

Nfina 7312R Hyperconverged Solutions



The Nfina 7312R-E and 7312R-HA complement your existing cloud computing infrastructure.

Nfina's 7312R Hyperconverged solutions put information processing (Data Entry, Compute, Storage, Point of Sale) closer to your edge applications. With the Nfina 7312R-E and 7312R-HA, you can improve security and compliance, achieve faster response times, create redundancy, reduce latency, lower cost, and complement your existing cloud computing infrastructure.

The Nfina 7312R-E and 7312R-HA offer multiple backup and disaster recovery options to ensure data security and retention: *Nfina-Store*™ provides integration for local and offsite data backup and disaster recovery. Unlike many of our competitors, you can choose to store your offsite storage where you like; a colo, the cloud, or multiple geo-redundant cloud locations. *Nfina-Store* helps create and manage HA clusters and provides no single point of failure. Features include tiered RAM, unlimited snapshots with instant restore, compression and deduplication, and on and offsite data protection. *Nfina-View*™ software provides monitoring on-prem and cloud, failover, rollback, and DR testing. Failover and rollback are simple single click operations and do not require rebuilding and repopulating data.

FEATURES:

DATA ACCELERATION

- Acceleration of random writes with Write Log (ZIL)
- Hybrid Read Cache with first level in RAM and second Read Cache level on an SSD or NVMe
- Compression for improved performance

DATA ACCESSIBILITY

- iSCSI, Fibre Channel (FC), NFS, SMB (CIFS)

DATA AVAILABILITY

- High-Availability Dual-Controller Clustering
- Active-Active and Active-Passive HA Cluster
- Dual Storage (Stretched) Metro HA Cluster and Common Storage Cluster architectures

DATA PROTECTION

- On-site and Off-site Data Protection
- N-way mirrors, Single, Dual and Triple Parity RAID
- Copy-on-Write
- Snapshots support AES Encryption while in Transit
- Snapshots support SED Encryption while at Rest

DATA INTEGRITY

- Data and Metadata Check-summing
- Self-Healing: Detecting and correcting with scrub utility

DATA BACKUP & RESTORE

- Unlimited Snapshots and Clones
- Snapshot Rollback

DATA OPTIMIZATION

- Inline Compression (LZ4, LZJB, ZLE, GZIP 1-9)
- Inline Deduplication

USER AUTHENTICATION

- Local LDAP users and groups authentication for SMB /CIFS protocol
- External Active Domain Server

