



EDGE AI WORKSTATION

KCO-3000-RPL

Expandable Edge AI Workstation, 14th/13th/12th Gen Intel® Core® Processor and Q670E PCH, PCIe Gen 5, Dual GPU, USB Type-C



Features

- Support 14th/13th/12th Gen Intel® Core™ Processors (LGA 1700, 65W Max TDP)
- Intel® Q670E PCH
- 4x 288-pin DDR4 DIMM. Max. up to 128GB
- 1x 1GbE, 1x 2.5GbE Ports Support Wake-on-LAN, PXE
- 4x DP++ Independent Displays
- 1x PCIe x16 (Gen 5), 2x PCIe x4 (Gen 4, Gen 3), 1x PCIe x16 (Gen 4, 4-lane)
- 2x M.2 M Key, 1x M.2 E Key
- 5x RS-232 COM Ports (3x internal), 1x RS-232/422/485 COM Port (internal)
- 6x USB 3.1 Gen 2, 1x USB 3.2 Gen 2x2 Type C
- Support uEFI Secure Boot, TPM 2.0
- Tool-less Washable Dust Filter
- Internal 500W Flex Power Supply
- 334(W) x 300(D) x 133(H) mm
- UL 62368 Ed. 3, FCC, CE

Specifications

System

Processor	Support 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3 Raptor Lake-S, Alder Lake-S Processor (LGA 1700, 65W Max TDP)
	- 14th Gen Intel® Core™ i9 / i7 / i5 / i3 (Raptor Lake-S Refresh, 65W/35W)
	- 13th Gen Intel® Core™ i9 / i7 / i5 / i3 (Raptor Lake-S, 65W/35W)
	- 12th Gen Intel® Core™ i9 / i7 / i5 / i3 (Alder Lake-S, 65W/35W)
System Chipset	Intel® Q670E PCH
LAN Chipset	GbE1: Intel® I219LM (Support Wake-on-LAN and PXE) GbE2: Intel® I225-V (Support Wake-on-LAN and PXE)
Audio Codec	Realtek ALC888S HD Audio Codec, support 5.1 channel
System Memory	4x DDR4 2133/2400/2666MHz DIMM. 128 GB Max
Graphics	Intel® Integrated Iris Xe Graphic (CPU Dependent)
BIOS	AMI uEFI 256MB SPI flash
Watchdog	Software Programmable Supports 1~255 sec. System Reset
iAMT	Intel® AMT 12.0 supported
TPM	TPM 2.0

Display

Display Port	4x DP++
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Storage

M.2	1x M.2 M / NVMe PCIe x4 Gen 4 / 2242, 2260, 2280 1x M.2 M / NVMe PCIe x4 Gen 4 / SATA / 2242, 2260, 2280 1x M.2 E / PCIe x1 Gen 3 / USB 2.0 / 2230
SATA	4x SATA III (6Gb/s)
SSD/HDD	1x 3.5" SATA HDD drive or 2x 2.5" SSD/HDD up to 15mm

Expansion

PCIe	1x PCIe x16 Slot (Gen 5) 1x PCIe x16 Slot (Gen 4, 4-Lane) 1x PCIe x4 Slot (Gen 4, Open End) 1x PCIe x4 Slot (Gen 3, Open End)
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I/O

Audio	1x Mic-in, 1x Line-in, 1x Line-out
COM	2x RS-232
LAN	2x RJ45
USB	2x USB 3.0 Gen 1 (Front Panel) 6x USB 3.1 Gen 2 (10 Gbps) 1x USB 3.2 Gen 2x2 (20 Gbps) Type C 4x USB 2.0

Internal I/O

Audio	1x Front panel audio
COM	3x RS-232 1x RS-232/422/485 (COM3, internal)
DIO	1x 8-bit DIO (4-in/4-out)
SATA	4 x SATA Gen 3, support RAID 0/1/5/10)
Others	1x SPI header 1x Front panel 1x CPU fan 2x System fan

Operating System

Windows	Windows 10/11
Linux	Linux Kernel 5.X

Power

Power Management	ACPI 5.0 compliant
Power Mode	100-240V AC @ 50/60Hz
Power Connector	IEC 60320 C14

