



# KCO-2000-CFL

Industrial Computer with 2U Certification-Ready, 9th Gen Intel® Core® Processor and Q370 PCH



## Features

- 2U Slim Form Factor (SFF) Chassis with Tool-less Mounting Options
- Industrial Grade mATX Motherboard with Intel Q370 CFL-R Chipset
- Support Intel 8th/9th Gen Core Processors (LGA 1151, 35W/65W/95W TDP)
- Support 4x 288-pin DDR4 DIMM, Max. up to 128GB
- 2x Intel GbE Ports Support Wake-on-LAN, PXE and vPRO (with i5 and above processors)
- Triple Independent Display Ports among VGA, DVI-D and DP (1.2) ports
- 1x PCIe X16 (Gen3) slot for low profile add-on cards
- 1x M.2 M Key, NVMe PCIe X4, SATA 2242/2260/2280
- 1x M.2 E Key PCIe X2, USB2.0. 2230
- 4x COM Ports (DB9) 2x RS-232/422/485 + 2x RS-23, 2x RS-232 (internal header)
- 6x USB3.1 ports, 7x USB2.0 External Ports
- 1x Hot-swappable 2.5" SATA drive tray support 7" SSD or HDD
- TPM2.0, Support UEFI Secure Boot
- Tool-less Washable Dust Filter
- Internal 250W Flex Power Supply
- 12.73"(W) x 10.75"(D) x 3.45"(H)
- CE, FCC, UL Certified

## Specifications

System	
Processor	
<ul style="list-style-type: none"> <li>• Support 8th/9th Gen Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP)</li> <li>• Intel® Core™ i7-9700E, 8 Cores, 12MB cache, up to 4.4 GHz</li> <li>• Intel® Core™ i5-9500E, 6 Cores, 9MB Cache, up to 4.2 GHz</li> <li>• Intel® Core™ i3-9100E, 4 Core, 6MB Cache, 3.7 GHz</li> <li>• Intel® Core™ i7-9700TE, 8 Cores, 12MB cache, up to 3.8 GHz</li> <li>• Intel® Core™ i5-9500TE, 6 Cores, 9MB Cache, up to 3.6 GHz</li> <li>• Intel® Core™ i3-9100TE, 4 Core, 6MB Cache, 3.2 GHz</li> <li>• Intel® Core™ i7-8700T, 6 Cores, 12MB cache, up to 4.0 GHz</li> <li>• Intel® Core™ i5-8500T, 6 Cores, 9MB Cache, up to 3.5 GHz</li> <li>• Intel® Core™ i3-8100TE, 4 Cores, 6MB Cache, 3.1 GHz</li> <li>• Intel® Pentium® G5400T, 2 Cores, 4MB Cache, up to 3.1 GHz</li> <li>• Intel® Celeron® G4900T, 2 Cores, 2MB Cache, up to 2.9 GHz</li> </ul>	
System Chipset	Intel® Q370 Express Chipset
LAN Chipset	GbE1: Intel® I219LM (Support Wake-on-LAN and PXE) GbE2: Intel® I210-AT (Support Wake-on-LAN and PXE)
Audio Codec	Realtek ALC888S
System Memory	2x 260-Pin DDR4 2400/2666MHz SODIMM. Max. up to 128GB
Graphics	Intel® UHD Graphics 610/630
BIOS	AMI 256Mbit SPI BIOS
Watchdog	Software Programmable Supports 1~255 sec. System Reset
iAMT	Intel® AMT 12.0 supported
TPM	TPM 2.0
Display	
Display Port	2x DP (DP 1.2)
DVI	1x DVI
Multiple Display	Triple Display
VGA	1x VGA
Storage	
M.2	1x M.2 (M Key, NVMe PCIe x4, 2280) 1x M.2 (E Key, PCIe x2, USB 2.0, 2230)
SSD/HDD	1x Hot-Swappable 2.5" SATA Drive Bay (support H=7mm)
Expansion	
PCIe	1x PCIe x16 slot (low profile, up to 9" card length)
I/O	
Audio	1x Mic-in, 1x Line-out

COM	2x RS-232/422/485 + 2x RS-232 2x RS-232 (internal header)
LAN	2x RJ45
USB	6x USB 3.0 7x USB 2.0

