DIAMANTI

DATASHEET

# Diamanti D20 RH for Red Hat OpenShift

## ENTERPRISE CONTAINER PLATFORM

| FULLY INTEGRATED | NETWORK | STORAGE | COMPUTE |
|---|---|---|---|
| Red Hat® OpenShift® | 4×10 GbE per node | 4 / 8 / 32 TB NVMe | Intel® Xeon® 20, 32 or 44 CPU cores per node |

The Diamanti® D20 RH for Red Hat® OpenShift® enables enterprises building and deploying containerized applications on the Red Hat OpenShift Container Platform to maximize the performance, scalability, and operational efficiency of Red Hat's best-in-class developer tools and industry-leading containers and Kubernetes platform.

For enterprises running OpenShift, the Diamanti D20 RH provides underlying infrastructure that deploys in hours. Developers can take full advantage of OpenShift's features to accelerate innovation and achieve competitive advantage. At the same time, IT operations enjoys the performance, efficiency, and simplicity of Diamanti's hyperconverged container infrastructure.


RED HAT® OPENSHIFT Container Platform

## DIAMANTI D20 RH BENEFITS:

### SIMPLICITY

- Rapid deployment of OpenShift and underlying infrastructure
- No vendor lock-in
- Integrates with traditional and cloud-native ecosystems
- Easy to manage and scale

### PERFORMANCE

- 1,000,000 IOPS per 1U with consistent 100-microsecond latency
- Industry-leading application-level transactions per second

### EFFICIENCY

- 70% lower TCO vs. traditional infrastructure
- 100% host utilization
- 95% usable storage capacity
- Guaranteed QoS with no overprovisioning

### ENTERPRISE FEATURES

- Full-stack support
- Production-grade SLAs
- Secure multi-tenant isolation
- Advanced DR/DP
- On-premises availability zones and hybrid cloud support

# The Diamanti D20 RH for Red Hat OpenShift:

## INFRASTRUCTURE ARCHITECTED FOR CONTAINERS

Diamanti's virtualized approach to network and storage traffic management addresses the unique requirements of stateful containerized applications. At the same time, Diamanti delivers unmatched resource utilization—up to 95%—across the entire cluster. No other container platform achieves comparable performance in such a small data center footprint. Low-latency block storage is built using Intel® NVMe, which requires roughly one-third the transactional CPU overhead of SCSI, delivering 100-microsecond read/write latency. Diamanti extends NVMe across the cluster using standard 10 GB Ethernet, offering data mobility without compromise.

### PLUG-AND-PLAY NETWORKING

Containers have their own unique system of port mappings, overlays, and bandwidth requirements that create a host of interoperability challenges. Diamanti eliminates these configuration roadblocks by using networking that integrates directly with existing network infrastructure. Each container is automatically allocated an IP address and can reside on any subnet.

### FAST NVME PERSISTENT STORAGE

Legacy scale-up storage arrays don't fit into modern scale-out containers based deployments. Trying to achieve performance at scale for databases and key value stores has ops teams scrambling to deliver persistent storage.

Diamanti meets the storage needs of your stateful applications with low-latency NVMe block storage, delivering 100-microsecond read/write latency. Diamanti extends NVMe across the cluster using standard 10 GB Ethernet, offering data mobility without compromise.

### SEAMLESS SCALABILITY

Easily scale your container infrastructure with multi-cloud capabilities and Diamanti appliances that deliver 1,000,000+ IOPS per 1U node and 100-microsecond latency.

### 24X7 ENTERPRISE-CLASS SUPPORT

As a Kubernetes Certified Service Provider, Diamanti's single-point-of-contact support allows you to focus on developing applications instead of building and maintaining infrastructure.

### CONTAINER-GRANULAR QUALITY OF SERVICE (QOS)

Guarantee real-time service levels for application containers across compute, network, and storage resources.

### MULTI-ZONE CLUSTERING

Enhance fault tolerance and application high availability by setting up your container environment and deploying workloads across multiple availability zones.

# Diamanti D20 RH for Red Hat OpenShift

## SPECIFICATIONS

| HARDWARE SPECIFICATIONS (minimum 6-node configuration is recommended) | |
|---|---|
| NETWORK | 4x 10 GbE via a single QSFP+ connection (per node) |
| STORAGE | DATA STORAGE<br>4 TB configuration (4x 1000 GB Intel® NVMe SSD per node)<br>8 TB configuration (4x 2000 GB Intel® NVMe SSD per node)<br>32 TB configuration (4x 8000 GB Intel® NVMe SSD per node)<br><br>HOST OS AND DOCKER IMAGE STORAGE<br>960 GB (2x 480 GB SATA SSD per node) |
| COMPUTE | CPU: 2x Intel® Xeon® Processors with 20 / 32 / 44 cores (per node)<br>RAM: 192 GB / 384 GB / 768 GB (per node) |

| PHYSICAL SPECIFICATIONS | |
|---|---|
| RACK SPACE | 1U |
| DIMENSIONS PER NODE | 17.25" W × 28" D × 1.72" H / 52 lbs 43.8 cm × 71.1 cm × 4.4 cm / 23.6 kg |
| POWER | Dual redundant 110/220V power supplies |
| ENVIRONMENTAL | Operating temperature: 50°F to 95°F (10°C to 35°C) |