



GET THE FREEDOM TO CHOOSE WITHOUT COMPROMISE WITH SUPERMICRO AND QUMULO

Featuring Qumulo Core Unified File Data Management System



A + Single AMD EPYC™ 7003/7002 Series All-Flash NVMe Platform - AS -1114S-WN10RT

Executive Summary

With data growing rapidly, budget tightening, and rack space in a data center at a premium, administrators often make the impossible choice between price, performance, and scale. Supermicro and Qumulo are jointly introducing the low profile and all-flash NVMe file storage solution bundle that brings customers the freedom to choose the performance and scale that meets the needs of their most advanced use cases with economics that meet their budgetary realities.

SUPERMICRO

As a global leader in high performance, high efficiency server technology and innovation, we develop and provide end-to-end green computing solutions to the data center, cloud computing, enterprise IT, big data, HPC, and embedded markets. Our Building Block Solutions® approach allows us to provide a broad range of SKUs, and enables us to build and deliver application-optimized solutions based upon your requirements.

SUPERMICRO SERVER CERTIFIED WITH QUMULO CORE FILE STORAGE PLATFORM



AS -1114S-WN10RT

Supermicro’s WIO A+ 1U 10Bays All-Flash NVMe server offers high performance in a compact footprint.

SOLUTION BENEFITS

- Designed to achieve high performance at an economical price
- Save data center space with a 1U server chassis footprint
- Reduce power and cooling with small physical footprint
- Support green IT initiatives with reduced space and resource needs
- Ensure success with world class support provided by Qumulo

Big Performance, Small Footprint

Supermicro’s A+ Single AMD EPYC™ 7003/7002 Series All-Flash NVMe Platform, AS -1114S-WN10RT, gives you the scale and performance you need in an economical and environmentally friendly form factor. All-NVMe provides lightning-fast reads and writes and unparalleled throughput to support your most advanced performance requirements. It was optimized for storage performance, and trimming the unnecessary fat results in a highly economical platform. The 1U Supermicro nodes offer a range of capacity in node based increments from 30TB, 76TB, to 153TB per node. The 1U design provides excellent density and a reduced footprint. This saves on rack space and reduces power and cooling requirements, lowering storage TCO.

Qumulo’s advanced distributed file system allows you to scale capacity and performance symmetrically. This solution provides real-time data visibility and performance monitoring without requiring frequent tree walks. As a result, Qumulo offers one of the most efficient file systems in the industry, with the best raw-to-useable capacity that leverages 100 percent of useable storage.

Built for the Hybrid Cloud

Qumulo’s file system is built for the hybrid cloud, providing a single file solution whether your data is in the cloud or on-prem. Users can burst their storage needs to cloud-based services from the major providers when necessary.

Reference Architecture of Qumulo Solution

Supermicro’s Qumulo-ready solution is designed as a node-based platform. A cluster starts with a minimum of four nodes and is flexible to scale out by adding additional nodes.

	Supermicro A+ WIO 1114S-WN10RT All-NVMe		
Model	A -1114S-WN10RT 30TB	A -1114S-WN10RT 76TB	A -1114S-WN10RT 153TB
Form Factor	1U	1U	1U
Node raw capacity	30 TB	76 TB	153 TB
Usable Max Capacity (100 node cluster)	2.2 PB	5.7 PB	11.4 PB
NVMe drives	8 x 3.84 TB	10 x 7.68 TB	10 x 15.36 TB
Networking	4 x 100 GbE	4 x 100 GbE	4 x 100 GbE
CPU	AMD EPYC 24 core 2.8 GHz	AMD EPYC 24 core 2.8 GHz	AMD EPYC 24 core 2.8 GHz
Memory	128GB	128GB	128GB

Table 1. A cluster requires a minimum of 4 nodes