

NetKera NK1400 4 U Server

A high-performance, scalable, and reliable 4U dual-socket rack server.



Overview

The NetKera NK1400 is a cutting-edge 4U rack server, designed for mission-critical enterprise environments requiring maximum computational power and flexibility. Powered by the latest Intel Xeon Scalable processors, the NK1400 delivers extreme processing capabilities, ideal for workloads such as artificial intelligence, machine learning, big data analytics, and cloud computing. With its highly scalable architecture, it supports a wide range of storage configurations, providing a versatile solution for businesses needing robust data handling and storage solutions.

Key Specifications

- **Processor:**
 - Dual Intel Xeon Scalable processors
 - Up to 112 cores per system (56 cores per processor)
 - L3 Cache: Up to 150MB per processor
- **Memory:**
 - 32 DIMM slots
 - Supports DDR5 ECC memory
 - Maximum memory capacity: 8TB
- **Storage:**
 - Supports up to 24 front-accessible 3.5" or 2.5" NVMe, SSD, or HDD drives
 - Additional 4 hot-swappable rear bays
 - RAID support: 0, 1, 5, 10, 50, 60
- **I/O Expansion:**
 - 8 PCIe Gen4 slots for expansion
 - 2 M.2 slots for NVMe SSDs
 - Dual 10GBase-T Ethernet ports
 - Optional support for 25G/40G/100G network cards
- **Power Supply:**
 - Dual redundant hot-swappable 2000W platinum power supplies



- Supports 110V/220V AC and 240V/336V DC input
- 1+1 power redundancy for uninterrupted operation
- **Cooling System:**
 - Advanced thermal design with hot-swappable fans
 - Intelligent fan speed control to optimize cooling efficiency
 - Ensures stable operation in demanding environments
- **Management and Monitoring:**
 - Integrated BMC for remote monitoring and management
 - IPMI 2.0 support with web interface and Redfish API
 - Remote BIOS and firmware updates
 - Support for SNMP, SMTP, and alerts for hardware failures
- **Security Features:**
 - Trusted Platform Module (TPM) 2.0
 - Secure Boot and BIOS integrity checks
 - Chassis intrusion detection

Physical Specifications

- **Form Factor:** 4U Rackmount
- **Dimensions:** 680mm (D) x 445mm (W) x 175mm (H)
- **Weight:** 25kg (without drives)

Operating Environment

- **Operating Temperature:** 10°C to 35°C
- **Storage Temperature:** -40°C to 70°C
- **Humidity:** 10% to 85% non-condensing

Applications

- High-performance computing (HPC)
- Artificial Intelligence (AI) and Machine Learning (ML)
- Virtualization and cloud environments
- Big data analytics
- Mission-critical enterprise applications

Benefits

- Extreme scalability for demanding enterprise workloads
- Superior processing power with Intel Xeon processors
- Versatile storage options, including NVMe for high-speed access
- Redundant power supplies and hot-swappable components for high availability
- Remote management for efficient operations and reduced downtime



Technical Specification

Processor	Dual Intel Xeon Scalable processors
Chipset	Intel C741
Memory	32 DDR5 slots, maximum 5,600 MT/s memory speed (Maximum memory capacity: 8TB)
Storage	Front: 24x 2.5" slots (SAS/SATA, NVMe SSD optional, hot-swappable). Rear: 4x 2.5" slots (SAS/SATA, NVMe SSD optional, hot-swappable).
RAID Support	RAID 0/1/5/6/10/50/60 with power-off protection
Networking	Dual 10GBase-T Ethernet ports Optional support for 25G/40G/100G network cards
External Ports	4 USB ports, 2 VGA ports, 1 Serial port
Power Supply	1+1 hot-swappable redundant power supplies. Options: 550W, 800W, 1200W, 1600W, 2000W (80PLUS Platinum or Titanium).
Cooling	Eight high-efficiency fans with N+1 redundancy and intelligent cooling system
Operating Temperature	+10°C to +35°C (depends on configuration).
Storage Temperature	-40°C to +70°C
Humidity	10% to 85% RH (no condensation).
Altitude	Operable up to 3,000m (performance degradation at higher altitudes).
Dimensions	Dimensions: 680mm (D) x 445mm (W) x 175mm (H) excluding flanges and rails
Weight	Maximum configuration: About 25kg (excluding rails)
Certifications	