DataON Kepler-47 G2

Two-Node Hyper-Converged Appliances for
Microsoft Azure Stack HCI

DataON Kepler-47 Hyper-Converged Appliances

Project Kepler-47 was a concept from Microsoft's Windows Server team. Its goal was to bring the software-defined data center features of Windows Server 2016 to remote office/branch office (ROBO), edge computing, and Internet of Things (IoT) environments. IT administrators for these environments are looking for a cost-sensitive solution, while still providing high availability for mission-critical apps and reliable storage.

DataON Kepler-47 G2 – Optimized for Cost and Size with Microsoft Azure Stack HCI

The DataON Kepler-47 G2 is a low cost and small-sized hyper-converged platform designed with an integrated compute, network and storage infrastructure. It simplifies and maximizes the deployment of Microsoft applications, virtualization, data protection and hybrid cloud services.

The Kepler-47 G2 features a mini tower form factor, making it ideal for deployments where there may not be a dedicated space for a data center, if there is limited space to house data center equipment, or if the data center needs to be portable for temporary deployments.

The Kepler-47 G2 uses Intel Thunderbolt™ 3 over a USB Type-C connector instead of using traditional Ethernet networking between the servers. This eliminates the need for costly high-speed network adapters and switches. Intel® Thunderbolt™ 3 provides up to 40 Gb/s throughput – plenty for replicating storage and live migration of virtual machines.

Validated Microsoft Azure Stack HCI Solution

The Kepler-47 G2 is a validated Azure Stack HCI solution, designed to help customers consolidate virtualized workloads and gain cloud efficiencies on-premises in a hyper-converged environment. It features the same Hyper-V based software-defined compute, storage, and networking as Azure Stack and shares similar testing and validation criteria. It follows engineering best practices to get customers up and running without lengthy design and build times.

Built-in integration to Azure makes it easy for IT staff to start using Azure for infrastructure management services and start building cloud skills. With the Azure management services in Windows Admin Center and DataON MUST, customers can easily integrate on-premises workloads with services such as Azure Site Recovery, Azure Backup, Cloud Witness, and Azure Monitor.

- **Simple 2-node hyper-converged appliance** – Provides high availability and storage for enterprise applications with over 10TB usable capacity in a mirrored configuration.
- **Small mini tower form factor** – Ideal for deployments where space for data center equipment is limited or for temporary deployments. 50% smaller footprint than a standard 2U rack server.
- **Hyper-V virtualization hosting** – Supports more than 40 Hyper-V virtual machines per HCI deployment.
- **Low-cost, high-speed networking** – Leverages Intel® Thunderbolt™ technology to eliminate the need for costly network adapters and switches.
- **High availability and resiliency –** The servers form one Windows Server 2019 failover cluster with cloud witness as low-cost, low footprint quorum technology.
- **Fault tolerant –** Uses local drives and leverages Storage Replica with Azure Site Recovery.

Highlights:

- **Designed for smaller deployments** – Delivers the simplicity and cost-savings of hyper-converged data center for ROBO, edge and IoT environments in a single 2-node cluster, in a small mini tower form factor.

- **High performance** – Utilizes all-flash storage to accelerate workload performance.

- **Low-cost, high-speed networking** – Leverages Intel® Thunderbolt™ technology to eliminate the need for costly network adapters and switches.

- **Small form factor** – Saves space with a footprint more than 50% smaller than a standard 2U rack server.

- **Easy to manage** – Includes DataON's exclusive MUST software for infrastructure visibility, monitoring and management. Available as an extension for use with Windows Admin Center.
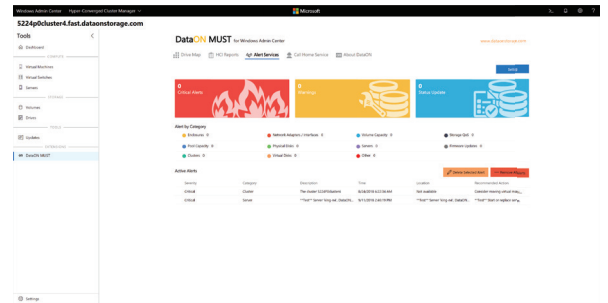
DataON MUST Features:

- **Dashboard level metrics** through a single pane of glass.
- **System alerts & automated e-mail notifications** for hardware failures, configuration issues and resource saturation.
- **Mobile friendly user interface** allows you to monitor your Windows Storage deployments when you're out of the office.
- **Available as an extension for Windows Admin Center,** adding historical data reporting, disk mapping, system alerts, and call home support.

DataON Kepler-47 G2	
Profile	All-Flash
Form Factor	Mini Tower
Drive Bay Configuration	2x 2.5" & 4x 3.5" SAS/SATA
Processor	Single Intel® Xeon® E-2126G 3.30GHz
CPU Cores	6 Cores per node
Memory	64GB to 128GB DDR4 per node
Boot Drive	2x 240GB Intel® NVMe M.2
Cache Tier	None
Capacity Tier	4x 960GB Intel® SATA SSDs or 6x 1.9TB Intel® SATA SSDs
PCIe 3.0 Slots	2x PCIe 3.0 x8
Onboard NIC	4x 1GbE RJ45
Networking	2x Intel® Thunderbolt™ 3 or 2x 25GbE
Max. TDP / Power Supply	80W / 350W

DataON MUST— Infrastructure Visibility and Management for Azure Stack HCI and Windows Server

DataON Kepler-47 G2 appliances include DataON's exclusive MUST visibility and management tool to provide SAN-like storage monitoring features for customers deploying Windows Server software-defined solutions.

MUST displays dashboard-level metrics of your cluster through a single pane of glass, with operational visibility of system analytics, infrastructure health management, storage system metrics, and event logging insights. It also sends system alerts and automated e-mail notifications for hardware failures, configuration issues and resource saturation.

MUST can be used through its standalone console or within Windows Admin Center, adding historical data reporting, disk mapping, system alerts, and call home support.

About DataON

DataON is the industry-leading provider of solutions for Microsoft Azure Stack HCI, and hyper-converged infrastructure and storage systems optimized for Microsoft Windows Server environments. It has been named to CIO Review's '20 Most Promising Microsoft Solution Providers 2018.' Our company is focused on customers who have made the "Microsoft choice" to deploy Microsoft applications, virtualization, data protection, and hybrid cloud services. Our enterprise-level solutions, delivered as a complete, turnkey experience, are designed to provide the highest level of performance, manageability, and security offered.