

RAK-100 Series

1U Rackmount Server

with Intel® Skylake / Kaby Lake S-Series Processors



- Intel® Skylake / Kaby Lake S-Series Processors (LGA1151 Socket)
- Intel® Q170 Express Chipset
- 2x DDR4 SO-DIMM
- 1x DVI-D, 2x DP for display output
- Triple display support
- 2x GbE LAN for Ethernet
- 5x USB3.0, 3x USB2.0, 3x RS-232/422/485 for peripherals
- 4x 3.5" SATA3.0 Hot-swap HDD / SSD Drive Bay for Storage
- 2x PCIe8 slot on rear, 2x mSATA / mPCIe for expansion
- Modular 1U rackmount server design
- TPM & iAMT support



Product Overview

RAK-100 Series is a standard 1U rackmount server based on 6th / 7th Generation Intel® Skylake / Kaby Lake S-Series Processors. It features large storage capacity of four 3.5" SATA3.0 hot-swap HDD / SSD drive bays.

For integration with peripherals devices, RAK-100 Series is also equipped with a variety of I/O ports such as two

DP ports, one DVI-D ports, three COM ports, two Ethernet LANs, eight USB ports.

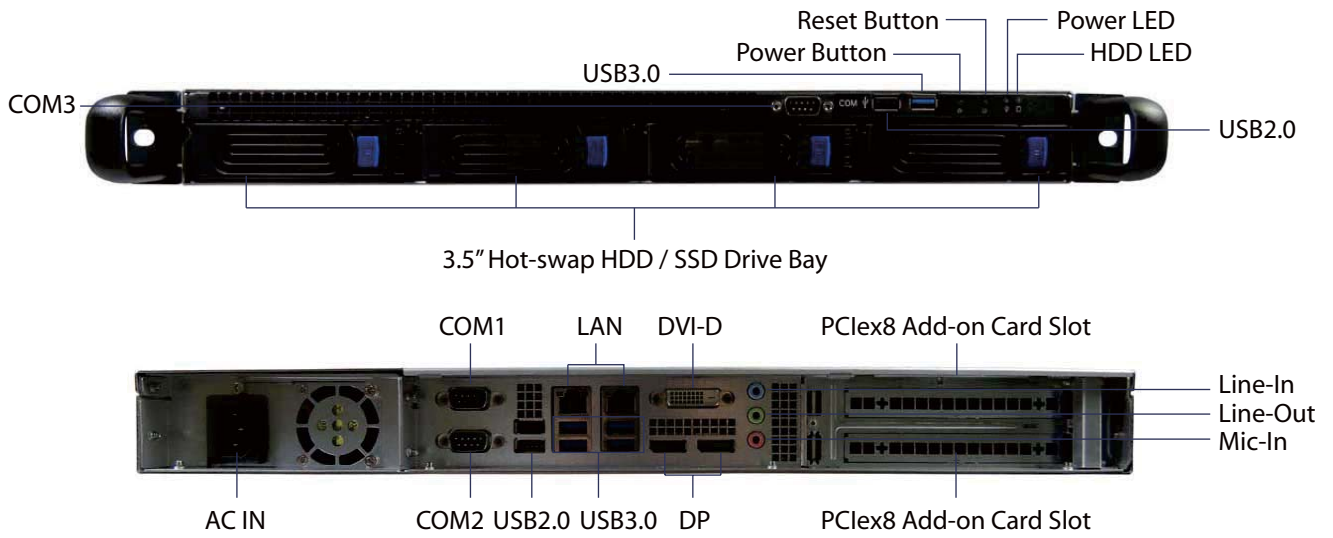
Moreover, it reserves two PCIe8 add-on card slots and two mPCIe / mSATA expansion slots wireless, storage or other function expansion.

