

Huawei eKitStor Xtreme 116P				
Basic Specifications				
Model Number	HSSD-E1215TP5A9N	HSSD-E1230TP5A9N		
Form Factor	U.2			
Weight (g)	< 300 g			
NAND Flash	QLC			
Interface Protocol	PCIe 5.0 1*4, NVMe 2.0			
Capacity <sup>1</sup>	15.36 TB	30.72TB		
Performance				
128 KB (GB/s) Sequential Write Bandwidth	13.5	12		
128 KB (GB/s) Sequential Read Bandwidth	3.2	3.2		
4KB Random Read IOPS (k IOPS)	2,500	2,200		
Random Write IOPS (k IOPS) <sup>2</sup>	160k	40k		
Average Read Latency (μs)	105	107		
Average Write Latency (μs)	8	23		
Reliability				
Endurance <sup>3</sup>	0.55 DWPD, 5years			
Reliability	MTBF: 2.5 million hours; AFR: ≤ 0.35%; UBER: 10 <sup>-17</sup>			
Temperature	Non-operational: -40°C to 85°C (-40°F to 185°F); operational: 0°C to 83°C (32°F to 181.4°F)			
TRIM	Supported			
Power Failure Protection	Supported			
Media Failure Protection	Supported			
Power Consumption				
Average Power Consumption	5 W (idle), 25 W (Active)			
Certification				
China: RoHS; Europe: WEEE, RoHS, REACH, and CE; North America: NRTL; UK: UKCA; Japan: VCCI; Canada: IC; Australia: RCM; IEEE Member Countries/Regions: CB				

Notes: Performance results are based on internal testing and use. Results and performance may vary according to configurations and systems, including device capacity, operating system versions, and test tools.

1 Capacity definition: 1 TB = 1,000 GB, 1 GB = 1,000,000,000 bytes.

2 Random write IOPS is based on a fixed I/O block size: 4 KB (for 15.36 TB) / 16 KB (for 30.72/61.44 TB).

3 DWPD represents drive writes per day tested according to the JEDEC219 standards. An SSD can be used for five years if the DWPD stays below the specified value; otherwise, the SSD service life will be affected.



Scale-out storage  
I/O performance improvement



Content caching  
Access speed improvement



CAD/CAM  
Data read/write acceleration



Database  
TPS performance improvement



Big data  
Data Sorting acceleration



HCI  
All-SSD acceleration



HUAWEI eKit App



HUAWEI eKit Store

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**HUAWEI TECHNOLOGIES CO., LTD.**  
Bantian Longgang District  
Shenzhen 518129, P.R. China  
Tel: +86-755-28780808

**Beyond the Xtreme for Data Acceleration**



**HUAWEI eKit**

# Huawei eKitStor Xtreme 116P

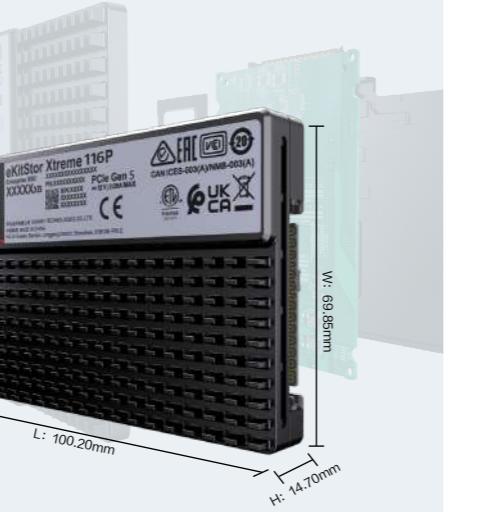
## High-Capacity Data Center SSD





## Huawei eKitStor Xtreme 116P

eKitStor Xtreme 116P is a Data Center NVMe PCIe SSD. It features high performance, fast response, and high reliability, greatly improving storage I/O performance. The SSD product can seamlessly fit into mainstream operating systems (OSs) and virtualization systems to enhance performance for database, virtualization, and HPC applications, helping reduce system TCO. With enhanced device management, the eKitStor Xtreme 116P supports OS-native drivers. It also supports comprehensive hot swap for easy maintenance.



