



## SPC BENCHMARK 1™

### EXECUTIVE SUMMARY

# HUAWEI TECHNOLOGIES CO., LTD. OCEANSTOR 5310 V5

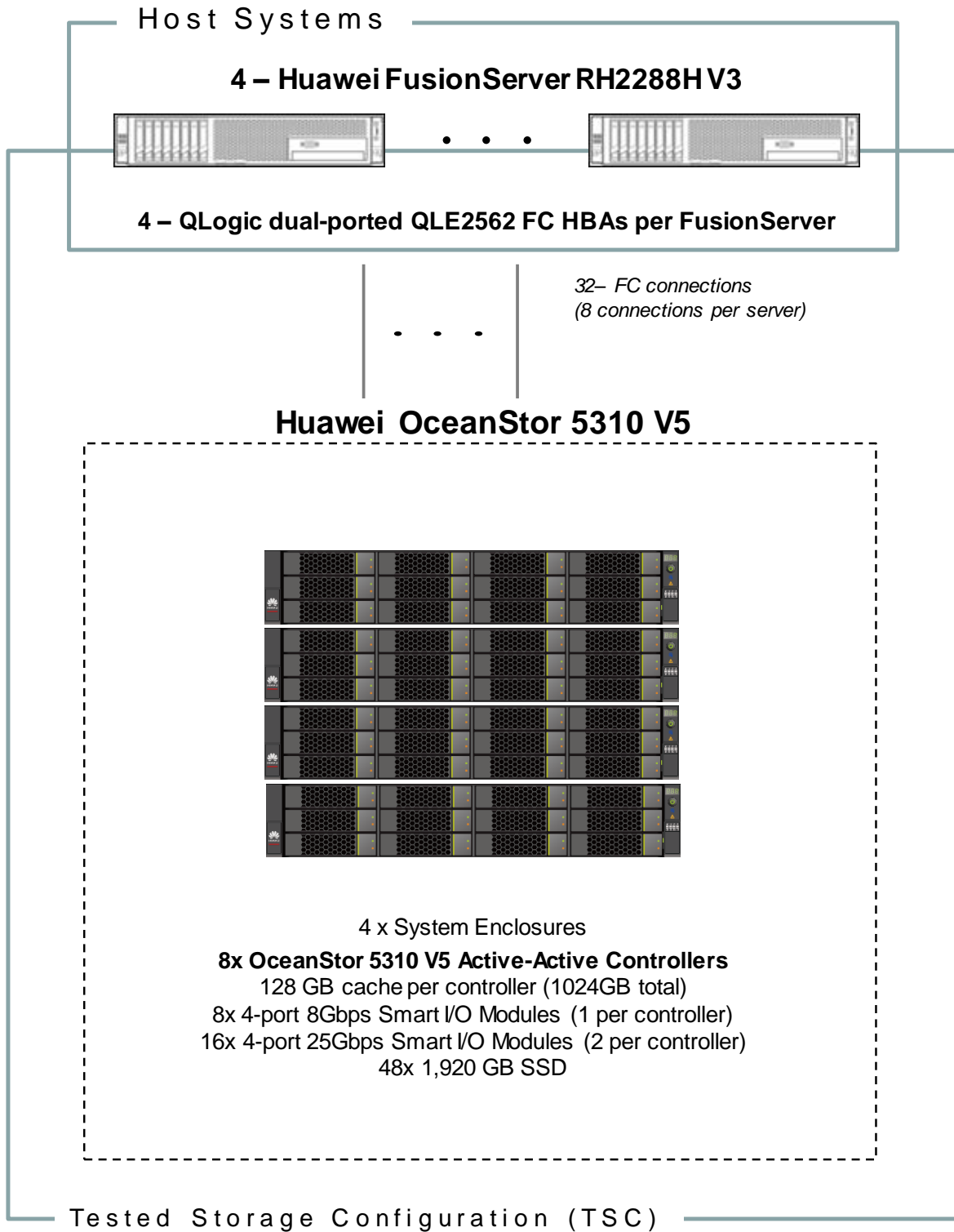
<b>SPC-1 IOPS™</b>	<b>1,600,658</b>
<b>SPC-1 Price-Performance™</b>	<b>¥3,115.89/SPC-1 KIOPS™</b>
SPC-1 IOPS™ Response Time	0.677 ms
SPC-1 Overall Response Time	0.353 ms
SPC-1 ASU Capacity	38,225 GB
SPC-1 Space Effectiveness Ratio	NA
SPC-1 ASU Price	¥130.48/GB
SPC-1 Total System Price	¥4,987,470.87
Data Protection Level	Protected 2 (RAID10 and full redundancy)
Physical Storage Capacity	92,160 GB
Pricing Currency / Target Country	CNY / China

**SPC-1 V3.8.0**

**SUBMISSION IDENTIFIER: A32013**

**SUBMITTED FOR REVIEW: MARCH 16, 2020**

### Benchmark Configuration Diagram



## Tested Storage Product Description

The new generation of mid-range hybrid flash storage, dedicated to providing the reliable and efficient data services for enterprises.