Technical Information

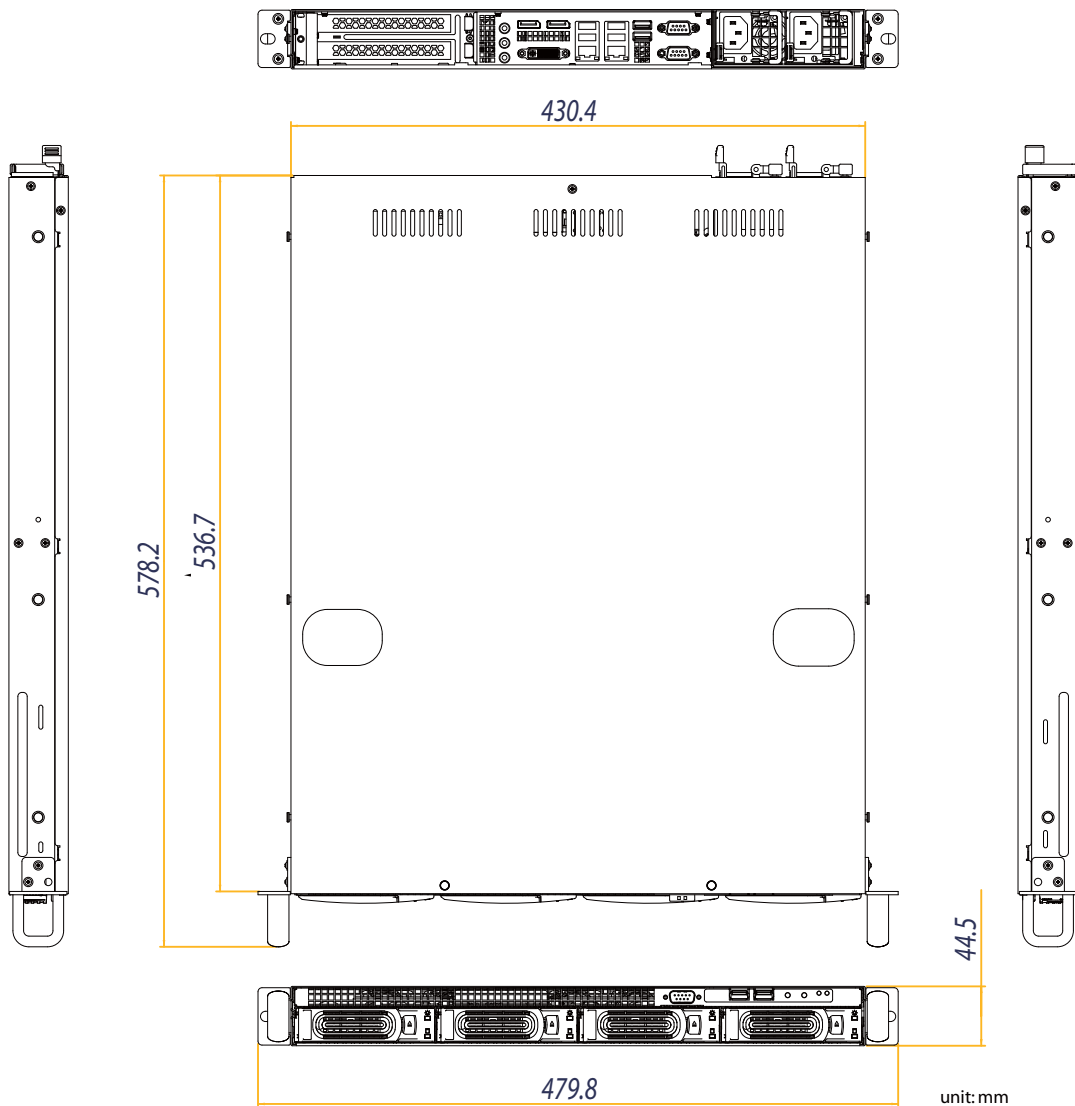
CPU Support	Intel® Skylake S-Series Processors (FCLGA1151 Socket, up to 91W) Intel® Kaby Lake S-Series Processors (FCLGA1151 Socket, up to 91W)
Chipset	Intel® Q170
Memory	2x DDR4 1866/2133 SO-DIMM up to 32GB (Skylake model) 2x DDR4 2133/2400 SO-DIMM up to 32GB (Kaby Lake model)
Graphic Controller	Intel® HD Graphics 510 (Skylake Celeron® processors) Intel® HD Graphics 530 (Skylake Core™ processors) Intel® HD Graphics 610 (Kaby Lake Celeron® processors) Intel® HD Graphics 630 (Kaby Lake Core™ processors)
Display Interfaces	1x DVI-D (on rear, 2560 x 1600 @ 60Hz) 2x DP (on rear, 4096 x 2304 @ 60Hz)
Multiple Display	Triple
Audio Chipset	Realtek ALC662
Audio Interfaces	1x Line-in (on rear) 1x Line-out (on rear) 1x Mic-in (on rear)
Ethernet	2x GbE LAN (RJ-45 on rear, 1x Intel® I219-LM, 1x Intel® I210-AT)
USB	5x USB3.0 (1x Type A on front, 4x Type A on rear) 3x USB2.0 (1x Type A on front, 2x Type A on rear)
Serial Ports	3x RS-232/422/485 (2x DB9 on rear, 1x DB9 on front)
Storage & Expansion	4x 3.5" SATA3.0 Hot-swap HDD / SSD Drive Bay (on front) 2x mSATA/mPCIe (1x full size, 1x half size) 2x PCIe8 Add-on Card Slot (on rear) 1x SIM Card Cage (optional)