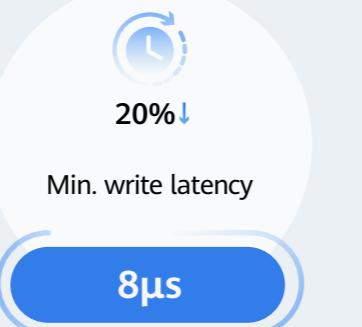
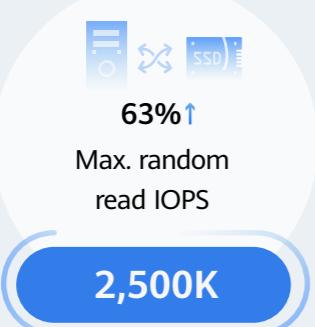
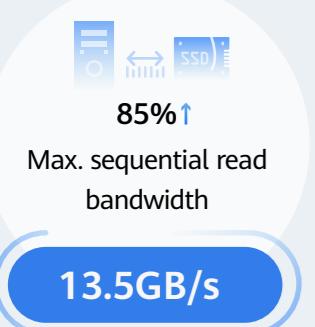
### Single-disk capacity

Different specifications of a single port

15.36TB

30.72TB

## Superb Performance



Leveraging the standard NVMe protocol and PCIe 5.0 high-speed interface, combined with a hardware-software integrated technical framework, eKitStor Xtreme 116P provides higher bandwidth and lower latency. It effortlessly handles efficient reads and writes of mass files, concurrent multi-task processing in complex environments, and critical application scenarios with heavy-load, high-performance demands. This product ensures a smooth and efficient user experience.

### PCIe 5.0

Efficient four-channel transmission

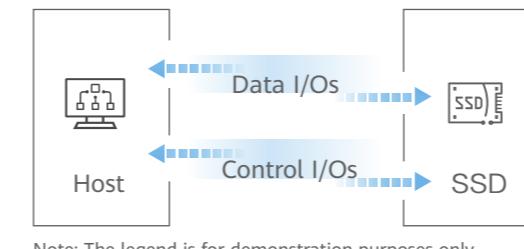
### NVMe 2.0

Standard protocol

## Optimized SSD performance with hardware and software combination

### Microcode-based control channel

The data and control I/O paths are decoupled, which reduces loads on each channel and delivers 10% higher energy efficiency under full load compared to similar products.



## Ultimate Reliability

**≤0.35%**  
AFR  
Annual Failure Rate

**10<sup>-17</sup>**  
UBER  
Uncorrectable Bit Error Rate

**2.5M hours**  
MTBF  
Mean Time Between Failures

With 20 years of expertise in data storage, Huawei has developed advanced technologies that deliver high stability, durability, and reliable data protection for complex environments and demanding workloads. These advanced technologies include the enhanced Low-Density Parity Check (LDPC) algorithm, intelligent wear leveling, intelligent multi-streaming and reclamation, and end-to-end data protection.

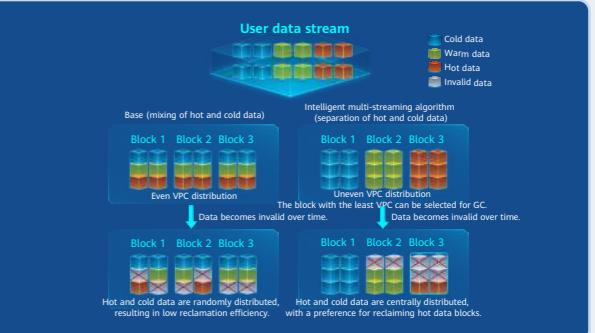


### Intelligent wear leveling

This technique identifies block health status and aligns the block Program/Erase (P/E) policy to improve the overall P/E cycles by 10%.

## Intelligent multi-streaming and reclamation

Intelligent hot and cold data identification and multi-dimensional judgment for reclamation help reduce write amplification by 20%+.



## Four-layer dataprotection mechanism

The four-layer data protection mechanism, including DIF, intra-SSD CRC, ECC encoding and decoding, and dynamic RAID, ensures end-to-end data resilience.

## Intelligent Management

Huawei DiskBooster is an AI-powered O&M tool that reliably predicts failures and lifespan of disks. By detecting slow disks, it reminds IT personnel to replace or repair disks or back up data to improve service performance. This reduces the impact of faulty or sub-healthy disks on services, ensuring data resilience and service continuity.

### Pre-failure detection

By analyzing over 20 key indicators, including wear degree, UNC threshold-crossing, and die failure, the impact of disk faults on services is halved.

### Disk life prediction

Over 10 disk lifespan indicators and advanced lifespan predication algorithms ensure disk lifespan is accurate to within five days (down from over a month).

### Slow disk detection

Over 10 slow disk criteria are collected and analyzed by decision and processing algorithms, delivering a detection accuracy of 99%.

### Disk logical failure repair

The multi-level incremental repair policy reduces the fault return rate by 50%.