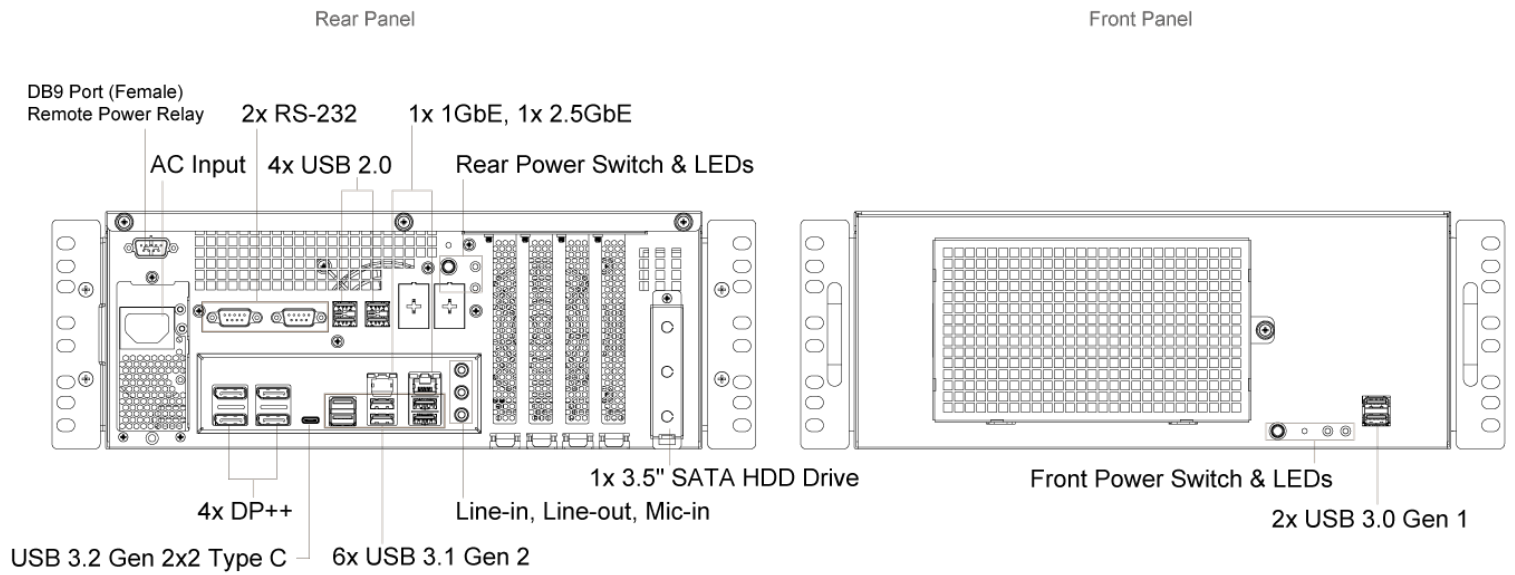
Environment

Operating Temperature	0 °C to 50 °C
Storage Temperature	-40 °C to 85 °C
Relative Humidity	10% ~ 90% relative humidity, non-condensing
Certification	UL 62368 Ed. 3, FCC, CE
Vibration	1 Grms, 5 - 500 Hz, 0.5 hr/axis
Shock	With SSD: 10G, half sine, 11ms

Physical

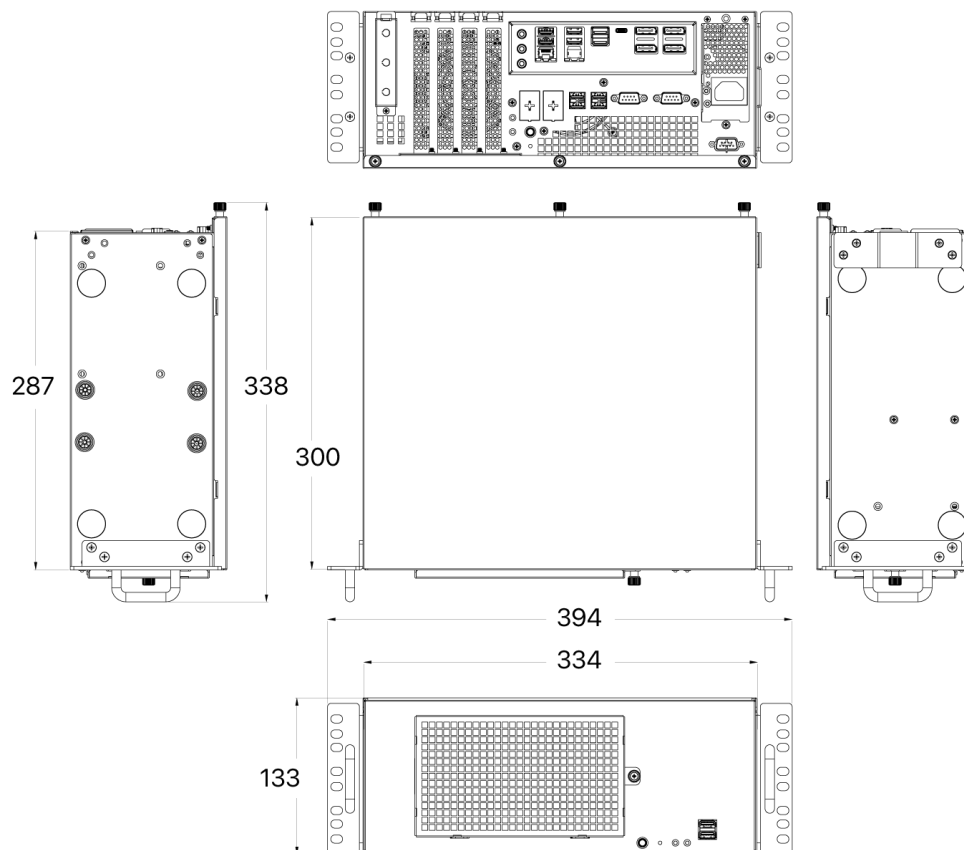
Dimensions	334(W) x 300(D) x 133(H) mm
Weights	5.6 KG (barebone w/ chassis, mb, and PSU only)
Construction	Heavy Duty Metal
Mounting Options	Special Rack Mount Brackets (Width 394 mm/15.5")

