

# DATERA ELASTIC DATA FABRIC

Datera Elastic Data Fabric™ (EDF), a next-generation “public-cloud”-like elastic block storage that is deployable within enterprises and service providers on industry-standard x86 servers. Datera Elastic Data Fabric takes datacenter automation and efficiency to a whole new level, delivering cloud operations at transformational speed, agility and economics.

Datera Elastic Data Fabric is built to deliver intent-based multi-tenant aware storage with the ability to automate to scale through application awareness. The distributed system is completely self-aware, self-adaptive, and self-optimizing making it an autonomic organism adapting to the changes in the underlying infrastructure as well as the scale/changes in the workloads.

## SOFTWARE FEATURES

### PROGRAMMABLE

|                               |  |
|-------------------------------|--|
| <b>Management Interface</b>   | RESTful API, CLI and GUI   |
| <b>REST Explorer</b>          | Live searchable endpoint APIs<br>Self-describing schema<br>Auto-generate cURL or Python script; copy and paste live data center transactions |
| <b>Monitoring/Diagnostics</b> | SNMP, syslog, event logging and monitoring support   |

### INTENT-BASED

|                                      |  |
|--------------------------------------|--|
| <b>Application Defined</b>           | Built-in Application Templates: Cassandra, Hadoop, MySQL test/dev or customize your own Linked Application Instance support: Deploy, manage 1000's of App Instances with a single App Template   |
| <b>Policy-driven QoS Engine</b>      | Set QoS by application or fine-grain volume/data store<br>Wide range of cost, performance or data protection options   |
| <b>Cloud Ecosystem Plug-and-Play</b> | VMware VAAI, vCenter Plugin<br>OpenStack Cinder driver with multi-tenancy, QoS configuration and multi-pathing<br>CloudStack driver with shared volume, and manage volume support<br>Docker/Swarm volume driver, Kubernetes driver, Mesos driver |

### HYPERSCALE

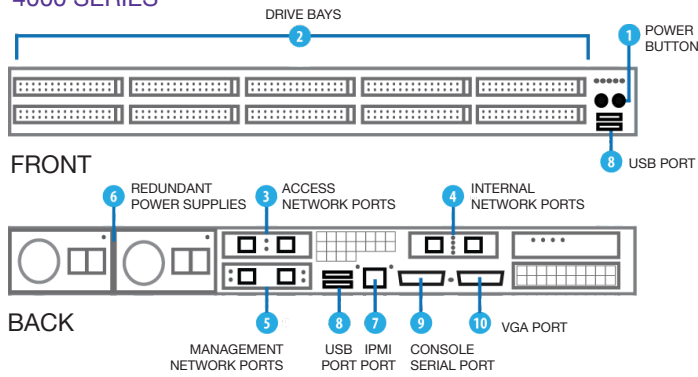
|                                       |  |
|---------------------------------------|--|
| <b>Cluster Architecture/ Metadata</b> | Symmetric, log-structured/Key Value Store<br>Available as software on qualified x86 platforms or as an integrated appliance  |
| <b>Heterogeneous Hyperscale</b>       | Mix 'n match all-flash node, and hybrid flash nodes<br>Tested Min/Max nodes per system; 3/20<br>Auto-load balancing across nodes<br>Transparent tech refresh   |
| <b>High Availability</b>              | Online, non-disruptive cluster shrink/expand, software and hardware upgrades<br>No single point of failure, automated mix node rebuilds, media failure handling<br>Minimum/Maximum Replicas: 1-5<br>Clones, Snapshots (read, write, online, offline and scheduled) |

