



## ioControl™ | HYBRID STORAGE

### Take Control of Your Storage Performance

Whether it's virtualizing more servers, deploying VDI, or accelerating business applications, your storage must deliver consistent performance. Take control of your shared storage performance needs with Fusion ioControl Hybrid Storage.

ioControl combines Fusion ioMemory enterprise flash with disk capacity to deliver industry-leading performance. Unlike other hybrid flash arrays, ioControl provides the ability to provision and prioritize storage resources with Quality of Service (QoS) policies. QoS policies are assigned to each volume independently, and define input/output operations, throughput and latency performance minimums for each application.

Amplify ioControl hybrid flash performance with SPX intelligent server caching. ioControl SPX adds server caching to ioControl, creating an end-to-end storage performance solution for data-intensive application clusters such as VMware and Microsoft SQL Server. Powered by Fusion ioMemory, and combined with high capacity disk drives, ioControl delivers 5x lower \$/GB than disk drives and 10x lower \$/IOPS than solid-state drives.

### ioControl Hybrid Storage

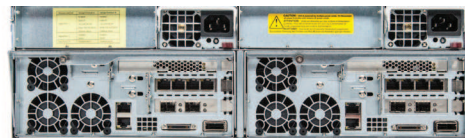
Quality of Service	Guarantee performance levels <ul style="list-style-type: none"> <li>• Provision and manage performance just like capacity</li> <li>• Create QoS managed datastores through vCenter Server</li> </ul>
Service Levels	Prioritize mission-critical workloads <ul style="list-style-type: none"> <li>• Control performance during planned or unplanned events</li> <li>• Mission-critical application performance will never be impacted</li> </ul>
Dynamic Data Placement	Real-time data movement between ioMemory and disk <ul style="list-style-type: none"> <li>• Address performance with real-time tiering</li> <li>• QoS driven</li> </ul>
Data Reduction	Reduced data written without impacting performance <ul style="list-style-type: none"> <li>• Inline pattern matching</li> <li>• Thin provisioned volumes and volume clones</li> </ul>
Data Protection	Provide enterprise data protection with snapshot and replication capabilities <ul style="list-style-type: none"> <li>• Thin snapshots</li> <li>• Efficient replication for disaster recovery</li> </ul>

**FUSION-IO**

# ioControl Hybrid Storage Hardware Specifications



Front



Rear

Model	n5-50	n5-100	n5-150	ioControl n5-SPX: 2-Server Application Cluster Solution	ioControl n5-SPX: 3-Host VMware Cluster Solution
Part Number	XN50-0716-11E	XN50-1332-11E	XN50-2448-11E	XN55-3948-3YR includes 3yr 24x7 Support XN55-3948-5YR Includes 5yr 24x7 Support	XN55-4748-3YR Includes 3yr 24x7 Support XN55-4748-5YR Includes 5yr 24x7 Support
ioMemory Capacity	730GB - 1,460GB	1,570GB - 3,140GB	2,400GB - 4,800GB		
Extended Server Cache				1,650 (for 2 servers)	2,475 (for 3 servers)
Raw Disk Capacity	16TB - 160TB	32TB - 176TB	48TB - 192TB		
IOPS	50,000 - 100,000	100,000 - 200,000	150,000 - 300,000	300,000 - 450,000*	375,000 - 525,000*
Storage Processors	Dual Active-Active				
Scalability	Performance packs: 730GB, 1,570GB, 2,400GB Capacity packs: 16TB, 48TB				
RAM	48GB		96GB		
RAID	RAID 6, hot-swap disk drives				
Network Interfaces	Data: (4) 10GbE + (8) 1GbE, Management: (4) 1GbE				
Storage Protocol	iSCSI				
Management	HTTP				
Hardware Availability	Redundant storage processors, fans, power supplies, and network connections, dual port SAS drives				
Flash Reliability	Fusion-io Adaptive Flashback				
Power	100 - 140V, 50 - 60Hz, 8 - 11.5 Amp, 180 - 240V, 50 - 60Hz, 5.5 - 8 Amp				
Environmental	Operating Temp: 10° to 35° C, (50° to 95° F), Operating Relative Humidity: 8% to 90% non-condensing, Non-Operating Temp: -40° to 70° C, (-40° to 158° F), Non-Operating Relative Humidity: 5% to 95% non-condensing				
Physical	Height: 5.2" (3 EAL rack units), Width: 17.2", Depth: 25.5", Weight: 75 lbs				

## ioControl Hybrid Storage Support Options (1 Year, 3 Year, and 5 Year)

Features	<ul style="list-style-type: none"> <li>• Software updates</li> <li>• n5 support costs never increase as capacity scales</li> <li>• Proactive phone-home monitoring</li> <li>• Single support contract</li> <li>• White glove storage engineer service</li> </ul>
Offerings	<ul style="list-style-type: none"> <li>• 7 day x 24 hour phone support with onsite parts</li> <li>• 7 day x 24 hour phone support with next business day parts</li> <li>• 5 day x 9 hour phone support with next business day parts</li> </ul>

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# ioControl Hybrid Storage Scalability Options

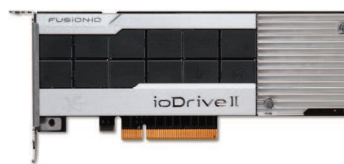
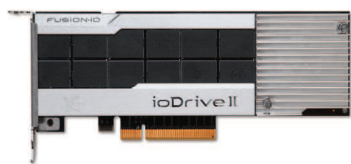


Front: Bezel on



Front: Bezel off

	Capacity Pack 16 TB	Capacity Pack 48 TB
Part Number	XN50-CP16-HD6	XN50-CP48-HD6
Raw Capacity	16 TB	48 TB
RAID	RAID 6, hot-swap disk drives	
Interfaces	6 Gb/s SAS	
Hardware Availability	Redundant fans, power supplies, and SAS connections Dual port SAS drives	
Power	100 - 140V, 50 - 60Hz, 8 - 11.5 Amp, 180 - 240V, 50 - 60Hz, 5.5 - 8 Amp	
Environmental	Operating Temp: 10° to 35° C, (50° to 95° F), Operating Relative Humidity: 8% to 90% non-condensing, Non-Operating Temp: -40° to 70° C, (-40° to 158° F), Non-Operating Relative Humidity: 5% to 95% non-condensing	
Physical	Height: 5.2" (3 EAI rack units), Width: 17.2", Depth: 25.5", Weight: 75 lbs.	



	n5-50 Performance Pack	n5-100 Performance Pack	n5-150 Performance Pack
Part Number	XN50-PP07-SSP	XN50-PP15-SSP	XN50-PP24-SSP
ioMemory Capacity	Qty (2) 365 GB	Qty (2) 785 GB	Qty (2) 1.2 TB
IOPS	50,000	100,000	150,000
Interface	PCIe	PCIe	PCIe

## For More Information

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