

RAK-100 Series

1U Rackmount Server
with 6th / 7th Gen. Intel® Skylake / Kaby Lake S Processors



- LGA1151 Socket 6th / 7th Gen. Intel® Skylake / Kaby Lake S Processors
- Intel® Q170 / H110 Express Chipset
- 2x DDR4 1866/2133 SO-DIMM Socket up to 32GB
- 4x 3.5" SATA3.0 Hot-swap HDD / SSD Drive Bay for Storage
- Modular 1U rackmount server design
- 1x DVI-D, 2x DP for display output
- Triple display support
- 2x LAN for wired network connection
- 2x PCIe x8 slot on rear, 2x mSATA/mPCIe or 2x mPCIe for storage and expansion
- 5x/4x USB3.0, 3x/4x USB2.0, 3x COM for peripheral connection
- TPM & iAMT support

Product Overview

RAK-100 Series is a standard 1U rackmount server based on 6th / 7th Generation Intel® Skylake / Kaby Lake S 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.

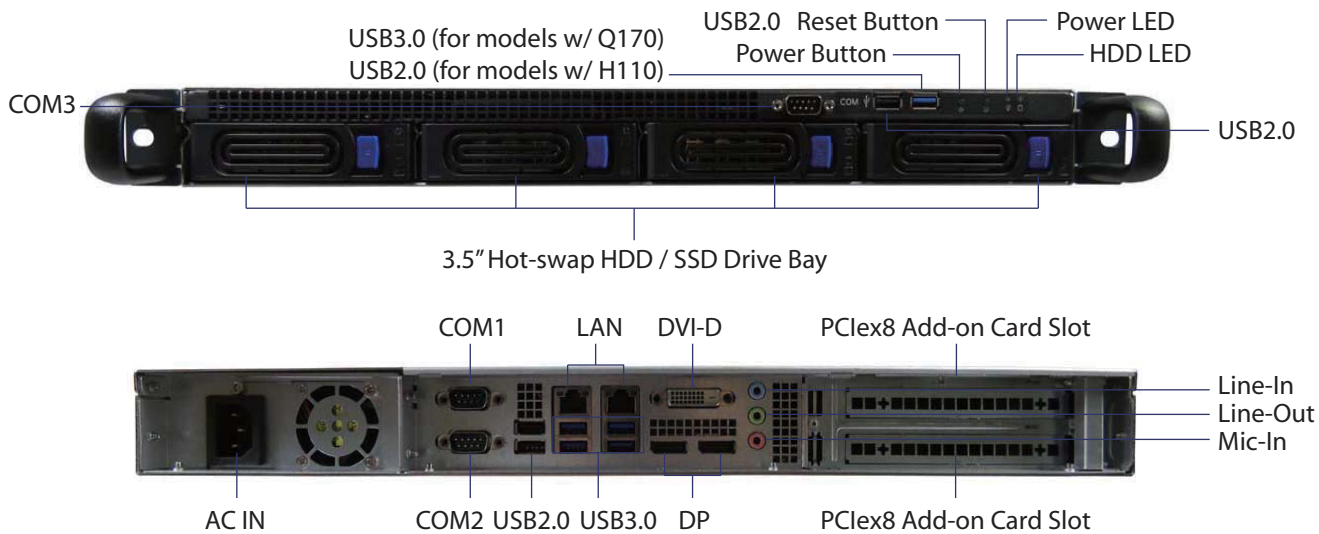
Moreover, it reserves two PCIe8 add-on card slots and two mPCIe / mSATA expansion slots wireless, storage or other function expansion.