### MULTI-TENANT

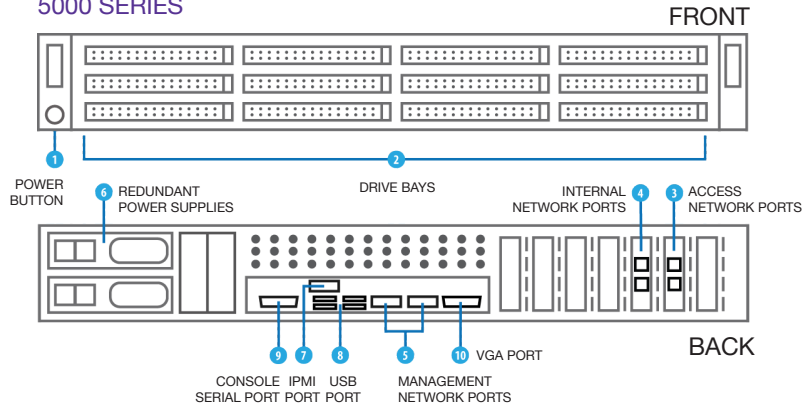
|                         |   |
|-------------------------|---|
| <b>Tenant Isolation</b> | Support for native multi-tenancy, tenant administration<br>Micro-segmentation: separates application traffic for security and fault isolation<br>Support of multiple IP blocks, VLAN Tagging<br>Secure administrative roles; end point-based access |
|-------------------------|---|

# APPLICATION SPECIFICATIONS

## 4000 SERIES



## 5000 SERIES



|                      | All-FLASH NODE (AFN)  |   | HYBRID FLASH NODE (HFN)   |   |
|----------------------|---|---|---|---|
|                      | DF 4010   | DF 4020   | DF 5005   | DF 5010   |
| Storage              | 9.6 TB Flash (raw)  | 19.2 TB Flash (raw)   | 48 TB HDD (raw)<br>3.2 TB Flash (raw)   | 96 TB HDD (raw)<br>6.4 TB Flash (raw)   |
| Access Protocols     | iSCSI, iSER   | iSCSI, iSER   | iSCSI, iSER   | iSCSI, iSER   |
| Performance          | Up to 50,000 IOPS @<br>< 1ms latency<br>Up to 2.5GB/s bandwidth   | Up to 50,000 IOPS @<br>< 1ms latency<br>Up to 2.5GB/s bandwidth   | Up to 50,000 IOPS @<br>< 1ms latency<br>Up to 2.5GB/s bandwidth   | Up to 50,000 IOPS @<br>< 1ms latency<br>Up to 2.5GB/s bandwidth   |
| System Configuration | 2-socket Xeon E5-2630v4<br>128GB memory<br>Mirrored boot drives   | 2-socket Xeon E5-2630v4<br>128GB memory<br>Mirrored boot drives   | 2-socket Xeon E5-2630v4<br>128GB memory<br>Mirrored boot drives   | 2-socket Xeon E5-2630v4<br>128GB memory<br>Mirrored boot drives   |
| Networking           | Management: Up to 3x1GbE RJ45<br>Access Network: 2x 10GbE SFP+<br>Internal Network: 2x 10GbE SFP+ (or) 40GbE QSFP | Management: Up to 3x1GbE RJ45<br>Access Network: 2x 10GbE SFP+<br>Internal Network: 2x 10GbE SFP+ (or) 40GbE QSFP | Management: Up to 3x1GbE RJ45<br>Access Network: 2x 10GbE SFP+<br>Internal Network: 2x 10GbE SFP+ (or) 40GbE QSFP | Management: Up to 3x1GbE RJ45<br>Access Network: 2x 10GbE SFP+<br>Internal Network: 2x 10GbE SFP+ (or) 40GbE QSFP |
| Power                | 2x Hot-plug redundant high-efficiency 750W 150W to 300W depending upon 10 load                                    | 2x Hot-plug redundant high-efficiency 750W 150W to 300W depending upon 10 load                                    | 2x Hot-plug redundant high-efficiency 750W 220W to 300W depending up on IO load                                   | 2x Hot-plug redundant high-efficiency 750W 220W to 300W depending up on IO load                                   |
| Gross Weight         | 17.2 kg (38 lbs)  | 17.2 kg (38 lbs)  | 38.6 kg (85 lbs)  | 38.6kg (85 lbs)   |
| Enclosure            | 1RU, Height: 42.8mm (1.7"), Width: 434mm (17.09"), Depth: 731mm (28.8")   | 1RU, Height: 42.8mm (1.7"), Width: 434mm (17.09"), Depth: 731mm (28.8")   | 2RU, Height: 88.9mm (3.5"), Width: 434mm (17.09"), Depth: 731mm (28.8")   | 2RU, Height: 88.9mm (3.5"), Width: 434mm (17.09"), Depth: 731mm (28.8")   |