



SPC BENCHMARK 1™

EXECUTIVE SUMMARY

HUAWEI TECHNOLOGIES CO., LTD. HUAWEI OCEANSTOR™ DORADO5000 V3

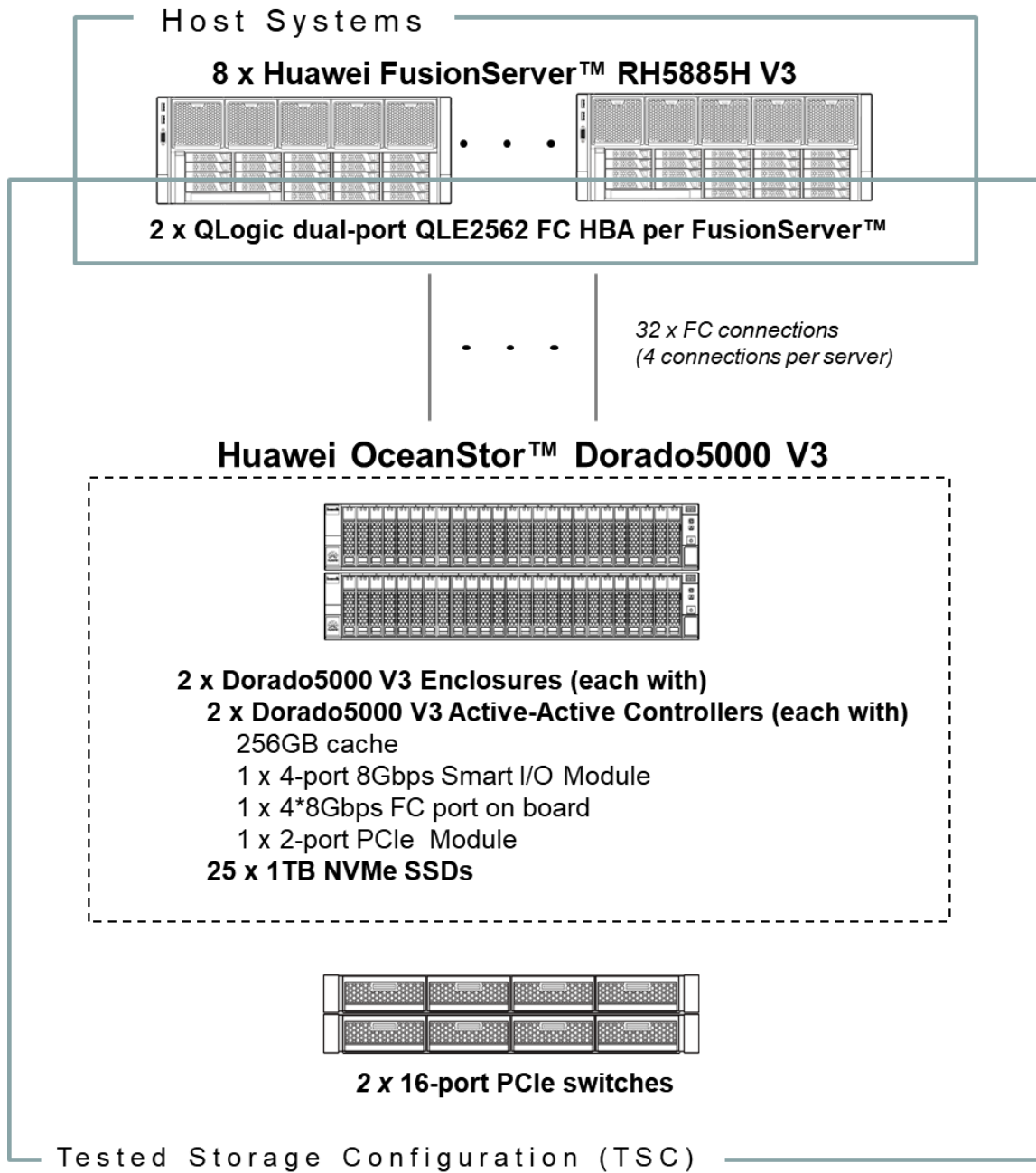
SPC-1 IOPS™	800,465
SPC-1 Price-Performance™	\$0.48/SPC-1 IOPS™
SPC-1 IOPS™ Response Time	0.507 ms
SPC-1 Overall Response Time	0.341 ms
SPC-1 ASU Capacity	27,058 GB
SPC-1 ASU Price	\$13.95/GB
SPC-1 Total System Price	\$377,376.62
Data Protection Level	Protected 2 (RAID 6 and full redundancy)
Physical Storage Capacity	50,791 GB
Pricing Currency / Target Country	U.S. Dollars / USA