Power Supply	Power Type: Flex ATX 400W 80+ power supply Connector: C14 Power Socket Input Voltage: AC 100V ~ 240V
Firmware	BIOS: AMI uEFI BIOS w/ 128Mb SPI Flash Watchdog: Programmable WDT to generate system reset event H/W Monitor: Input & Core Voltages, CPU & System Temperatures Real Time Clock: Chipset integrated RTC TPM: Supported Infineon SLB 9660 TPM 1.2 for Skylake model Infineon SLB 9665 TPM 2.0 for Kaby Lake model iAMT: Depending on processor
System Control & Monitoring	1x Power Button (on front) 1x Reset Button (on front) 1x Power LED (on front) 1x HDD LED (on front)
Cooling	1x CPU Smart Fan 3x System Smart Fan
OS Support	Windows 7 (Skylake only), Windows 8 (Skylake only), Windows 10, Linux
Construction	1U Metal Rackmount Chassis
Dimensions (W x D x H)	479.8 x 578.2 x 44.5 mm / 18.89" x 22.76" x 1.75"
Weight	8700 g / 19.18 lb
Environmental Characteristics	Operation Temp.: 0°C ~ 40°C / 32°F ~ 104°F Storage Temp.: -20°C ~ 80°C / -4°F ~ 176°F Humidity: 0% ~ 90%
Mounting	Rackmount
Certification	CE, FCC Class A

Front & Rear I/O Panels



Mechanical Dimensions



• Ordering Information

Article	Description
RAK-100	Intel® Skylake-S CPU, Intel® Q170 Chipset, 1x DVI-D, 2x DP, 2x GbE, 5x USB3.0, 3x USB2.0, 3x RS-232/422/485, 4x 3.5" SATA3.0 Hot-swap HDD/SSD Drive Bay, 2x PCIe8, 2x mPCIe/mSATA
RAK-110	Intel® Kaby Lake-S CPU, Intel® Q170 Chipset, 1x DVI-D, 2x DP, 2x GbE, 5x USB3.0, 3x USB2.0, 3x RS-232/422/485, 4x 3.5" SATA3.0 Hot-swap HDD/SSD Drive Bay, 2x PCIe8, 2x mPCIe / mSATA