

A
Procuradoria-Geral de Justiça do Estado de Minas Gerais
Processo SIAD: Nº 254/2023
Unidade: 1091012
Processo SEI: Nº 19.16.1937.0064247/2023-12
Sessão: 28/11/2023 as 10:00 (horário de Brasília)

ANEXO II PROPOSTA (PLANILHA DE PREÇOS)

Objeto: Aquisição de servidores de arquivos tipo NAS (Network Attached Storage) - Sistema de discos para o armazenamento de dados em rede para uso nos GAECOS, com serviços de instalação, montagem e configuração dos servidores em comarcas de Minas Gerais, acompanhados da aquisição de discos rígidos avulsos.

1) IDENTIFICAÇÃO DO LICITANTE:

Razão Social: Primetech Informática LTDA	CNPJ: 03.812.745/0002-24
Endereço: Rua Raulino Gonçalves 169 Sala 03 Enseada Do Sua, Vitória-ES Cep: 29.050-405	
Telefone: (21) 3171-4898 E-mail: licitacao01@primetech.emp.br	
Banco: Banco do Brasil Agência: 3010-4 CC: 4133-5	

DAS EXIGÊNCIAS DA PROPOSTA:

PRAZO DE VALIDADE DA PROPOSTA: 60 (sessenta) DIAS, contados da data de sua apresentação.

PRAZO DE ENTREGA/EXECUÇÃO: 30 (trinta) dias corridos contados do recebimento, pela Contratada, da AF (Autorização de Fornecimento) para viabilizar e montar os equipamentos NAS.

PRAZO PARA VIABILIZAR E MONTAR OS EQUIPAMENTOS NAS: 30 (trinta) DIAS, contados do recebimento, pela CONTRATADA, da Autorização de Fornecimento.

PRAZO PARA REMESSA, INSTALAÇÃO E TREINAMENTO NAS UNIDADES REFERENCIADAS NO ITEM 14.1 DO ANEXO VII DO EDITAL (TERMO DE REFERÊNCIA): 20 (vinte) DIAS, contados da data de entrega (viabilização dos NAS), nos endereços informados no item no item 14.1 do ANEXO VII DO EDITAL (TERMO DE REFERÊNCIA), devendo ocorrer em horário ajustado entre a CONTRATADA e o fiscal do contrato.

PRAZO DE SUBSTITUIÇÃO DO OBJETO (PEÇAS E EQUIPAMENTOS) COM DEFEITO: 5 (cinco) DIAS, durante o prazo de garantia, sem ônus para a CONTRATANTE, contados da solicitação da contratante.

PRAZO DE GARANTIA (DO FABRICANTE): Para o item 01 , garantia de 60 (sessenta) meses, com atendimento on-site, incluindo peças, discos e serviços a serem prestados por ele próprio ou empresa credenciada e garantia de 12 (doze) meses on-site com atendimento em balcão para o item 03, contados a partir da data da emissão da respectiva nota fiscal (ou documento equivalente);

PRESTAÇÃO DA GARANTIA: A garantia do equipamento ofertado será prestada pelo fabricante e em total acordo com o solicitado no edital e demais anexos.

- A garantia inclui todos os seus acessórios e será oferecida pelo fabricante.
- Os custos com transporte para fins de execução de serviços relativos à garantia, inclusive quando realizados fora da RMBH, serão arcados exclusivamente pela contratada;
- A garantia será prestada pelo fabricante, preferencialmente situada na Região Metropolitana de Belo Horizonte (RMBH – LC Nº 63/02), sendo indicada(s):

Empresa (razão social): Primetech Informática LTDA

CNPJ: 03.812.745/0002-24

Endereço: Rua Raulino Gonçalves 169 Sala 03 Enseada Do Sua, Vitória-ES Cep: 29.050-405

