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Data sheet

Vantageo 2230-RE

Flexible, Scalable, and Secure

Vantageo 2230-RE is a new generation 2U 2-Socket general rack server developed by Vantageo, supporting two Intel ®Xeon ® third generation extensible processors (Ice Lake). Vantageo 2230-RE is designed with high density, modularization and streamline. It features high performance, high reliability, easy scalability and easy management, which is widely applicable to Internet, cloud computing, big data and NFV.

HIGH DENSITY, HIGH PERFORMANCE

- 2 Intel ® Xeon ® third-generation extensible processors (Ice Lake) with a single processor up to 40 cores

- Provides dual CPUs for high-speed interconnection, up to 3 UPIs for fast channel interconnection, and transmission rate of up to 11.2GT/s

- Provides 32 DDR4 memory slots at a rate of up to 3,200MT/s

- Provides high-speed I/O performance and supports high performance NVMe SSD

HIGH SCALABILITY, HIGH BANDWIDTH

- Provides a maximum of 41 2.5" disk slots or 20 3.5" disk slots + 4 2.5 "disk slots to meet the large- capacity storage requirement.

- Supports maximum of 28 NVMe SSD interfaces and provides high-speed I/O interfaces to solve thebottleneck of slow hard disk access in traditional solutions

- Provides multiple storage combinations and RAID card configuration options to flexibly configure local storage in accordance with service requirements.

- Provides powerful expansion capability and supports up to 14 PCIe expansion slots.

- Provides powerful computing capability, and supports four high-performance GPU modules

HIGH AVAILABILITY, HIGH RELIABILITY

- Provides a good heat dissipation design, which improves system reliability, effectively extends thelife of components, and reduces costs.

- The hard disks, power supply devices and fans support hot swapping, which improves theavailability of the system.

- Supports RAID 0, 1, 5, 6, 10, 50, and 60, supporting power-off protection and providing multipledata protection solutions for users

- The power module supports 1+1 redundancy and the fan supports N+1 redundancy, thus improvingthe system reliability

CONVENIENT MANAGEMENT, EASY MAINTENANCE

- Vantageo Server Suite Provides the Intelligent management platform, implementing out-of-band monitoring of resources such as CPUs, memories, hard disks, fans, power supplies, and networks.

- Provides powerful KVM functions.

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Provides the intelligent management platform, which implements out-of-band monitoring of resources such as CPU, memory, hard disk, fan, power supply, and network

Supports standard interfaces such as IPMI, SNMP and Redfish, which can be integrated with athird-party management system.