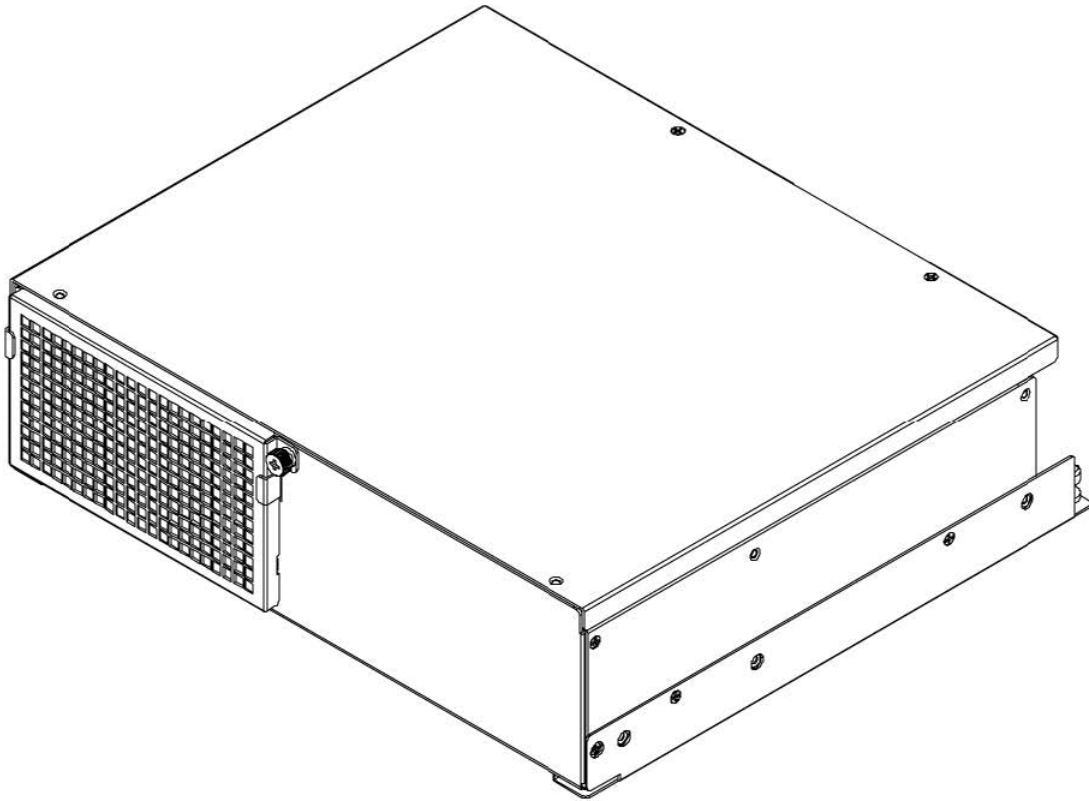
Operating System	
Windows	Windows 10
Linux	Linux Kernel

Power	
Power Mode	AT, ATX
Power Supply Voltage	Internal 250W Flex Power Supply
Power Connector	Standard US power cord

Environment	
Operating Temperature	0°C to 35°C
Storage Temperature	0°C to 60°C
Relative Humidity	10% to 95% (non-condensing)
Certification	CE, FCC, UL Certified
Vibration	1 Grms, 5 - 500 Hz, 0.5 hr/axis With SSD: 25G, half sine, 11ms

Physical	
Form Factor	2U
Dimensions	12.73"(W) x 10.75"(D) x 3.45"(H)
Weights	11 lbs (barebone w/ chassis, mb, and PSU only)
Construction	Heavy Duty Metal
Mounting Options	Tool-less Mounting Options

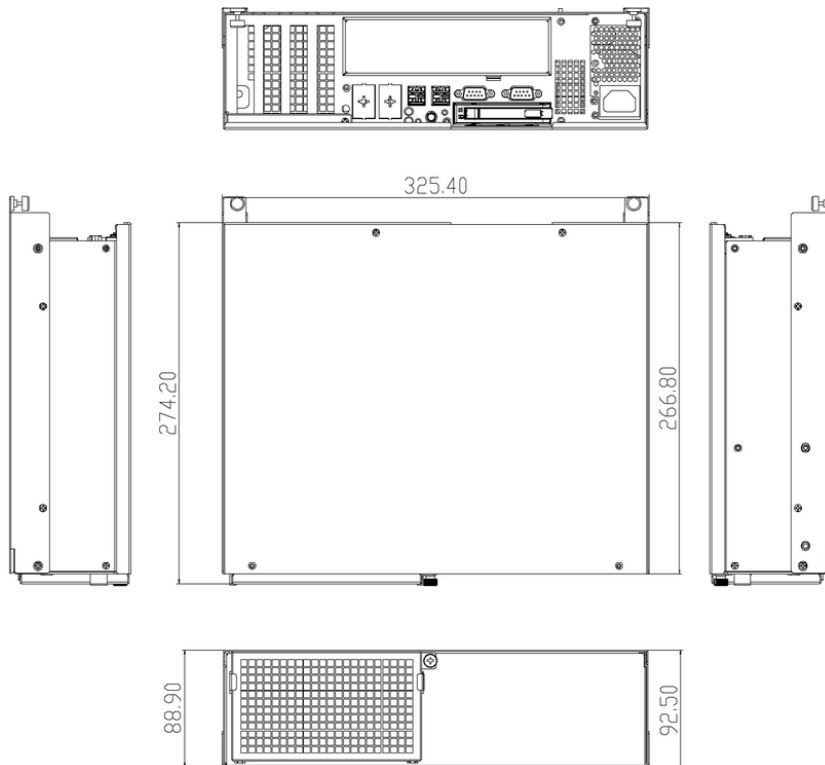
External I/O Mechanical Layout



SCALE 1:1

Dimension

Unit: mm



## Available Models

Model No.	Description
KCO-2000-CFL-P	Industrial Computer with 9th Gen Intel® Core™ Processor, 2U Certification-Ready

## Optional Accessories

Model No.	Description
1-E09A22801	Adapter AC/DC 24V/11.67A 280W with 3pin Terminal Block Plug 5.0mm Pitch
1-E09A22102	Adapter AC/DC 24V 9.2A 220W with 3pin Terminal Block Plug 5.0mm Pitch
999930	Power Cord, 3-pin US Type, 180cm
1-TPCD00002	Power Cord, European Type, 180cm
1-TPCD00001	Power Cord, 3-pin UK Type, 180cm

## Packing List

- 1x KCO-2000-CFL
- 1x 6ft standard US power cord (3-pin US Type)

## Exports And Tariff Codes

ECCN	5A992.c
HTS	8542.31.0001
Schedule B	84.71