SYSTEM MONITORING

- SNMP
- Nagios, Checkmk
- GUI statistics
- REST API



HYBRID CLOUD SOLUTIONS
CYBER SECURE SERVERS
BACKUP & RAPID DR
DATA STORAGE

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HYBRID ■ CLOUD SOLUTIONS

NFINA 7312R-E / NFINA 7312R-HA

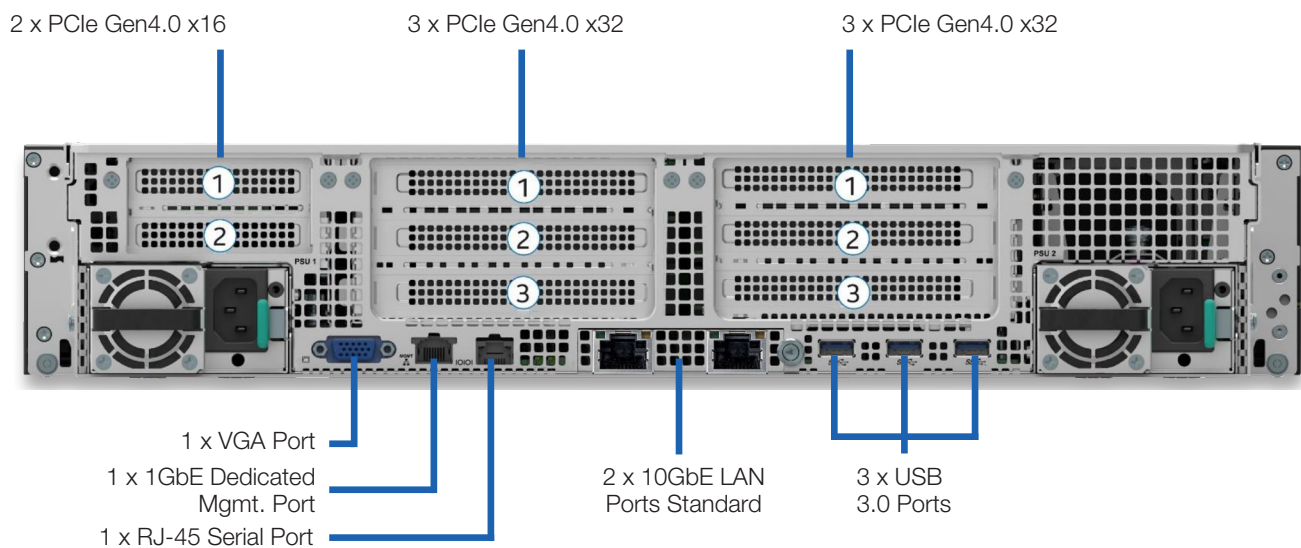
SPECIFICATIONS

Form Factor	2U rack-mount, 3.42" x 17.56" x 30.3"
Operating Temperature	10°C to 35°C (50°F to 95°F)
Processor	3rd Generation Intel® Xeon® Scalable Processors, 40 cores each, 270W max
Processor Speed	2.3GHz to 3.4GHz
Processor Cache	60MB
Socket	Dual Socket P
Memory	Up to 32 DIMMs, DDR4 ECC 3200 MHz 12TB Max memory capacity Intel® Optane™ Memory supported (200 series)
Storage	12 x 3.5" or 2.5" hot-swap drive bays Supports: Up to 12 x SSD/HDD drives - or - Up to 8 x SSD/HDD drives and up to 4 x NVMe drives 2 x Internal fixed 2.5" SSD drives (optional) 2 x internal M.2 NVMe connectors, PCIe® or SATA (22110 or 2280 FF)
Software RAID	0, 1, 10, optional 5
Hardware RAID/Caching	Hardware RAID optional, Caching available
Input Voltage	100-127V @ 12A, 50/60 Hz 200-240V @ 9.5A, 50/60 Hz
Power Supply	Redundant hot-swap 1600W AC
Remote Management	BMC, IPMI 2.0, KVM over HTML5, and Redfish
TPM	Version 2.0, optional
Software Certifications	VMware® ESXi™ 7.0 U2,U3 w/Direct Path I/O, SR-IOV, Fault Tolerant, TPM 2.0 w/ text
OS Supported	Microsoft® Windows Server® 2019, 2022, VMware® ESXi™ 6.7, 7.0, vSphere® 8.0, Nfina-Store™, Open-E® JovianDSS™ & DSS7, Red Hat® RHEL 7.9-8.4, SUSE® SLES 15 SP2, 15 SP3, Ubuntu 20.04-LTS, 20.10, 21.04, CentOS™ 8.2, CentOS™ Linux 7, more options available
Regulatory Certifications	CE (Europe), FCC part 15 (US), EAC (Eurasia), NRTL certification (US, Canada), RCM DoC (Australia/NZ), International Compliance - CISRP32 & CISPR24, CB Certification (International), GS (Germany), CU Certification (Russia, Belarus, Kazakhstan), KC (Korea), Ukraine Certification, BSMI (Taiwan), VCCI Certification (Japan), NOM Mexico Certification, South Africa Certification, BIS (India), WEEE (Europe). RoHS (Europe) RoHS 20 (China)
Warranty	5 years

NFINA 7312R-E / NFINA 7312R-HA

SPECIFICATIONS

I/O	4 x USB 3.0 ports (1 front, 3 rear) and 1 x USB 2.0 port (front) 1 x RJ-45 Serial A port (rear)
Display	1 x VGA ports (rear) 128MB of DDR4 video memory Integrated 2D video controller
Ethernet	2 x 10GbE LAN (100/1000/10000) standard, other options available 1 x 1GbE (Dedicated management port) included
PCIe® Slots	6 x PCIe® Gen4 x32 (up to 32GB/s) FH/FL 2 x PCIe® Gen4 x16 (up to 32GB/s) LP/HL



Nfina products deliver exceptional functionality by creating products that are easily customized to fit specific applications. Designed and built for virtualized computing environments, our products provide highdensity, maximum yield solutions for our customers. Multiple options for high performance computing, including I/O, RAID, storage, and memory options make our products a custom fit for many applications.

All Nfina Technologies' servers are backed by a five-year limited warranty and include 24x7 tech support with remote diagnostics. Next day and four hour onsite response options are available.

Nfina Hyperconverged solutions come with no adware, spyware, bloatware, or trackware.

OTHER NFINA 7312R SOLUTIONS

SERVER

7312R

The 7312R delivers exceptional functionality by creating a solution that is easily customized to fit your specific application. Designed and built for virtualized computing environments, the 7212R provides a high-density, maximum yield solution for your IT infrastructure. Multiple options for high performance computing, including I/O, RAID, storage, and memory options make our servers a custom fit for many applications.

STORAGE SOLUTIONS

7312R-NAS

The 7312R-NAS offers high-performance storage (block and file share) for backup, disaster recovery, or business continuity solutions. It is the ideal candidate for an all-flash storage array (AFA) or for creating backup storage for a HA cluster and can be loaded with 12 HDD, SSD, or NVMe drives, alleviating the I/O bottleneck between high performance and capacity.

7312R-SAN

The 7312R-SAN dual nodes deliver high-performance, high iOPS, and low latency. This SAN equipped with 24 HDD, SSD, or NVMe drives is the ideal candidate for an AFA with a wide variety of network and storage options.

HYBRID CLOUD EDGE-TO-CLOUD SOLUTIONS

7312R-HC

The 7312R-HC is a dual node, twenty-four bay Hybrid Cloud solution, designed for businesses requiring High-Availability with maximum performance and uptime. Nfina's Hybrid Cloud solutions are the perfect alternative to the public hyperscale cloud, offering more benefits than the public cloud without the cost and complexity. Copies of your data are maintained on-site and at geo-redundant off-site locations. Nfina's Hybrid Cloud solutions makes storage, compute, backup, disaster recovery, managed services, and system monitoring easy by becoming your single point of contact for the entire process.

Nfina's Hybrid Cloud products include easy and reliable backup and disaster recovery management tools. **Nfina-Store™** is management software used to create and manage data storage pools. Snapshots created according to your desired frequency provide fool-proof on and off-site backup and disaster recovery protection. For added security, snapshots are encrypted during transmission with at-rest encryption available as an option. **Nfina-View™** software uses a unified management control pane to monitor your edge and cloud data storage pools. In the event of an outage or failure, Nfina-View allows you to quickly failover and run from your backups in minutes, not hours or days. If a ransomware attack occurs, your system is rolled back and restored from snapshots taken before the event occurred. Nfina-View also allows you to test your backups and failover procedures, assuring your IT systems are protected if an actual disaster occurs.

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