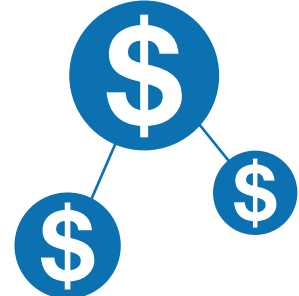


Seagate 12G Hybrid 4005

Better Value

Now, businesses can have enterprise level data storage performance at a lower cost. There is an ongoing struggle between faster access to information and lowering the cost of IT infrastructure. Businesses depend on data and slow response times can cripple a company, impacting revenue and operations. At the same time, companies are constantly asked to reduce cost and save money while maintaining operational excellence.

With Seagate's real-time tiering technology, higher IOPS can be achieved with a small number of SSDs, lowering the system cost relative to AFA solutions. Data is moved to the SSD tier when it is accessed frequently and moved down to slower disk tiers when not in use. This approach balances SSD speed with HDD cost, delivering real-time business benefits while keeping IT cost down.



Better Architecture



If your customers are looking for out of the box functionality, and easy configuration, Seagate is your solution. Different areas of a business need different IT solutions. Many times components are delivered from multiple vendors, which means more work for procurement to manage many suppliers, for sales and support staff to understand a wide variety of products and for operations to keep track of all the unique offerings.

The Seagate storage systems portfolio is built across a common architecture, allowing the same chassis to be used across many different business units with differing needs. With Seagate, solutions can be tailored by division to deliver the most important features for that business function, while keeping a consistent platform across the company to ease the burden on sales, operations, supply chain and support.

Better Reliability

Quality and reliability are key to a company's IT environment. With many businesses operating 24x7, it is important to have systems that are accessible around the clock. Downtime can have significant impact on revenue and ongoing operations. Even a slight outage can have devastating consequences.

Seagate combines devices, including HDDs and SSDs, with Seagate storage systems to create an integrated solution that is built to work better together. When needed, support is easier and more efficient. In addition, the storage platform is designed for and validated at 99.999% availability, meaning your IT environment will just work so you can focus on other business functions instead.