Telefone: (21) 3171-4898

E-mail: licitacao01@primetech.emp.br

DECLARAÇÃO DE REGULARIDADE: apresentada, juntamente com esta Proposta, a Declaração de Regularidade, conforme modelo constante do Anexo IV do Edital;

ESTÁ SENDO APRESENTADO, JUNTAMENTE COM A PROPOSTA:

PARA OS ITENS 1 E 3 DO LOTE1 (ÚNICO):

- O fornecedor deverá apresentar juntamente com a proposta: nome, marca e modelo do produto ofertado, além do catálogo, prospecto ou folder, a fim de verificar a compatibilidade do objeto com as especificações técnicas exigidas neste Termo de Referência.
- O catálogo deve mostrar expressamente as características exigidas no Edital ou demonstrar sua funcionalidade via amostra.

LOTE 1 – SERVIDORES DE ARQUIVOS NAS E SERVIÇOS DE INSTALAÇÃO, MONTAGEM E TREINAMENTO

Item	QTD	UND.	Especificação do item	Preço		Preço deduzido ICMS	
				Unit.	Total	Unit.	Total
01	20	Und.	Sistema de Armazenamento (Storage) Marca: Asustor Modelo: Asustor AS6510T Intel Garantia: 60 (sessenta) meses, com atendimento on site, incluindo peças, discos e serviços a serem prestados por ele próprio ou empresa credenciada	R\$ 82.400,00	R\$ 1.648.000,00	R\$ 82.400,00	R\$ 1.648.000,00
02	20	Und.	Serviço de Instalação, Montagem e Configuração de	R\$ 7.000,00	R\$ 140.000,00	R\$ 7.000,00	R\$ 140.000,00

			Equipamentos de Informática.				
03	20	Und.	Disco Rígido Interno Marca: Seagate IronWolf Modelo: ST18000VN000 Garantia: 12 (doze) meses, com atendimento balcão.	R\$ 6.120,00	R\$ 91.800,00	R\$ 6.120,00	R\$ 91.800,00
Preço total do lote R\$: 1.879.800,00 (Um milhão oitocentos e setenta e nove mil e oitocentos reais)				Preço total do lote com dedução do ICMS R\$: 1.879.800,00 (Um milhão oitocentos e setenta e nove mil e oitocentos reais).			

COMPROVAÇÕES TÉCNICAS (IDENTIFICAÇÃO & CATÁLOGOS)

Lote 1		
Item 1 - NAS - NETWORK ATTACHED STORE		
Part No.	Descrição	Qtd
AS6510T	Storage NAS Asustor AS6510T Intel Quad-Core C3538 2,1GHZ 8GB DDR4 Expansível 10 Baías Hot-Swap	1
ST18000VN000	Seagate IronWolf ST18000VN000 18TB 3.5 inch SATA3 NAS Hard Drive (8x Discos em RAID 5 + 1 spare)	9
ZP1920NM30011	Seagate IronWolf 510 1.92TB NAS SSD Internal Solid State Drive – M.2 PCIe	2

Catálogos:

[https://www.asustor.com/materials/datasheet/Datasheet_LOCKERSTOR%2010%20\(AS6510T\)_ENG.pdf](https://www.asustor.com/materials/datasheet/Datasheet_LOCKERSTOR%2010%20(AS6510T)_ENG.pdf)

https://www.asustor.com/product/spec?p_id=64

https://www.seagate.com/files/www-content/datasheets/pdfs/ironwolf-18tb-DS1904-20-2111US-en_US.pdf

https://www.seagate.com/www-content/datasheets/pdfs/ironwolf-510-ssd-DS2032-1-2002US-en_US.pdf

NAS - NETWORK ATTACHED STORE

- Quantidade: 20 (vinte) unidades
- O equipamento será novo, de primeiro uso, e estará em linha de fabricação na data de abertura das propostas;
- O Storage NAS será padrão Desktop (torre);
- O Sistema de armazenamento será do tipo NAS (Network Attached Storage), possuir no mínimo quatro (4) conexões padrão Ethernet de 1Gbps, compatíveis com LACP (Link Aggregation Control Protocol);