Cloud-ready operating system, flash-enabled performance, and intelligent management software, delivering top-of-the-line functionality, performance, efficiency, reliability, and ease of use.

Satisfies the data storage requirements of large-database OLTP/OLAP, cloud computing, and many other applications, making it a perfect choice for sectors such as government, finance, telecommunications, and manufacturing.

For more details, visit:

<https://e.huawei.com/cn/products/cloud-computing-dc/storage/hybrid-flash-storage/oceanstor-5X10-v5>

## Priced Storage Configuration Components

<b>16 x QLogic dual-ported QLE2562 8 Gbps FC HBAs</b>
<b>8 x OceanStor 5310 V5 Active-Active Controllers (2 per enclosure), each with:</b> 128 GB cache (1,024 GB total) 8 x 4-port 8 Gbps Smart I/O Modules (1 per controller) 16 x 4-port 25 Gbps Smart I/O Modules (2 per controller) <b>48 x 1,920 GB SSD Storage Devices (12 per enclosure)</b>
<b>4 x System/Disk Enclosures</b>

## Storage Configuration Pricing

Part No.	Description	Source	Qty	Unit Price	Ext. Price	Disc.	Disc. Price
<b>Hardware &amp; Software</b>							
5310 V5-25-256-AC	5310 V5(2U,Dual Ctrl,SAS,AC)240V HVDC,256GB Cache,8*1Gb ETH,8*10Gb ETH,4*(4*12Gb) SAS,25*2.5",include 4*2*8Gb HBA)	1	4	1,249,907.25	4,999,629.00	73.5%	1,324,901.69
SMART8GbFE	4 ports SmartIO I/O module(SFP+,8Gb FC)	1	8	61,900.00	495,200.00	73.5%	131,228.00
25GeScale	4 ports 25Gb RDMA I/O module(SFP28,Scale-out for direct connection)	1	16	63,649.00	1,018,384.00	73.5%	269,871.76
L3-S-SSD1920	1.92TB SSD SAS Disk Unit(2.5")	1	48	237,180.00	11,384,640.00	73.5%	3,016,929.60
SN2F01FCPC	Patch Cord,DLC/PC,DLC/PC,Multi-mode,3m,A1a.2,2mm,42mm DLC,OM3 bending insensitive	1	32	50.00	1,600.00	0.0%	1,600.00
SFP28-AOC-010	Active Optical Cable Assembly,SFP28 AOC,25.78125G,0.01km	1	32	2,190.00	70,080.00	0.0%	70,080.00
LIC-53X0-BS	Basic Software License (Including DeviceManager,SmartThin,SmartMulti-Tenant,SmartMigration,SmartErase,SmartMotion,SystemReporter,eService,SmartQuota,NFS,CIFS,NDMP)	1	1	67,670.00	67,670.00	73.5%	17,932.55
LIC-53X0-ULTRAPATH	OceanStor UltraPath Software License	1	1	67,670.00	67,670.00	73.5%	17,932.55
<b>Hardware &amp; Software Subtotal</b>							<b>4,850,476.15</b>
<b>Support &amp; Maintenance</b>							
02352SCG_88136S CH-242_36	5310 V5(2U,Dual Ctrl,SAS,AC)240V HVDC,256GB Cache,8*1Gb ETH,8*10Gb ETH,4*(4*12Gb) SAS,25*2.5",SPE35C0225)_Hi-Care Onsite Premier OceanStor 5310 V5 Controller Enclosure_36Month(s)	1	4	15,457.50	61,830.00	0.0%	61,830.00
02352WEQ_88136S CH-129_36	1.92TB SSD SAS Disk Unit(2.5")_Hi-Care Onsite Premier OceanStor 1.92TB SSD_36Month(s)	1	48	328.50	15,768.00	0.0%	15,768.00
88035TBJ_88134U GC-OMA_36	Basic Software License (Including DeviceManager,SmartThin,SmartMulti-Tenant,SmartMigration,SmartErase,SmartMotion,SystemReporter,eService,SmartQuota,NFS,CIFS,NDMP)_Hi-Care Application Software Upgrade Support Service OceanStor 5310 V5 Basic Software License_36Month(s)	1	1	14,211.00	14,211.00	0.0%	14,211.00
88035TDQ_88134U GC-ON2_36	OceanStor UltraPath Software License_Hi-Care Application Software Upgrade Support Service OceanStor 5310 V5 OceanStor UltraPath Software License_36Month(s)	1	1	17,256.00	17,256.00	0.0%	17,256.00
8812153243	OceanStor 5310 V5 OceanStor 5300 Series Enterprise Storage Hardware Installation Service	1	1	27,929.72	27,929.72	0.0%	27,929.72
<b>Support &amp; Maintenance Subtotal</b>							<b>136,994.72</b>
<b>SPC-1 Total System Price</b>							<b>4,987,470.87</b>
SPC-1 IOPS™							1,600,658
<b>SPC-1 Price-Performance™ (¥/SPC-1 KIOPS™)</b>							<b>3,115.89</b>
SPC-1 ASU Capacity (GB)							38,225
<b>SPC-1 ASU Price (¥/GB)</b>							<b>130.48</b>