Seagate Services: *Maximize Value by Bringing Seagate's Expertise to You*



Professional Services

TIME TO VALUE

Strategic consulting, solution design, implementation and migration



Education Services

DEVELOP "IN HOUSE" EXPERTISE

Develop your team's skills and expertise to optimize your investment



Support Services

EXPERT HELP

Support from experts, with SLAs that meet critical business needs

Seagate 12G Hybrid 4005

Specifications	
4005 Performance	250,000 IOPS 7GB/s read throughput 5.5GB/s write throughput
Expansion BODs	J1212 (2U12) J1224 (2U24) Maximum of 9 EBODs
Advanced Features	Real-time Tiering Thin Provisioning SSD Read Cache Snapshots Replication
High-Availability Features	Redundant Hot-Swap Controllers Redundant Hot-Swap Disks, Fans, Power Dual Power Cords Hot Standby Spare Automatic Failover Multi-Path Support
RAID	Levels Supported: 0, 1, 3, 5, 6, 10, and 50
Models – 4825 Fibre Channel or iSCSI, 4525 SAS	
With twenty-four 2.5" drives	Up to 24 drives per chassis 48TB max capacity per chassis
Physical	Height: 3.46 in / 87.9 mm Width: 17.44 in / 443 mm Width w/ ear mounts: 19.01 in / 483 mm Chassis weight: 38 lb / 17 kg Chassis weight with drives: 66 lb / 30 kg
Models – 4835 Fibre Channel or iSCSI, 4535 SAS	
With twelve 3.5" drives	Up to 12 drives per chassis 120TB max capacity per chassis
Physical	Height: 3.46 in / 87.9 mm Width: 17.44 in / 443 mm Width w/ ear mounts: 19.01 in / 483 mm Chassis weight: 38 lb / 17 kg Chassis weight with drives: 71 lb / 32 kg
Hosts	
External Ports	4 per controller / 8 maximum
Fibre Channel Models	Host Speed: 16Gb, 8Gb Fibre Channel Interface Type: SFP+
iSCSI Models	Host Speed: 10Gb, 1Gb iSCSI Interface Type: SFP+
SAS Models	Host Speed: 12Gb, 6Gb SAS Interface Type: HD Mini-SAS
Drive Support	
4525, 4825	SAS, Nearline SAS, SAS SSD
4535, 4835	Nearline SAS
System Configuration	
System Memory	8GB per controller
Volumes per System	1024
Mirrored Cache	Yes
Supercapacitor Cache Backup	Yes
Cache Backup to Flash	Yes – Non-volatile
Management	
Interface Types	10/100/1000 Ethernet, Mini USB
Protocols Supported	SNMP, SSL, SSH, SMTP, HTTP(S)
Management Consoles	Web GUI, CLI
Management Software	RealStor Storage Management Console
	Remote Diagnostics Non-disruptive Updates Volume Expansion
Power Requirements – AC Input	
Input Power Requirements	100-200VAC 50/60Hz
Max Input Power	346W maximum continuous
Heat Dissipation	1181 BTUs/hour Gold rated power supplies
Temperature and Humidity Ranges	
Operating Temperature	RBOD: 5°C to 35°C (41°F to 95°F) EBOD: 5°C to 40°C (41°F to 104°F)
Shipping Temperature	-40°C to +70°C (-40°F to +158°F)
Operating Humidity	20% to 80% non-condensing
Non-Operating Humidity	5% to 100% non-precipitating
Declared Acoustic Noise Levels	
Sound Power	<L _{WA} d 6.6 Bels (re 1 pW) @ 23oC
Shock and Vibration	
Shock, Operational	5.0 g, 10 ms, ½ sine pulses, Y-axis
Shock, Non-Operational	30.0 g, 10 ms, ½ sine pulses
Vibration, Operational	0.21 G _{rms} 5 Hz to 500 Hz random
Vibration, Non-Operational	1.04 G _{rms} 2 Hz to 200 Hz random
Safety (Country) - latest edition/amendments	
UL 60950-1 (United States) CAN/CSA-C22.2 No.60950-1-07 (Canada) EN 60950-1 (European Union) IEC 60950-1 (International) CCC (China PRC – CCC Power Supplies) BIS (India – BIS Power Supplies)	
Electromagnetic Compatibility	
Emissions	FCC CFR 47 Part 15 Subpart B Class A (United States) ICES/NMB-003 Class A (Canada) EN 55022/EN 55032:2012 Class A (EU) AS/NZS CISPR 22/CISPR 32 Class A (Australia/New Zealand) VCCI Class A (Japan) KN 22/KN 32 Class A (S. Korea) CNS 13438 Class A (Taiwan)
Harmonics	EN61000-3-2 (EU)
Flicker	EN 61000-3-3 (EU)
Immunity	EN 55024 (EU) KN 24/KN 35 (S. Korea)
Environmental Standards (latest amendments)	
The RoHS Directive (2011/65/EU) The WEEE Directive (2012/19/EU) The REACH Directive (EC/1907/2006) The Batteries Directive (2006/66/EC)	
Standard Country Approvals (Mark):	
Australia/New Zealand (RCM), Canada (cUL/ICES/NMB-003 Class A), China (CCC – PSU only), European Union (CE), Japan (VCCI), South Korea (MSIP), Taiwan (BSMI), United States (FCC/UL)	
Disk enclosures 80 PLUS® Gold Certified power efficiency with adaptive cooling, or option for 90 PLUS® Platinum Certified power efficiency with adaptive cooling technology. Seagate is registered through BSI to the international standard for environmental management systems ISO 14001:2004 and holds certificates for each of its three manufacturing locations at Havant UK, Guadalajara Mexico and Seremban Malaysia.	
(1) Product availability and specifications subject to change. Consult your authorized Seagate ClusterStor reseller partner or Seagate ClusterStor Sales representative for details. (2) Rack configuration attributes above provide a representative example.	