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Features	Technical Specification
Form Factor	2U rack server
Adaptable cabinet	19 inches ≥1,000mm-deep cabinet
Chipset	Intel C621A
Processor	2 Intel ® Xeon ® 3 rd generation scalable processors Ice lake
Memory slot	32 DDR4 memory slots, with a maximum rate of 3,200MT/s
Memory Protection	Advanced ECC
Memory DIMMS Supports	16GB-DDR4-RDIMM-3200MHz 32GB-DDR4-RDIMM-3200MHz 32G-DDR4-RDIMM-2933MHz 64GB-DDR4-RDIMM-3200MHz
Hard disk controller	Supports the HBA, RAID card and SAS3.0/SATA3.0.
Raid Controller	PCIe SAS Raid Card 12Gbps 2Gb caches, support Raid, 0, 1, 5, 6, 10, 50 ,60 with battery backup PCIe SAS Raid Card 12Gbps 4Gb caches, support Raid, 0, 1, 5, 6, 10, 50 ,60 with battery backup PCIe SAS Raid Card 12Gbps 8Gb caches, support Raid, 0, 1, 5, 6, 10, 50 ,60 with battery backup(Supports NVMe) Raid controller cooling with heat sink
Raid Manager	RAID Manager (command-line interface) BIOS Configuration Utility
Key RAID Data Protection Feature	Online Capacity Expansion Health Monitoring Online RAID level Migration Multi Raid array Support Fast initialization for quick array setup Check consistency for background data integrity S.M.A.R.T support Global and dedicated Hot Spare with Revertible Hot Spare support Automatic rebuild
Hard disk	Front storage hard disks: • 8x2.5" disk positions, supporting SAS/SATA/NVMe and supporting hot swapping • 16x2.5" disk positions, supporting SAS/SATA/NVMe and supporting hot swapping • 24x2.5" disk positions, supporting SAS/SATA/NVMe and supporting hot swapping • 25x2.5" disk positions, supporting SAS/SATA, of which 8 can support NVMe andsupport hot swapping • 12x3.5" disk positions, supporting SAS/SATA/NVME and supporting hot swapping Middle storage hard disk: • 8x2.5" disk positions, supporting SAS/SATA (optional) • 4x3.5" disk positions, supporting SAS/SATA (optional) • 2xM.2 SSD Rear storage hard disks: • 4x2.5" disk positions, supporting SAS/SATA/NVMe and supporting hot swapping (optional) • 4x3.5"/2.5" disk positions, supporting SAS/SATA and supporting hot swapping (optional)
Display	Integrated display controller,supporting the optional configuration of PCIe standard display cards
System management	Web Management interface Monitoring of critical components like Fan, Power ,CPU , HDD, Raid Telemetary details Supports sending alarm notification securely to OEM / Personal for troubleshooting **Vantageo Server Suite Provides Comprehensive**
PCIe slot	Supporting a maximum of 14 PCIe4.0 expansion slots: • 1 OCP3.0 slot, supporting NCSI • 10 standard rear-panel slots • 1 on-board RAID card slot • 2 central GPU slots
Onboard Ports	OCP NIC 3.0x2
External device interface	6 USB interfaces (2 back USB3.0 interfaces, 2 internal USB3.0 interfaces, 2 front USB2.0 interfaces) 2 VGA interfaces (one for the front end and one for the back end) 1 serial port