SPC-1 V3.5.0

SUBMISSION IDENTIFIER: A31010

SUBMITTED FOR REVIEW: DECEMBER 5, 2017

Benchmark Configuration Diagram



Tested Storage Product Description

Huawei's OceanStor™ Dorado™ V3 all-flash storage is the ideal choice for enterprises' mission-critical business. It is the industry's first commercial use of NVMe all-flash storage, and it delivers high-performing, reliable, and efficient storage services.

The HyperMetro gateway-free active-active solution ensures 99.9999% availability, and 3:1 data reduction guarantee reduces TCO by 50%.

The Dorado satisfies the storage requirements of databases, Virtual Desktop Infrastructure (VDI) and Virtual Server Infrastructure (VSI), smoothing the way to the all-flash era.

For more details, visit:

<http://e.huawei.com/en/products/cloud-computing-dc/storage/unified-storage/dorado-v3>

Priced Storage Configuration Components

16 x QLogic dual-ported QLE2562 FC HBA
2 x Dorado5000 V3 Enclosures (each with) <ul style="list-style-type: none">2 x Dorado5000 V3 Active-Active Controllers (each with)<ul style="list-style-type: none">256GB cache1 x 4-port 8Gbps Smart I/O Module1 x 4*8Gbps FC port on board1 x 2-port PCIe Module25 x 1TB NVMe SSDs
2 x 16-port PCIe 2.0 switches

Storage Configuration Pricing

	Description	Qty	Unit Price	Ext. Price	Disc.	Disc. Price
Hardware & Software						
D5V3-512G-NAC-8	Dorado5000 V3(2U,Dual Ctrl,NVMe,AC\240HVDC,512GB Cache,SmartIO,16*8Gb FC,25*2.5",SPE61C0225)	2	123,590.82	247,181.64	45%	135,949.90
DV3-LPU5PCIE	8G PCIE Interface Board(w ith tw o NT Ports)	4	1,929.20	7,716.80	45%	4,244.24
D5V3-SSD-NVME-1T	1TB SSD NVMe Disk Unit(2.5")	50	4,971.40	248,570.00	45%	136,713.50
N8GHBA000	QLOGIC QLE2562 HBA Card,PCIE,8Gbps DualPort ,Fiber Channel Multimode LC Optic Interface,English Manual, No Drive CD	16	1,698.00	27,168.00	0%	27,168.00
SN2F01FCPC	Patch Cord,DLC/PC,DLC/PC,Multi-mode,3m,A 1a.2,2mm,42mm DLC,OM3 bending insensitive	32	19.80	633.60	0%	633.60
DV3-PCIESWITCH3	PCIe 3.0 Sw itch(AC\240HVDC,8GB Cache,16 Port,SWE1600P08)	2	16,218.00	32,436.00	0%	32,436.00
AOC-QSFP41G	Quadw ire 40 Gb/s Parallel AOC for PCIe 3.0	8	1,065.30	8,522.40	0%	8,522.40
D5V3-LBS	Basic Softw are License(Include DeviceManager,SmartThin,SmartMigration,Sm artDedupe,SmartCompression,eService,Syste mReporter,UltraPath)	1	7,196.00	7,196.00	44%	4,029.76
Hardware & Software Subtotal						349,697.40
Support & Maintenance						
02351GSA-88134ULF-36	Dorado5000 V3(2U,Dual Ctrl,NVMe,AC\240HVDC,512GB Cache,SmartIO,8*8Gb FC,25*2.5",SPE61C0225)-Hi-Care Onsite Premier 24x7x4H Engineer Onsite Service-36Month(s)	2	4,446.00	8,892.00	10%	8,002.80
02351GTU-88134ULF-36	1TB SSD NVMe Disk Unit(2.5")-Hi-Care Onsite Premier 24x7x4H Engineer Onsite Service-36Month(s)	50	216.00	10,800.00	10%	9,720.00
88033NAM-88134UHK-36	Basic Softw are License(Include DeviceManager,SmartThin,SmartMigration,Sm artDedupe,SmartCompression,eService,Syste mReporter)-Hi-Care Application Softw are Upgrade Support Service,UltraPath Softw are License-36Month(s)	1	1,854.00	1,854.00	30%	1,297.80
8812102575	OceanStor Dorado5000 V3 Installation Service - Engineering	1	9,620.68	9,620.68	10%	8,658.61
Support & Maintenance Subtotal						27,679.21
SPC-1 Total System Price						377,376.62
SPC-1 IOPS™						800,465
SPC-1 Price-Performance™ (\$/SPC-1 IOPS™)						0.48
SPC-1 ASU Capacity (GB)						27,058
SPC-1 ASU Price (\$/GB)						13.95