- Conterá no mínimo 6 baias, todas deverão ser “hot-plug” ou “hot-swap” e suportar na mesma baia instalação de discos de 3,5 polegadas e 2,5 polegadas. Não é obrigatório que todas as baias estejam preenchidas;
- A memória do Storage possuirá pelo menos 8GB DDR4;
- O processador será de 64 bits e ter no mínimo quatro núcleos;
- Além da memória interna, o Storage possuirá, pelo menos 2 (dois) módulos com 1,92TB cada, em SSD, NVMe M.2 ou via SSD SATA, configurados para aceleração de cache, com capacidade bruta de 3.84 TB, configurado em RAID 1, a fim de otimizar o desempenho do Sistema nativo ou através de Adaptador PCIe;
- Os discos serão de uso intensivo 24x7 compatíveis com o NAS ofertado e já instalados e configurados em RAID 5;
- Capacidade bruta total de armazenamento de 120 TB, no mínimo;
- Suportará os níveis de RAID 1 e 5 e vir configurado com tolerância a falha de 1 (um) disco;
- O Storage possuirá suporte para Microsoft Active Directory (AD) e controlador de domínio;
- Possuirá pelo menos 2 (duas) portas de conexão USB versão USB 3.0 ou superior, onde deve ser possível efetuar cópia de pastas diretamente para um dispositivo de armazenamento de dados externo USB 2.0/3.0;
- Suportará os seguintes sistemas operacionais: Microsoft Windows 10, Windows Server e Linux.

ITEM 2

SERVIÇO DE INSTALAÇÃO, MONTAGEM E CONFIGURAÇÃO DE EQUIPAMENTOS DE INFORMÁTICA

- O CONTRATADO efetuará a implantação física, on-site (PRESENCIAL), após agendamento com o gestor do contrato, nas dependências do GAECO listadas no item 14.1 deste Anexo.
- O CONTRATADO efetuará a configuração lógica do equipamento, incluindo criação dos volumes, configuração do Cache, atualização do Firmware, endereçamento IP e todos os alarmes de emails.
- O CONTRATADO efetuará uma passagem de conhecimento (mini treinamento) sobre a configuração do NAS, troca de discos, boas práticas e seu completo funcionamento e configuração, para cada uma das unidades implantadas, de maneira PRESENCIAL por pessoa técnica treinada e com experiência no equipamento ofertado. O mini treinamento poderá ser feito no ato de instalação do equipamento nas unidades GAECO.
- O CONTRATADO se obriga a ofertar o Serviço de Suporte Técnico por 5 anos (60 meses) por telefone, email ou acesso remoto, com abertura de chamado técnico por telefone ou através de portal na internet sem geração de nenhum tipo de custo para o CONTRATANTE da solução, diretamente com o Fabricante ou Distribuidor do equipamento no Brasil. O suporte engloba tira dúvidas, atualização de firmware (BIOS), ajuste em configuração, Raid, atualização de sistema gerenciador e troubleshooting da plataforma. O CONTRATADO deverá colocar na proposta o endereço eletrônico ou o telefone para abertura de chamados técnicos.
- Cada unidade GAECO REGIONAL possuirá um equipamento NAS, totalizando 13 equipamentos. O GAECO SEDE (Belo Horizonte), ficará com 3 (três) unidades do NAS para uso imediato mais 3 (três)

unidades para uso futuro, totalizando 6 unidades. A unidade restante (1 equipamento), também de uso futuro, deverá ser enviado para a Procuradoria-Geral de Justiça: Av. Álvares Cabral, 1740 - 4º andar, Diretoria de Suporte e Manutenção - Santo Agostinho, Belo Horizonte. CEP: 30170916 Telefone: (31) 3330-8119, responsável: Flávio Henrique Gomes.