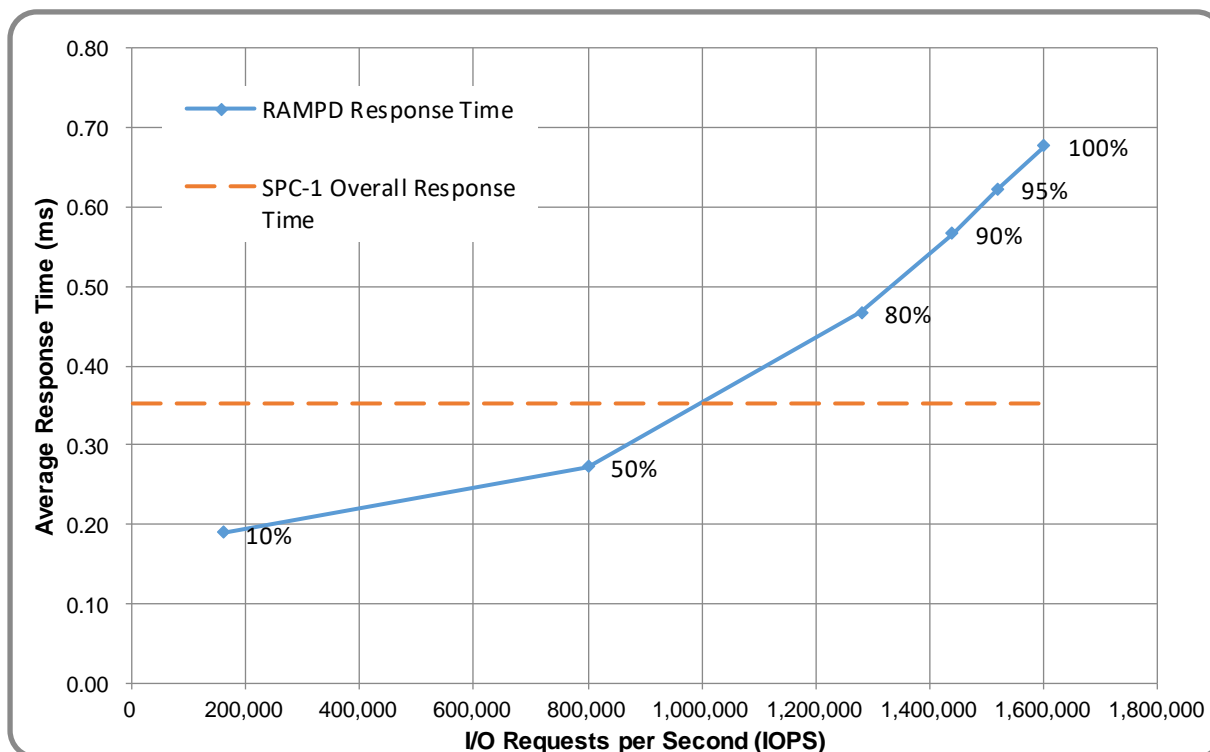
**Pricing Details:** All prices are in CNY and reflect prices generally available in China.

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

**Warranty:** Hi-Care Premier On-Site Service include: 7\*24 Technical Assistance Center Access. Access to all new software updates and Online Support. 24\*7\*4 Hours Onsite Hardware Replacement.

**Availability Date:** March 10, 2020.

### Response Time and Throughput Graph



Contact Information	
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Revision Information	
<b>SPC Benchmark 1™ Revision</b>	V3.8.0
<b>SPC-1 Workload Generator Revision</b>	v3.0.2-1-g823a
<b>Publication Revision History</b>	Initial Publication