

# E™ - Specificatio

## Protect your storage investment and allow your data system to evolve and grow

keeperSAFE™ is a purpose built, flexible cloudscale storage architecture. Bundled with Seagate's new highly secure and ultra-dense server platform, keeperSAFE perfects open-source software based storage technology, thus enabling an enterprise to intelligently scale storage infrastructure on demand. Its 1920TB capacity in a single 4U chassis leads the industry in space efficiency. Showcasing a unique cloud architecture, the highly compact appliance quickly consumes growing workloads without disruption. System health is easily monitored through a sophisticated single-pane-of-glass management interface. Engineered as a open and unified storage platform, keeperSAFE's Software Defined architecture affords customers forklift-free technology insertion.



#### Highlights of keeperSAFE... powered by @SEAGATE

#### Space Efficient Footprint

- 1920TB Capacity in 4U Chassis
- Two storage nodes per 4U
- Independent Intel processor and connectivity per node

#### Data Resiliency and Protection

- · Erasure Coding for durability and efficiency
- Integrated Real-Time data protection and integrity
- Snap-shots/Journaling
- Automatically isolates and minimizes component failures

#### Scalable and Elastic

- Uninterrupted scalability from petabytes to exabytes
- · Bandwidth flexes as the system grows
- No controller bottleneck
- Objects at the core displace legacy infrastructures

#### Proactive Management GUI

- Data-point fusion for real-time monitoring
- Automatic, decentralized data look-up
- Unified GUI for hardware and software
- Self healing with SWARM enabled rebuild times

#### **Future Proof Design**

- Fueled by Open Source
- On-line technology modifications
- Non disruptive upgrades
- Proven hardware

#### Multiple Presentation Layers

- Native S3 API, Swift, Other REST(ful) Access
- NFS3, NFS4, OpenStack Manilla Access
- SMB1, SMB2, SMB3 Network Access
- RBD, OpenStack Cinder Block Access

#### Security

- FIPS 140-2 encryption at rest
- External Key Management Support (KMIP compliant)
- Secure, audited administrative actions
- Intra-system SSL Encrypted
- Extensive RBAC controls

#### **Cost Effective**

- Speedy non-disruptive consumption of workloads
- Expansion-ready Cloud based architecture
- Delivers savings operating on pennies/GB per year



# keeperSAFE<sup>™</sup> - Specifications

### **System Technical Specifications**

#### Capacity per Storage Shelf:

- Raw Capacity: 1,920 TB (20TB Drive) 1,728 TB (18TB Drive) 1.536 TB (16TB Drive) 1,344 TB (14TB Drive)

#### Client Connectivity:

- 4 x 10 Gb Ethernet Internal
- 10/40 Gb; 25/100 Gb Ethernet External

#### Redundancy

- Hot-swappable disk drives
- 2 hot-swappable power supplies
- No single point of failure
- Non-disruptive online software upgrades

#### Data Protection and Security:

- Replication and erasure coding via storage policies
- FIPS 140-2 encryption at rest

#### kSAFE Control Nodes:

- Form Factor: 2U
- Admin Node (Min 1 Required)
- Monitor Node (Min 3 Required)
- Gateway Node (Optional)
  - Interfaces: 2 x 10 Gb Ethernet
    - Optional I/F: 2 x 40 Gb Ethernet
    - Optional I/F: 2 x FDR IB
    - Optional I/F: 2 x 25/100 Gb Ethernet

#### kSAFE Control Shelf Specs:

- Dimensions: 3.41"H x 17.06"W x 33.52"D - Input Power: 100-240v (AC, 50/60 Hz)

- Weight (Max): 94 lbs.

#### Storage Form Factor:

- 2 nodes per 4U rack mount chassis

#### **Physical Characteristics:**

- Dimensions: 6.95"H x17.4" W x 46.06"D

- Weight (Max): 309 lbs.

#### Power (Per Chassis):

- Voltage: 200-240v (4U) - Power supply: 2x 3200W PSU - Power Receptacles: 4 x C14

#### Temperature:

- Operating: 41 to 95 F (5 to 35 C)

- Non-Operating: -40 to 158 F (-40 to 70 C)

#### Relative Humidity:

- Operating: 10% to 80% Non-condensing - Non-Operating: 5% to 90% Non-condensing

#### Altitude:

- Operating: 0 to 10,000 feet

- Non-Operating: -328 to 40,000 feet

#### Certifications, Marks and Approvals:

- Safety: UL 60950-1 (USA and Canada)

- Emissions (EMC): FCC CFR Part 15 Subpart B Class A (United States)

- Standard Marks/Approvals North America (FCC, UL, cUL, ICES/NMB-oo3 Class A)

#### **Optional 2U Storage Shelves:**

- 2U24 and/or 2U12:

- Dimensions: 3.5"H x 17.4"W x 24.8"D

- Weight (Max): 53 lbs. - Voltage: 100-240v