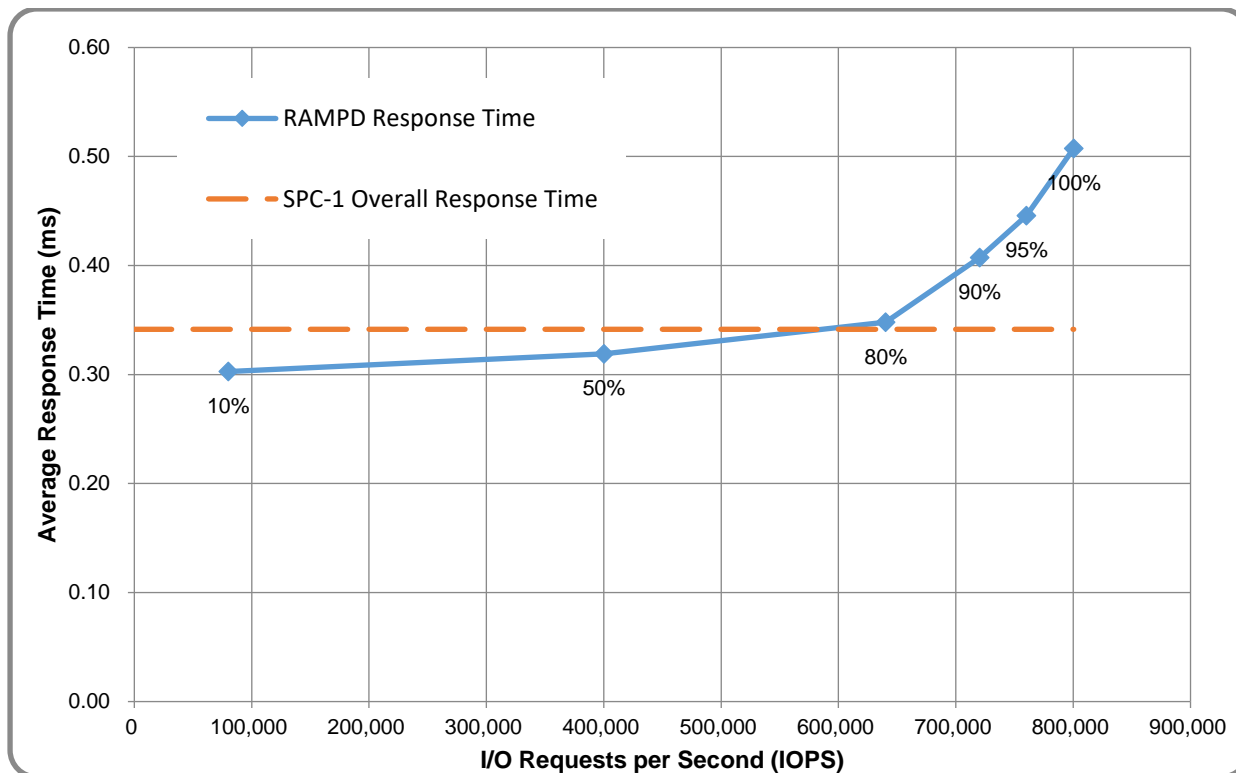
Third-Party Reseller: Huawei Technologies Co., Ltd. only sells its products to third-party resellers who, in turn, sell those products to U.S. customers. The above reflects the pricing quoted by one of those third-party resellers. See Appendix B of the Full Disclosure Report for a copy of the third-party reseller's quotation.

Discount Details: The discounts shown are based on the storage capacity purchased and are generally available.

Warranty: Hi-Care Premier On-Site Service include: 7x24 Technical Assistance Center Access. Access to all new software updates and Online Support. 24x7 with 4-hour On-site Hardware Replacement.

Availability Date: Currently available.

Response Time and Throughput Graph



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Revision Information	
SPC Benchmark 1™ Revision	V3.5.0
SPC-1 Workload Generator Revision	V3.00 build d34fb3c
Publication Revision History	Initial Publication