Item 3 - DISCO RÍGIDO AVULSO		
Part No.	Descrição	Qtd
ST18000VN000	Seagate IronWolf ST18000VN000 18TB 3.5 inch SATA3 NAS Hard Drive	1

Catálogo: https://www.seagate.com/files/www-content/datasheets/pdfs/ironwolf-18tb-DS1904-20-2111US-en_US.pdf

ITEM 3**DISCO RÍGIDO AVULSO**

- Interface SATA III (6 Gb/s) de uso intensivo 24x7;
- Capacidade: possuirá a mesma capacidade e compatibilidade com o NAS ofertado.
- Os discos avulsos serão iguais e totalmente compatíveis com o equipamento NAS ofertado, considerando velocidade, desempenho, cache e tamanho físico e lógico.
- Os discos deste item serão de uso futuro, após findado a garantia de 5 anos do item 1, e não podem compor estoque do fornecedor em caso de falhas dentro do período de garantia.
- O objeto destas contratações não se enquadra como sendo de bens de luxo, conforme artigo 20 da Lei nº 14.133, de 2021.

COMPOSIÇÃO CUSTOS	
	Percentual
CUSTO DE PRODUÇÃO OU CUSTO DE COMPRA	70%
CUSTOS ADMINISTRATIVOS/OPERACIONAIS	5%
CUSTOS TRIBUTÁRIOS	15%
LUCRO	10%

- **CONDIÇÕES DE FORNECIMENTO:**
- **Prazo de validade da proposta:** 60 (sessenta) DIAS, contados da data de sua apresentação
- **Prazo de Entrega:** 30 (trinta) dias corridos contados do recebimento, pela Contratada, da AF (Autorização de Fornecimento) para viabilizar e montar os equipamentos NAS.
- **Local de Entrega:** Os equipamentos serão fornecidos em total acordo com o solicitado no edital e demais anexos bem como o informado no subitem 14.1 do Termo de Referência
- **Prazo de Garantia:** 60 (sessenta) meses para o item 01 e 12 (doze) meses para o item 03
- **Prazo de pagamento:** EM total acordo com o solicitado no edital e todos os seus anexos.
- Declaramos que a proposta se encontra em conformidade com as informações previstas no edital e seus anexos.
- Declaramos, sob as sanções administrativas cabíveis, inclusive as criminais e sob as penas da lei, que toda documentação anexada ao sistema é autêntica.

- Declaramos que os bens ofertados **atendem aos requisitos técnicos especificados no TR;**
- Declaramos que os **produtos ofertados são novos** e sem uso e se encontram em linha de produção, e que os preços oferecidos serão fixos e irrevogáveis.
- Declaramos que **estamos de pleno acordo com todas as condições estabelecidas no Edital e seus Anexos**, bem como aceitamos todas as obrigações e responsabilidades especificadas no Termo de Referência.
- Declaramos que nos preços cotados **estão incluídas todas as despesas que, direta ou indiretamente**, fazem parte do presente objeto, tais como gastos da empresa com suporte técnico e administrativo, impostos, seguros, taxas, ou quaisquer outros que possam incidir sobre gastos da empresa, sem quaisquer acréscimos em virtude de expectativa inflacionária e deduzidos os descontos eventualmente concedidos.
- Declaramos a não ocorrência do registro de oportunidade, de modo a garantir o princípio constitucional da isonomia e a seleção da proposta mais vantajosa para a Administração Pública, conforme disposto na Lei nº 8.666, de 1993 e no item 1.7 do Anexo da IN SGD/ME 01/2019
- Caso nos seja homologado o objeto da licitação, comprometemos a entregar o mesmo no prazo determinado e para esse fim fornecemos os seguintes dados:

