# SKY-8132S

## Compact 1U Edge Server based on 3rd Gen Intel Xeon Scalable Processors

## Features

- 1U 20.4" deep rackmount server for 5G Open RAN and edge computing
- Single 3rd Gen Intel® Xeon® Scalable Processor supporting Platinum, Gold and Silver SKUs
- 8 x DIMM sockets DDR4 3200 MHz DDR4 (ECC/RDIMM/LRDIMM)
- 2 x FH/FL PCIe x16 Gen4 and 2xFH/HL PCIe x16 Gen4 slots
- 4 x 2.5" SATA/NVME U.2 SSD
- 2 x M.2 2280 SATA SSD
- IPMI 2.0 and Redfish compliant system management with reliability and security enhancements
- Optional LCM module and dust filter

Red Hat Certified Technology   VCI   CB   UL   CE   FCC

## Introduction

The Advantech SKY-8132S is a highly efficient, high performance, carrier-grade edge server designed to balance the best in x86 server-class processing with maximum I/O and offload density in a 20" depth chassis. The system is a cost effective, robust platform optimized for superior reliability in business critical applications including, but not limited to, communications, edge and industrial high performance computing. It is specifically designed for high density PCIe card payloads where maximum IO connectivity is needed or the integration of industry leading offload and acceleration technology is essential. The power and cooling options along with the streamlined mechanical design make it ideal for demanding applications requiring high performance acceleration technologies such as GPU, DSP and FPGA cards or dedicated vRAN accelerators.

Architected around the 3rd Gen Intel Xeon Scalable processor, the single-socket SKY-8132S combines cutting-edge performance with the ruggedness, reliability, and long system lifecycles required by the industry. Advantech's customized COTS framework for specific semi-custom electronic, mechanical design and BIOS firmware strings enable the system offers best-in-class integration in a compact 1U, 20" deep form factor.
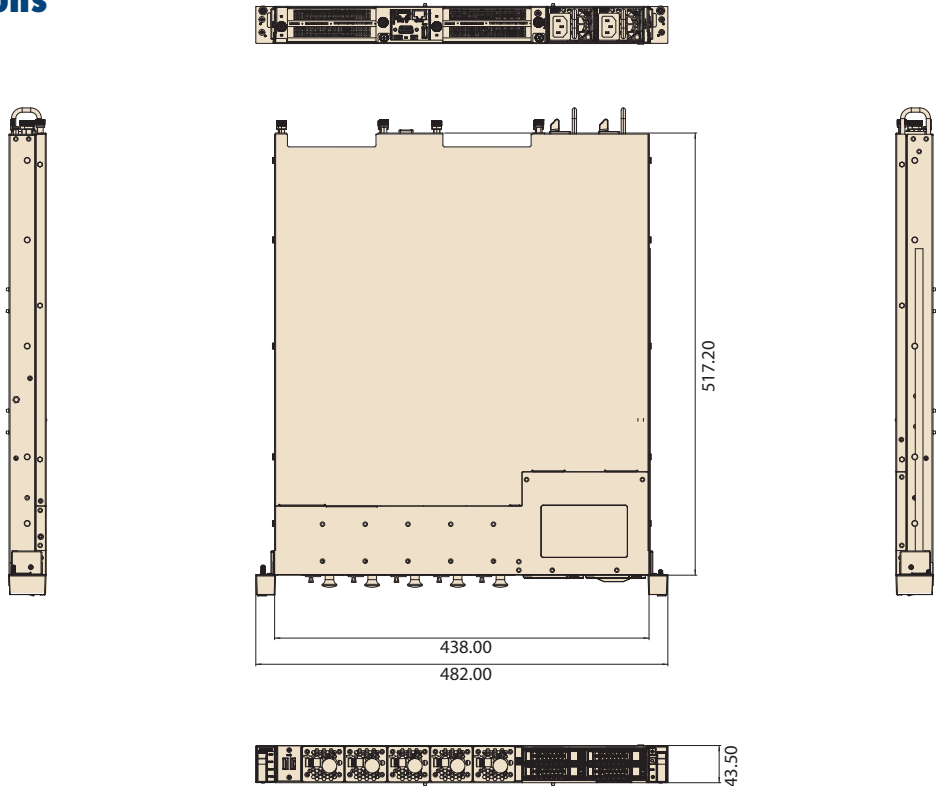
The SKY-8132S is designed to withstand extended environmental conditions in terms of shock, vibration and operating temperature. An optional replaceable front air filter is supported to cope with dust. Redundant power supplies, the ability to withstand single fan failures, redundant firmware images with failsafe upgrades and hot swappable FRUs make the SKY-8132S the platform of choice for applications requiring zero downtime. The SKY-8132S is designed for NEBS Level 3 carrier grade environments and where limited rack space is available. Interoperability testing is performed with a wide selection of third-party PCIe card vendors.