Technical Information

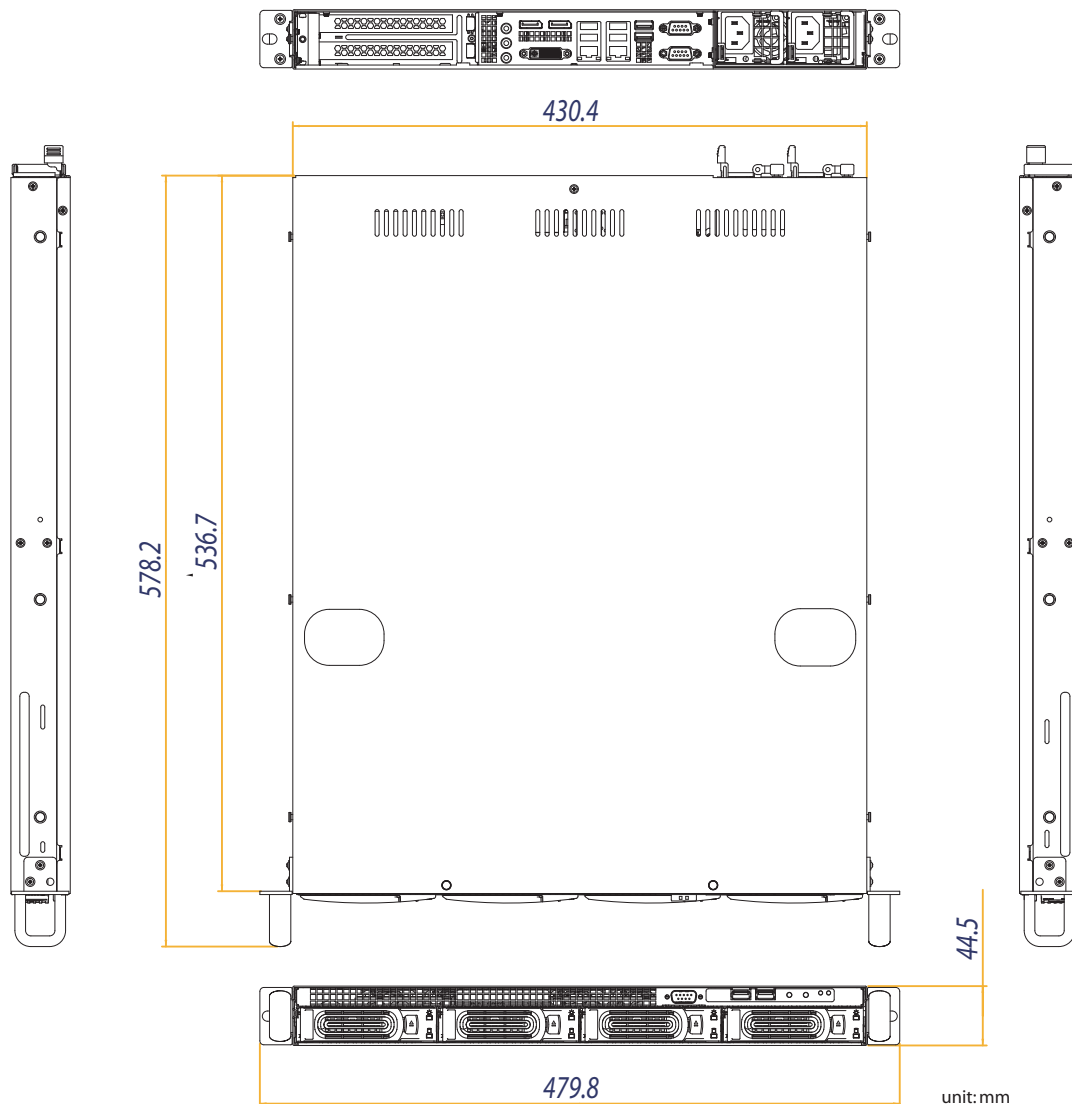
CPU Support
RAK-100/101: 6th Gen. Intel® Skylake S Processors (FCLGA1151 Socket, up to 91W)
RAK-102/103: 7th Gen. Intel® Kaby Lake S Processors (FCLGA1151 Socket, up to 91W)
Chipset
Intel® Q170 (RAK-100/102)
Intel® H110 (RAK-101/103)
Memory
2x DDR4 1866/2133 SO-DIMM up to 32GB
Graphic Controller
Intel® HD Graphics 510 / 530 (RAK-100/101)
Intel® HD Graphics 630 (RAK-102/103)
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 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, for RAK-100/102)
4x USB3.0 (Type A on rear, for RAK-101/103)
3x USB2.0 (1x Type A on front, 2x Type A on rear, for RAK-100/102)
4x USB2.0 (2x Type A on front, 2x Type A on rear, for RAK-101/103)
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/ePCIe (1x full size, 1x half size, models w/ Q170, RAK-100/102)
2x mPCIe (1x full size, 1x half size, models w/ H110, RAK-101/103)
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: Yes (Infineon SLB 9660 TPM 1.2)
iAMT: Yes (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, Windows 8, 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

RAK-100 Series I/Os



Mechanical Dimensions




Ordering Information

Article	Part No.	Description
RAK-100	SRAK010000010T00	Intel® Skylake S CPU, Intel® Q170, 1x DVI-D, 2x DP, 2x LAN, 5x USB3.0, 3x USB2.0, 3x COM, 4x 3.5" SATA3.0 Hot-swap HDD/SSD Drive Bay, 2x PCIe8, 2x mPCIe/mSATA
RAK-101	SRAK010100010T00	Intel® Skylake S CPU, Intel® H110, 1x DVI-D, 2x DP, 2x LAN, 4x USB3.0, 4x USB2.0, 3x COM, 4x 3.5" SATA3.0 Hot-swap HDD/SSD Drive Bay, 2x PCIe8, 2x mPCIe
RAK-102		Intel® Kaby Lake S CPU, Intel® Q170, 1x DVI-D, 2x DP, 2x LAN, 5x USB3.0, 3x USB2.0, 3x COM, 4x 3.5" SATA3.0 Hot-swap HDD/SSD Drive Bay, 2x PCIe8, 2x mPCIe / mSATA
RAK-103		Intel® Kaby Lake S CPU, Intel® H110, 1x DVI-D, 2x DP, 2x LAN, 4x USB3.0, 4x USB2.0, 3x COM, 4x 3.5" SATA3.0 Hot-swap HDD/SSD Drive Bay, 2x PCIe8, 2x mPCIe