Power	Supporting 1+1 hot-swapping redundancy power Selecting 550W/800W/1,200W/1,600W/2,000W efficient platinum power supply Supporting 110V/220V AC, 240V/336 V high-voltage DC, and -48V DC

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Features	Technical Specification
Security	TPM 2.0(Trusted Platform Module), Authenticated BIOS, secure Boot, Silicon Root of Trust, Disk Encryption, Hardware Root of Trust
BIOS	UEFI compliant BIOS Flash EPROM update by software BIOS settings save and restore Local BIOS update from USB device Secure boot support
Remote Management	Remote management supports hardware components, Power on/off and boot process. Supports Management log , Audit Logs and dedicated Management roles bases on users Ports can be integrate with industry wide KVM solution. Monitoring fan, power supply, memory, CPU, RAID, NIC for failures. Remote management supports telemetry streaming and Idle Server Detection. Supports Role Based Security through LDAP or Local and able to provide pre-failure alarms for CPU, Memory and HDD by SMTP.
Operating buttons	On/off switch ID button Reset button
Status LEDs	Power ON Customer self service Global error LED Hard disks access
Environment conditions	Operating temperature: +5 ℃ ~ +45 ℃ Storage temperature: -40 ℃ ~ +65 ℃ Operating humidity: 8% ~ 90% RH, no condensation Transport storage humidity: 5% ~ 95% RH, no condensation Altitude: ≤ 3,000m. When the temperature is higher than 900m, the operating temperature is reduced by 1℃ when the altitude rises by 300m. If the attitude is higher than 3,000m, the server does not support the configuration of mechanical hard disks.
System size	432mm x 87.6mm x 780mm (W x H x D), excluding flanges and guide rails. Standard 19-inch rack (rack depth >=1m)
Fan	4 groups of efficient fans, N+1 redundancy, intelligent adjustment heat dissipationsystem
Weight	35kg in full configuration (excluding guide rails)
Supported Components CPU	2230-RE 6330N CPU(28core,2.2GHz,165W,with Heat sink) 2230-RE 4309Y CPU(8core,2.8GHz,105W,with Heat sink) 2230-RE 4310T CPU(10core,2.3GHz,105W,with Heat sink) 2230-RE 4310 CPU(12core,2.1GHz,120W,with Heat sink) 2230-RE 4314 CPU(16core,2.4GHz,135W,with Heat sink) 2230-RE 4316 CPU(20core,2.3GHz,150W,with Heat sink) 2230-RE 5315Y CPU(8core,3.2GHz,140W,with Heat sink) 2230-RE 5317 CPU(12core,3.0GHz,150W,with Heat sink) 2230-RE 5318N CPU(24core,2.1GHz,150W,with Heat sink) 2230-RE 5318Y CPU(24core,2.1GHz,165W,with Heat sink) 2230-RE 5320T CPU(20core,2.3GHz,150W,with Heat sink) 2230-RE 5320 CPU(26core,2.2GHz,185W,with Heat sink) 2230-RE 6326 CPU(16core,2.9GHz,185W,with Heat sink) 2230-RE 6330 CPU(28core,2.0GHz,205W,with Heat sink) 2230-RE 6334 CPU(8core,3.6GHz,165W,with Heat sink) 2230-RE 6336Y CPU(24core,2.4GHz,185W,with Heat sink) 2230-RE 6338N CPU(32core,2.2GHz,185W,with Heat sink) 2230-RE 6338T CPU(24core,2.1GHz,165W,with Heat sink)

