

DELL EMC DSS8440 IPU SERVER

This Graphcore/Dell EMC IPU Platform lets innovators develop the next generation of machine intelligence systems, faster and more efficiently.

It is a 4U rack-mounted chassis, incorporating eight Graphcore C2 IPU-Processor PCIe Cards, each of which runs two of Graphcore's Colossus GC2 IPUs (Intelligence Processing Units). The IPU has been optimised to work efficiently on the extremely complex high-dimensional models needed for machine intelligence. It emphasises massively parallel, low-precision floating-point compute and provides much higher compute density than other solutions.

The platform is fully supported by Graphcore's Poplar® software stack to provide a complete, scaleable platform for accelerated development. See over for more details.



Dell EMC DSS8440 containing 8 Graphcore C2 IPU-Processor PCIe Cards

TECHNICAL SPECIFICATIONS

IPU Accelerators	8 Graphcore C2 IPU-Processor PCIe Cards
IPU Processors	16x IPU Colossus GC2 IPUs, using IPU-Link™ interconnect cables
IPU-Cores	19,456 Individual IPU-Cores, with 4.8GB In-Processor Memory™
Compute	1.6 petaFLOPS mixed-precision
System CPU (typical)	2x Xeon Platinum 8168
System Memory (typical)	24x 32GB 2.4GHz DDR4 ECC Registered DIMM Modules
OS Storage (typical)	2x 480GB SATA 2.5in Enterprise SSD
System Storage (typical)	8x 2TB NVMe Enterprise SSD
Network	10Gbps/25Gbps Ethernet
Software	Ubuntu® Linux; Graphcore Poplar
Gross weight	Approx. 45kg/100lbs (weight with 8 accelerators)
Dimensions	434mm (width) x 865mm (depth) x 178mm (height)
Max power	4800W (at 220-240V)
Operating temperature	10°C to 35°C (50°F to 95°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)