## Specifications

| | | | |
|---|---|---|---|
| Processor System | CPU | Single socket 3rd Generation Intel® Xeon® Scalable Processor up to 185W TDP | |
| | Chipset | Intel® PCH C62xA series | |
| Memory | Technology | Up to 8x 3200MHz DDR4 ECC RDIMM/LRDIMM | |
| | Max Capacity | Max capacity per channel: 64GB<br>Max total capacity per system: 512GB | |
| | Socket | 8 x 288-pin DIMM | |
| PCIe | Expansion slot | 2x rear PCIe x16 (FH/FL), plus 2x rear PCIe x16 (FH/HL) or 2x rear PCIe x8 expansion slots(LP) for Advantech Personalization card | |
| I/O | Front I/O | 2 x USB, PWR, Status and ALARM LEDs | |
| | Rear I/O | 1 x GbE LAN RJ45(Management port), 1 x VGA, 1 x USB3.0,<br>1 x Console port | |
| Ethernet | Management Interface | NC-SI(BMC to i210-IS) | |
| | 10/25GbE Ethernet | Via Add-on PCIe card | |
| | Controller | GbE LAN: Intel i210-AT support | |
| | Connector | 1 x RJ45 | |
| Storage | Front Access | Up to 4x hot-swap SFF SATA3/NVMe U.2(optional) | |
| | Internal (on-board) | 2x M.2 2280 (SATA3/PCIe) | |
| Power | Input | 700W AC/DC Redundant PSU 100-240Vac, 50-60Hz | |
| Environment | | Operating | Non-operating |
| | Temperature | -5 ~ 55°C (23 ~ 131°F) | -40 ~ 70°C (-40 ~ 158°F) |
| | Humidity | 50% @25°C to 95%@40°C (non condensing) | 95% @60°C (non-condensing) |
| Cooling | Chassis Fan | 5 x high speed fans | |
| | Thermal Control | Two separate thermal zones for motherboard and Full Length (FL) PCIe cards | |
| | Reliability | Resilient to single fan failure | |
| | Air Filter | Yes (Optional) | |
| System Management | IPMI2.0 and Redfish API | Aspeed AST2500 BMC with Advantech System Management Solution<br>Advanced Lights Out Management compliant to IPMI2.0 with security and availability enhancements<br>iKVM Support Advantech Web GUI Style Node Manager<br>Configurable shared or dedicated NIC support | |
| Physical | Dimensions (W x D x H) | 438 x 517.2 x 43.5 mm (17.2 x 20.4" x 1.74") | |
| | Net Weight | ~15kg | |

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**ADVANTECH**  **High Performance Servers**

All product specifications are subject to change without notice.

# Dimensions

Unit: mm [inch]

517.20

438.00

482.00

43.50

# Front View

# Rear View

# Ordering Information

| Part Number | Description |
|---|---|
| SKY-8132SAS-A000E | 20" 1U server, single Intel® Xeon® Scalable Processor, Intel® Whitley Platform LBG-R chipset, AC 700W PSU, 4x2.5" HDD/SDD slot, 2xFh/FL slots. 2xLP slots |

# Optional Accessories

| Part Number | Description |
|---|---|
| SKY-8132S-SLR900 | SKY-8132S and SKY-8232D Slide Rail for 900mm Rack |
| SKY-8132S-SLR600 | SKY-8132S and SKY-8232D Slide Rail for 600mm Rack |
| SKY-8101S-PSUACE | AC PSU Module, 700W, common with SKY-8101S |
| 1702002600-02 | Power Cord 3P UL/CSA(USA) 125V 10A 1.83M 180D |
| 1702002605-02 | Power Cord 3P European 10A/16A 250V 1.83M 90D |
| 1700000237-01 | Power Cord 3P PSE 12A 125V 1.83M Japan |