# SKY-8134DU

## 1U High Performance Server based on 4th Gen Intel® Xeon® Processor Scalable Family

## Features

- 1U 31" deep rackmount server
- Dual Intel® Xeon® Scalable Gold6, Gold5, Silver or Bronze processor
- 32 x DIMM sockets support up 2048GB DDR5 4800/4400 MT/s
- PCIe5.0 add-in cards support up to two full-high 3/4 length (FH | 3/4L) PCIe x16 and one OCP3.0 PCIe x16
- Up to twelve NVMe or SATA3 SSDs
- Up to two NVMe or SATA3 2280 M.2 drives
- IPMI 2.0-compliant management with reliability and security enhancements

## Introduction

The Advantech SKY-8134DU is a high-performance server that is designed to balance the best in x86 server-class processing with maximum storage, I/O, and offload density in a 1U 31" depth chassis. The system is not only a cost-effective, robust platform optimized for superior reliability in business-critical applications such as communications, edge and industrial high-performance computing, but also for high-density PCIe card payloads where maximum I/O 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 acceleration technologies such as GPU, DSP, and FPGA cards.

Architected around the new Intel® Xeon® Processor Scalable Family, which offers an unprecedented choice of performance levels from 8 to 32 cores each with the ruggedness, reliability, and long system lifecycles required by the industry. The system also features integrated security and compression offload based on Intel® QuickAssist technology and two onboard GbE ports with SR-IOV and RDMA support, making it an ideal choice for best-in-class integration in 1U form factor.

Specifically designed for applications requiring higher capacity, front loading, hot-swappable storage with RAID support. It accommodates up to twelve 2.5" removable drive bays at the front of the system, which support 2.5"NVMe drives each connected to a PCIe x4 Intel OCuLink bus, or SATA connectivity. The server is ideal for video caching and edge transcoding, data acquisition, storage and processing as well as accelerated edge processing and analytics. Another option of four 3.5" removable drive bays at the front of the system is also available.
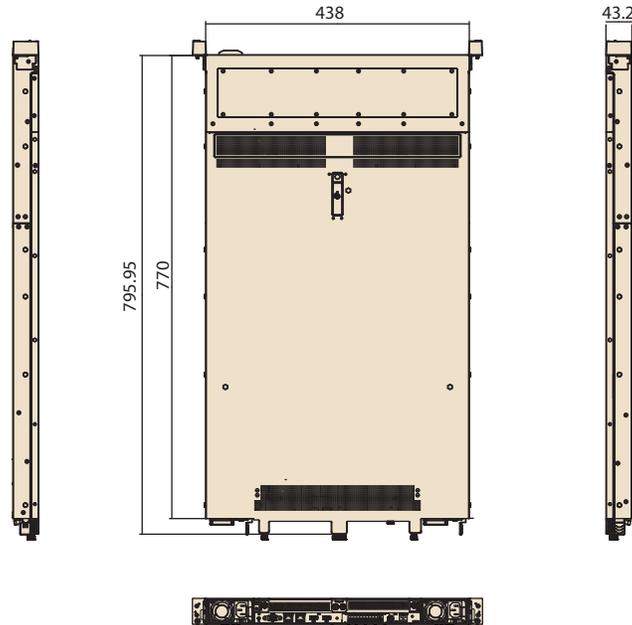
The SKY-8134DU meets a variety of acquisition, preprocessing and forwarding performance needs and can operate in environments with limited space, higher ambient temperature and lower low noise level constraints. It is designed to withstand extended environmental conditions in terms of shock, vibration and operating temperature. The server features redundant power supplies, the ability to withstand single fan failures, redundant firmware images with failsafe upgrades and hot swappable FRUs all make the SKY-8134DU the platform of choice for applications requiring zero downtime.

## Specifications

| | | |
|---|---|---|
| Processor System | CPU | Dual 4th generation Intel Xeon Scalable processor up to 205W |
| | Chipset | Intel® Emmitsburg PCH chipset |
| Memory | Technology | 32x 4800MHz DDR5 RDIMM |
| | Max Capacity | Max capacity per channel: 64GB<br>Max total capacity per system: 2048GB |
| | Socket | 32x 288-pin DIMM |
| PCIe | Expansion slot | 2x full-high 3/4 length (FH | 3/4L) PCIe x16<br>OCP3.0 PCIe x16 |
| IO and LEDs | Front IO and LEDs | 1x USB3.2 Gen1; Power button/LED; ID button/LED; Reset button; Status LED* |
| | Rear IO | ID button/LED; VGA; 2x USB3.2 Gen 1; RS-45 Console |
| Ethernet | Management Interface | NC-SI (BMC to I210-AT) |
| | 10/25GbE Ethernet | Via Add-on PCIe card |
| | Controller | GbE LAN: Intel i210-AT support |
| | Connector | 2x GbE ports |
| Storage | | 12x 2.5" hot-swappable SATA3/NVMe drive bay<br>2x M.2 2280 SATA3/NVME slot |
| Power Supply | Input | 1200W 1+1 platinum redundant power supply with PMBus |
| Environment | Humidity Operational (non-condensing) | 5% to 85% |
| | Operation Temperature | 0 °C (32 °F) to 40 °C (104 °F) |
| | Storage Temperature | -40 °C (-40 °F) to 70 °C (158 °F) |
| Cooling | Chassis Fan | 8x 4056 fan with SmartFan control |
| | Thermal Control | Three separate thermal zones for motherboard and PCIe cards |
| | Redundancy | Resilient to single fan failure |

# Dimensions

Unit: mm

438

43.2

795.95

770

# Specifications (Cont.)

| 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<br>Optional TPM 2.0<br>Optional Secure Boot<br>Chassis Intrusion Protection<br>Cryptographically signed BMC firmware, optional signed BIOS firmware<br>NIST.SP.800-193 Sustainable, see https://campaign.advantech.online/en/Cloud-IoT/software/pop_EnhancedSecurity.html |
|---|---|---|
| Physical | Dimensions (W x D x H) | 438.0 x 788.0 x 44.2 mm (17.2" x 31.0" x 1.7") |
| | Weight | 20kg |

# Front View

# Rear View

# Ordering Information

| Part Number | Description |
|---|---|
| SKY-8134DU-12BA000 | 31" 2-socket 1U Server 4th/5th Generation Intel Xeon Scalable Processor, Intel C741, 12 x 2.5" drive bay supports SATA3 or NVMe drive, 2 x PCIe G5 x16 FH3/4L slot, 1 x OCP3.0 slot, AC 1200W 1+1 Power Supply |

# Optional Accessories

| Part Number | Description |
|---|---|
| 1700020095 | Power cable 3P 180 cm, USA |
| 1702002605 | Power cable 3P 180 cm, Europe |
| 1700000237 | Power cable 3P 180 cm, JP |
| 1700009652 | Power cord 3P 180 cm, China |