Razão social: PRIMETECH INFORMÁTICA LTDA

CNPJ: 03.812.745/0002-24

Inscrição Estadual: 083.583.72-6

Inscrição Municipal: 1264291

Endereço: Rua Raulino Gonçalves 169 Sala 03 Enseada Do Sua / Cep: 29.050-405

Telefone: (21) 3170-4898

E-mail: licitacao01@primetech.emp.br

Cidade: Vitória UF: ES

Dados Bancários:

Banco: Banco do Brasil Agência:

3010-4

CC: 4133-5

Representante: Cesar Luciano Cardoso Silva

CPF: 878.841.275-04

Cargo ou Função: Sócio Administrador

Carteira de Identidade:

0512530386

Expedido por: SSP/BA

Nacionalidade: brasileiro

Estado Civil: solteiro

Endereço: Travessa Cunha Galvão ,205 Bl 01/109 – Freguesia – Jacarepaguá, Rio De Janeiro /RJ

Telefone: (21) 3170-4898

E-mail para contato e envio documentação: licitacao01@primetech.emp.br

Vitoria/ES 28/11/2023



Cesar Luciano Cardoso Silva

PRIMETECH INFORMÁTICA EIRELI

CNPJ: 03.812.745/0002-24



LOCKERSTOR 10 (AS6510T)

Hardware & Packaging



[Product Datasheet \(https://www.asustor.com/materials/datasheet/Datasheet_LOCKERSTOR 10 \(AS6510T\)_ENG.pdf\)](https://www.asustor.com/materials/datasheet/Datasheet_LOCKERSTOR 10 (AS6510T)_ENG.pdf)

Hardware Specifications

Software & Features

Featured Apps

Hardware Specifications

CPU

CPU Model	Intel ATOM C3538
CPU Architecture	x64 64-bit
CPU Frequency	Quad-Core 2.1GHz

Memory

Memory	8GB SO-DIMM DDR4 Compatibility (https://www.asustor.com/service/memory?id=memory&lan=en)
Memory Module Pre-installed	8GB (1x 8GB)
Total Memory Slots	2
Memory Expandable up to	64GB (2x 32GB) Installation Guide (https://s3.amazonaws.com/download.asustor.com/download/docs/Memory_Installation/AS65_Series_Memory_Installation_Guide_ENG.pdf?t=1701094368) <ul style="list-style-type: none">Support mixed capacity

We use cookies to help us improve our webpage. Please read our [Cookie Policy](#) (/privacy).

OK

Hardware Specifications

Storage

Drive Bays	10
M.2 Drive Slots	2 Installation Guide (https://s3.amazonaws.com/download.asustor.com/download/docs/Memory_Installation/AS65_Series_M.2_SSD_Drive_Installation_Guide_ENG.pdf?t=1701094368)
Compatible Drive Type Compatibility (https://www.asustor.com/service/compatibility?lan=en)	<ul style="list-style-type: none">▪ 3.5" SATA HDD▪ 2.5" SATA HDD▪ 2.5" SATA SSD▪ M.2 2280 NVMe▪ M.2 2280 SATA 3▪ M.2 2260 SATA 3▪ M.2 2242 SATA 3
Maximum Drive Bays with Expansion Unit (https://www.asustor.com/product/AS6004U)	18
Supports Hot Swappable Drives ⓘ	✓

External Ports

Expansion	2x USB 3.2 Gen 1
Network	2x 10 Gigabit Ethernet(10G/1G); 2x 2.5 Gigabit Ethernet (2.5G/1G/100M)
Multimedia Output	N/A

Others

System Fan	2x 120mm
LCD Panel	✓
Power Supply Unit / Adapter	250W x1
Input Power Voltage	100V to 240V AC
Certification	FCC, CE, VCCI, BSMI, C-TICK
Warranty	3 Years

Operation

Power Consumption	76.8W (Operation); 41.1W (Disk Hibernation); ⓘ
Noise Level	22dB (HDD idle)

We use cookies to help us improve our webpage. Please read our [Cookie Policy \(/privacy\)](#).

