  
 Accessory Box  
 AC Power Cables (qty 6 – IEC 60320 C19/20, compatible with data center PDUs)  
 Hard disk bay screws  
 Toxic Substance Notice & Safety Instructions  
 Quick Start Guide  
 DVD containing source files for open source software

Refer to DGX-2 User Guide document for “What’s in the Box” for the full list of what is provided.

For Infiniband connections, customers should use Mellanox compliant InfiniBand cables. Refer to <http://www.mellanox.com/products/interconnect/cables-configurator.php> for the current list of compliant cables.

|  |            |                           |                         |                         |
|--|------------|---------------------------|-------------------------|-------------------------|
| System is able to connect to the Internet                |            | FALSE                     |                         |                         |
| URLs above accessible from the network (on ports 80/443) |            | FALSE                     |                         |                         |
| Onboard Ethernet   |            |                           |                         |                         |
|  | BMC (RJ45) | On-board Ethernet (RJ-45) | Storage Port 0 (QSFP28) | Storage Port 1 (QSFP28) |
| Switch port ID   |            |                           |                         |                         |
| Cable Available  | FALSE      | FALSE                     | FALSE                   | FALSE                   |
| IP Address   |            |                           |                         |                         |
| Netmask  |            |                           |                         |                         |
| Gateway  |            |                           |                         |                         |

|   |                 |                 |                 |                 |
|---|-----------------|-----------------|-----------------|-----------------|
| Cluster (Mellanox ConnectX-5) configuration |                 |                 |                 |                 |
|   | Port 0 (QSFP28) | Port 1 (QSFP28) | Port 2 (QSFP28) | Port 3 (QSFP28) |
| Switch port ID                              |                 |                 |                 |                 |
| Cable Available                             | FALSE           | FALSE           | FALSE           | FALSE           |
| Mode (Eth/IB)                               |                 |                 |                 |                 |
| IP Address                                  |                 |                 |                 |                 |
| Netmask                                     |                 |                 |                 |                 |
| Gateway                                     |                 |                 |                 |                 |
|   | Port 4 (QSFP28) | Port 5 (QSFP28) | Port 6 (QSFP28) | Port 7 (QSFP28) |
| Switch port ID                              |                 |                 |                 |                 |
| Cable Available                             | FALSE           | FALSE           | FALSE           | FALSE           |
| Mode (Eth/IB)                               |                 |                 |                 |                 |
| IP Address                                  |                 |                 |                 |                 |
| Netmask                                     |                 |                 |                 |                 |
| Gateway                                     |                 |                 |                 |                 |

|                    |  |
|--------------------|--|
| DNS IP Address     |  |
| DNS Search Domains |  |

|                         |          |
|-------------------------|----------|
| Proxy server IP address |          |
| Proxy server Userid     | Password |

|                           |  |
|---------------------------|--|
| NFS Server IP address(es) |  |
| NFS Server mount point(s) |  |

|   |       |
|---|-------|
| <b>Network Cable requirements</b>   |       |
| RJ45 / Cat6 cable available for the remote management port                      | FALSE |
| RJ45 switch port available for the remote management port                       | FALSE |
| QSFP28 TwinAx/optical transceivers and cables available for Storage ports       | FALSE |
| QSFP28 switch ports available for Storage ports                                 | FALSE |
| QSFP28 cables available for the Cluster ports                                   | FALSE |
| QSFP28 switch ports available (Ethernet or IB as noted above) for Cluster ports | FALSE |

**Customer Agreement**  
 This section confirms that the end user has reviewed this document and that the necessary accommodations have been made in order to meet the installation and operational requirements for the DGX-2 system.

|   |       |
|---|-------|
| Customer agrees that and confirms all of the above requirements are met | FALSE |
| Name  |       |
| Contact email   |       |
| Contact phone   |       |
| Contact signature   |       |