External I/O Mechanical Layout



Dimension

Unit: mm



Compatible GPU AVL

Model	GPU Memory	Memory Bandwidth	CUDA Cores	Tensor Cores	RT Cores	AI TOPS	Dimensions	Power & Thermal
NVIDIA RTX PRO 4000 Blackwell	24GB GDDR7 ECC	672 GB/s	8,960	280	70	1,247	4.4" H X 9.5" L, FHML Single Slot	140 W
NVIDIA RTX PRO 4000 Blackwell SFF Edition	24GB GDDR7 ECC	432 GB/s	8,960	280	70	770	2.7" H x 6.6" HHHL, Dual Slot	70 W
NVIDIA RTX PRO 2000 Blackwell	16GB GDDR7 ECC	288 GB/s	4,352	136	34	545	2.7" H x 6.6" L, HHHL Dual Slot	70 W
NVIDIA RTX 4000 Ada Generation	20GB GDDR6 ECC	360 GB/s	6144	192	48	428	4.4" x 9.5" FH SS	130 W
RTX 4000 SFF Ada Generation	20GB GDDR6 ECC	320 GB/s	6144	192	48	307	4.7" x 6.6" LP DS	70 W
NVIDIA RTX 2000 Ada Generation	16 GB GDDR6 with ECC	224 GB/s	2816	88	22	192	2.7" x 6.6" LP DS	70 W

Compliances and Standards

Vibration	1 Grms, 5 - 500 Hz, 0.5 hr/axis IEC60068-2-64:2008
Shock	With SSD: 10G, half sine, 11ms IEC60068-2-27:2008
Operating Temperature	0 °C to 50 °C IEC60068-2-1:2007 (Cold test procedure) IEC60068-2-2:2007 (Dry heat test procedure) IEC60068-2-3:2007 (Damp heat, steady state, test procedure) IEC60068-2-14:2009 (Wide temperature range thermal shock)
EMC	• FCC Class A • CE • ICES-003 • UKCA • Industrial EMC Compliance - EN 61000-4-2: 2009 - EN IEC 61000-4-3: 2020 - EN 61000-4-4: 2012 - EN 61000-4-5: 2014 +A1: 2017 - EN 61000-4-6: 2014
Safety	• UL Safety: UL62368-1, 3rd Ed., (cULus) • Test procedure: CB Scheme • Standard: IEC 62368-1:2018

Available Models

Model No.	Description
KCO-3000-RPL-500W-P	Expandable Edge AI Workstation, 14th/13th/12th Gen Intel® Core® Processor and Q670E PCH, PCIe Gen 5, Dual GPU, 500W Flex Power Supply

Optional Accessories

Model No.	Description
999930	US POWER CORD
1-TPCD00002	Power Cord, European Type, 180cm
1-TPCD00001	Power Cord, 3-pin UK Type, 180cm

Packing List

- 1x KCO-3000-RPL Series Expandable Edge AI Workstation
- 1x SATA Drive Kit (Cable, Screws, Bracket)
- 1x Chassis Foot Pads
- 1x Fan Cooler
- 1x Special Rack Mount Brackets (Width 394 mm/15.5")

Exports And Tariff Codes

ECCN	5A992.c
HTS	8542.31.0001
ScheduleB	84.71

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