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Features	**Technical Specification**
	2230-RE 6338 CPU(32core,2.0GHz,205W,with Heat sink)
	2230-RE 6342 CPU(24core,2.8GHz,230W,with Heat sink)
	2230-RE 6346 CPU(16core,3.1GHz,205W,with Heat sink)
	2230-RE 6348 CPU(28core,2.6GHz,235W,with Heat sink)
	2230-RE 6354 CPU(18core,3.0GHz,205W,with Heat sink)
	2230-RE 8352V CPU(36core,2.1GHz,195W,with Heat sink)
	2230-RE 8352Y CPU(32core,2.2GHz,205W,with Heat sink)
	2230-RE 8358P CPU(32core,2.6GHz,240W,with Heat sink)
	2230-RE 8358 CPU(32core,2.6GHz,250W,with Heat sink)
	2230-RE 8360Y CPU(36core,2.4GHz,250W,with Heat sink)
	2230-RE 8362 CPU(32core,2.8GHz,265W,with Heat sink)
	2230-RE 8368 CPU(38core,2.4GHz,270W,with Heat sink)
	2230-RE 8380 CPU(40core,2.3GHz,270W,with Heat sink)
SAS HDD	HDD-1.2TB-SAS-2.5"-10K-12Gb/s-TOSHIBA-2.5-inch hard disk box
	HDD-1.8TB-SAS-2.5"-10K-12Gb/s-3.5-inch hard disk box
	HDD-1.8TB-SAS-2.5"-10K-12Gb/s-2.5-inch hard disk box
	HDD-1.2TB-SAS-2.5"-10K-12Gb/s-TOSHIBA-3.5-inch hard disk box
	HDD-12TB-SAS-3.5"-7.2K-12Gb/s-3.5-inch hard disk box
	HDD-2.4TB-SAS-2.5"-10K-12Gb/s-2.5-inch hard disk box
	HDD-2.4TB-SAS-2.5"-10K-12Gb/s-3.5-inch hard disk box
	HDD-4TB-SAS-3.5"-7.2K-12Gb/s-WD-3.5-inch hard disk box
	HDD-600GB-SAS-2.5"-10K-12Gb/s-SEAGATE-2.5-inch hard disk box
	HDD-600GB-SAS-2.5"-10K-12Gb/s-SEAGATE-3.5-inch hard disk box
	HDD-600GB-SAS-2.5"-10K-12Gb/s-2.5-inch hard disk box
	HDD-600GB-SAS-2.5"-10K-12Gb/s-3.5-inch hard disk box
SATA HDD	HDD-12TB-SATA-3.5"-7.2K-6Gb/s-3.5-inch hard disk box
	HDD-14TB-SATA-3.5"-7.2K-6Gb/s-3.5-inch hard disk box
	HDD-16TB-SATA-3.5"-7.2K-6Gb/s-3.5-inch hard disk box
	HDD-16TB-SATA-3.5"-7.2K-6Gb/s-3.5-inch hard disk box
	HDD-16TB-SATA-3.5"-7.2K-6Gb/s-3.5-inch hard disk box
	HDD-20TB-SATA-3.5"-7.2K-6Gb/s-3.5-inch hard disk box
	HDD-2TB-SATA-3.5"-7.2K-6Gb/s-3.5-inch hard disk box
	HDD-4TB-SATA-3.5"-7.2K-6Gb/s-3.5-inch hard disk box
	HDD-8TB-SATA-3.5"-7.2K-6Gb/s-3.5-inch hard disk box
SSD SATA	SSD-240GB-SATA-2.5"-6Gb/s-Intensive read type-Intel S4510-2.5-inch hard disk box
	SSD-1.92TB-SATA-2.5"-6Gb/s-Intensive read type-Samsung PM893-2.5-inch hard disk box
	SSD-1.92TB-SATA-2.5"-6Gb/s-Intensive read type-Samsung PM893-3.5-inch hard disk box
	SSD-240GB-SATA-2.5"-6Gb/s-Intensive read type-Intel S4510-3.5-inch hard disk box
	SSD-240GB-SATA-M.2-2280-6Gb/s-Intensive read type-Intel S4510
	SSD-3.84TB-SATA-2.5"-6Gb/s-Read-write hybrid-Samsung PM897-2.5-inch hard disk box
	SSD-3.84TB-SATA-2.5"-6Gb/s-Read-write hybrid-Samsung PM897-3.5-inch hard disk box
	SSD-3.84TB-SATA-2.5"-6Gb/s-Intensive read type-Intel S4520-3.5-inch hard disk box
	SSD-3.84TB-SATA-2.5"-6Gb/s-Intensive read type-Intel S4520-2.5-inch hard disk box
	SSD-480GB-SATA-2.5"-6Gb/s-Read-write hybrid-Samsung PM897-2.5-inch hard disk box
	SSD-480GB-SATA-2.5"-6Gb/s-Read-write hybrid-Samsung PM897-3.5-inch hard disk box

