



GRAPHCORE POD DEPLOYMENT

Data centre checklist



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1 Data centre preparation for Pod installation

Before installing a Graphcore Pod in your data centre, you should complete the following checklist. This checklist applies to all sizes of IPU-POD and Bow Pod systems.

Once completed, share this checklist with your Graphcore sales representative and/or deployment@graphcore.ai to receive support deploying Pods into your data centre.



1.1 Power

In order to confirm that your data centre can provide sufficient power to run Pod systems you need to provide the information requested in the following sections.

In an IPU-POD₆₄ or Bow Pod₆₄ reference design, with 1.7kW default power cap, the power required per logical rack is:

- 2x 22kW PDUs (AP8886 PDUs in APC AR3300SP metered rack) + 2x 22kW PDUs for redundancy, if required
- PDU input voltage: 380/400VAC 3 Phase 50/60Hz
- PDU input: IEC 60309 32 A 3-Phase + N + E
- PDU whip (cord) length: 1.8 meters (exit top of rack)

1.1.1 Phase, voltage and frequency

What is the phase, voltage and frequency of the facility power? (If three phase, please confirm if wye or delta):

What are the acceptable ranges for voltage and frequency?

1.1.2 Connector and cable length

What is the required connector for each PDU?

What is the minimum cable length?

Is the power provisioned above or below the cabinet?

Is the facility overcurrent protection lower than the connector rating? If yes, provide information about the overcurrent protection below:

1.1.3 Quantity and diversity

How many connections will be provided per cabinet?

How should each feed be treated for power diversity?

1.1.4 Additions

Are there any other requirements or questions about power? If so specify below:



1.2 Cooling

In order to confirm that your data centre can provide sufficient cooling to run Pod systems you need to provide the information requested in the following sections.

Airflow required for each IPU-POD₆₄ or Bow Pod₆₄ logical rack is 1723 CFM or higher. Airflow is front of rack (single door, cold isle side) to rear of rack (split door, hot isle side). A minimum of 19kW provisioned cooling is required.

1.2.1 Method

What types of cooling are available at the facility?

(For example raised floor, raised floor with isle containment, in row cooling, in row cooling with isle containment, rear door heat exchanger, in rack cooling.)

1.2.2 Temperature and humidity

What are the temperature and humidity specifications of the facility? Also include details about elevated temperature operating periods.

1.2.3 Provisioned cooling per cabinet

What is the provisioned cooling per cabinet in kW?

1.2.4 Additions

If you have any other requirements around cooling (for example CFM per kW) please specify them.



1.3 Cabinet

In order to confirm that your data centre can provide cabinets suitable to contain Pod systems you need to provide the information requested in the following sections.

For the IPU-POD₆₄ and Bow Pod₆₄ reference designs, APC AR3300SP cabinets are used. These cabinets are 42U tall, 600mm width and 1200mm depth. Two IPU-POD₆₄ or Bow Pod₆₄ logical racks fit in one physical cabinet.

1.3.1 Width, height and depth

What is the width, height and depth of the cabinets to be used at the facility?

1.3.2 Weight and anti-tip

What is the maximum weight per cabinet?

Will the cabinets be deployed standalone (tip protection required) or part of a row of cabinets which are physically connected (no tip protection required)?

1.3.3 Network connections

The network connections required per logical rack are:

- 2x 10GBASE-T RJ45 network interfaces per server
- 2x (minimum) 100Gbps uplinks per ToR switch
- 2x SFP+ uplinks from 1GbE management switch
- Single or redundant 1G/10G uplinks

Note that two IPU-POD₆₄ or Bow Pod₆₄ logical racks can fit in one physical APC AR3300SP cabinet.

Can the cabinets at the facility support these connections?

1.3.4 Additions

Are there any other cabinet specifications? If so specify below:



1.4 Facility

In order to confirm that the physical aspects of your data centre are suitable to contain Pod systems you need to provide the information requested in the following sections.

1.4.1 Delivery - offloading

Can facility personnel offload the shock packed rack from the delivery vehicle?

1.4.2 Delivery - unpacking

Can facility personnel unpack the rack from the shock packaging and then dispose of the packaging?

1.4.3 Delivery - baying

Can facility personnel transport the rack from the unloading area to the data hall and bay the rack into position?

1.4.4 Connectivity

Is there wireless or wired internet connectivity for commissioning engineers to use in the facility?

1.4.5 Additions

Are there any other facility requirements? If so specify below:



2 Document details

Revision history

This document's revision history is as follows:

Version	Date	Notes
1.0	28 th of March 2022	First release

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