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Features	Technical Specification
	SSD-480GB-SATA-2.5"-6Gb/s-Intensive read type-Samsung PM893-2.5-inch hard disk box
	SSD-480GB-SATA-2.5"-6Gb/s-Intensive read type-Samsung PM893-3.5-inch hard disk box
	SSD-480GB-SATA-M.2-2280-6Gb/s-Intensive read type-Intel S4520
	SSD-480GB-SATA-M.2-2280-6Gb/s-Intensive read type-Micron
	SSD-7.68TB-SATA-2.5"-6Gb/s-Intensive read type-Intel S4520-2.5-inch hard disk box
	SSD-7.68TB-SATA-2.5"-6Gb/s-Intensive read type-Intel S4520-3.5-inch hard disk box
	SSD-960GB-SATA-2.5"-6Gb/s-Read-write hybrid-Intel S4620-2.5-inch hard disk box
	SSD-960GB-SATA-2.5"-6Gb/s-Read-write hybrid-Intel S4620-3.5-inch hard disk box
	SSD-960GB-SATA-2.5"-6Gb/s-Intensive read type-Samsung PM893-2.5-inch hard disk box
	SSD-960GB-SATA-2.5"-6Gb/s-Intensive read type-Samsung PM893-3.5-inch hard disk box
	SSD-960GB-SATA-M.2-2280-6Gb/s-Intensive read type-Micron
NVME SSD	SSD-960GB-NVMe PCIe-2.5"-PCIE 4.0*4-Intensive read type-Samsung PM9A3-3.5-inch hard disk box
	SSD-960GB-NVMe PCIe-2.5"-PCIE 4.0*4-Intensive read type-Samsung PM9A3-2.5-inch hard disk box
	SSD-1.6TB-NVMe PCIe-2.5"-PCIE 4.0*4-Read-write hybrid-Intel P5620-2.5-inch hard disk box
	SSD-1.6TB-NVMe PCIe-2.5"-PCIE 4.0*4-Read-write hybrid-Intel P5620-3.5-inch hard disk box
	SSD-1.92TB-NVMe PCIe-2.5"-PCIE 4.0*4-Intensive read type-Samsung PM9A3-2.5-inch hard disk box
	SSD-1.92TB-NVMe PCIe-2.5"-PCIE 4.0*4-Intensive read type-Samsung PM9A3-3.5-inch hard disk box
	SSD-7.68TB-NVMe PCIe-2.5"-PCIE 4.0*4-Intensive read type-Samsung PM9A3-2.5-inch hard disk box
	SSD-7.68TB-NVMe PCIe-2.5"-PCIE 4.0*4-Intensive read type-Samsung PM9A3-3.5-inch hard disk box
Fibre Channel Card	PCIe FC HBA-LPE31002-2x16G SFP+ -PCIe3.0x8-with optical module
	PCIe FC HBA-LPe32000-1x32G SFP+ -PCIe3.0x8-with optical module
NIC card	PCIE NIC-XXV710-Intel-2x25G SFP28-PCIe3.0x8-no optical module
	PCIE NIC-I350-Intel-4x1G-RJ45-PCIe3.0x8
	PCIe NIC-NS312-Mellanox CX4-2x25G SFP28-PCIe3.0x8-no optical module
	PCIE NIC-MCX512A-ACUT-Mellanox CX5-2x25G SFP28-PCIe3.0x8-no optical module
	PCIE NIC-X710-Intel-2x10G-RJ45-PCIe3.0x8
	PCIe NIC-NS312-Mellanox CX4-2x10G SFP28-PCIe3.0x8-no optical module
	PCIe NIC-NS313-Mellanox CX6-2x25G SFP28-PCIe4.0x8-no optical module
Raid Card	PCIE SAS HBA card-LSI9440-8i-SAS3408-no Cache-RAID0,1,10,5-12Gb/s
	PCIE SAS HBA CARD-SAS9500-16i-SAS3816-no Cache-straight through-12Gb/s
	PCIE SAS HBA CARD-SAS9500-8i-SAS3808-no Cache-straight through-12Gb/s
	PCIE RAID card-SAS9560-16i-8GB Cache-RAID0,1,10,5,6,50,60-12Gb/s-no cache protection module
	PCIE RAID card-SAS9560-8i-4GB Cache-RAID0,1,10,5,6,50,60-12Gb/s-no cache protection module
	PCIE SAS HBA-RS243-18i-PM8238-no Cache-RAID0,1,10,5-12Gb/s
	PCIE SAS RAID Card-RS241_V3-18i-PM8236-2G Cache-RAID0,1,5,6,10,50,60-12Gb/s
	PCIE SAS RAID Card-RS242_V3-18i-PM8236-4G Cache-RAID0,1,5,6,10,50,60-12Gb/s
Certified or supported operating system & virtualization Software	Compatible with mainstream server operating systems: Microsoft Windows Sever - 2022 Datacenter Microsoft Windows Sever - 2019 Datacenter Microsoft Windows Sever - 2016 Datacenter Microsoft Windows Sever - 2022 Standard Microsoft Windows Sever - 2019 Standard Microsoft Windows Sever - 2016 Standard Microsoft-Hyper V Red Hat Enterprise Linux 9.0 - 9.x Red Hat Enterprise Linux 8.6 - 8.x Redhat Open Shift Container Platform 4.11 Redhat Virtualization 4.x SUSE Linux Enterprise Server 15 for AMD64 & Intel64 (with XEN / KVM) Ubuntu Server 24.04 & 22.04 LTS VMWare vSphere 8.0 VMWare vSphere 7.0

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