Noise Level

OK

Hardware Specifications

Operation Temperature	0°C~40°C (32°F~104°F)
-----------------------	-----------------------

Humidity	5% to 95% RH
----------	--------------

Size and Weight

Size	215.5(H) x 293(W) x 230(D) mm
------	-------------------------------

Weight	6.4 (kg) / 14.1 (lb) Package Contents (package_contents?p_id=64)
--------	--

Downloads (<https://www.asustor.com/en/service/downloads>)
 NAS Selector (https://www.asustor.com/en/service/nas_selector)
 NVR Selector (https://www.asustor.com/en/service/nvr_selector)
 Compatibility (<https://www.asustor.com/en/service/compatibility>)
 RAID Calculator (https://www.asustor.com/en/service/RAID_calculator)
 Online Support Form (<https://support.asustor.com/>)
 Getting Started (http://www.asustor.com/getting_start/landing?lan=en)
 FAQ (<http://www.asustor.com/knowledge>)

Live Demo (https://www.asustor.com/en/live_demo)
 ASUSTOR College (<https://www.asustor.com/en/online/College>)
 Community (<https://www.asustor.com/en/online/community>)
 From App Central (https://www.asustor.com/en/app_central)
 ASUSTOR Developer Corner (<https://developer.asustor.com/>)

About ASUSTOR (https://www.asustor.com/en/about/about_asustor)
 News (<https://www.asustor.com/en/news/sNews?year=2023>)
 Contact Us (https://www.asustor.com/en/about/contact_us)
 Press Release (https://www.asustor.com/en/news/news_list?year=2023)
 Media Review (<https://www.asustor.com/en/news/review?year=2023>)
 Newsletter (<https://www.asustor.com/en/news/newsletter?year=2023>)
 Success Stories (https://www.asustor.com/en/news/success_story/)

Job Opportunities (<https://www.asustor.com/en/about/hiring>)

Accessories Store (<https://shop.asustor.com/>)

Where to buy (https://www.asustor.com/en/service/where_to_buy)

ASUS (<https://www.asus.com>)

Partners (<https://www.asustor.com/en/partners>)

(<https://www.asustor.com/en/support/ars>)

(<https://www.asustor.com/en/support/bot>)

(<https://www.youtube.com/watch?v=ASU0R1nGAFI>)

Copyright © 2023 ASUSTOR Inc. Terms of Use (https://www.asustor.com/terms_of_use) | Privacy Policy (<https://www.asustor.com/privacy>)

OK



3.5 HDD DATA SHEET

Tough. Ready. Scalable Purpose-built for Connected-Home, SOHO, & Small-to-Medium Business NAS Environments



IronWolf™ is designed for consumer and commercial NAS.
Delivering Tough, Ready and Scalable 24x7 performance in multi-bay, networked environments.



Best-Fit Applications

- Consumer and Commercial NAS
- Desktops and Workstations
- Multimedia Servers



Key Advantages

Optimized for NAS with AgileArray™ enables Dual-Plane Balancing and Time-Limited Error Recovery to deliver best-in-class RAID performance in multi-bay systems.

Always On, Always Accessible IronWolf drives are designed for 24x7 usage, allowing users to access their data any time, anywhere.

All-CMR Portfolio All IronWolf drives utilize Conventional Magnetic Recording (CMR) technology for consistent, best-in-class NAS performance.

Up to 18TB Broad range of capacity options to deliver scalable and cost-efficient storage solutions.

Built Tough IronWolf drives are rated for 180TB/year workload, allowing consumer and commercial NAS users to seamlessly store and work with large amounts of networked data.

Superior Reliability and Dependability IronWolf drives are rated for 1M hours MTBF and include a 3-year limited warranty for hassle-free data storage and best-in-class total cost of ownership (TCO)

Rotational Vibration (RV) sensors¹. Built-in RV sensors for vibration tolerance and consistent performance in multi-bay systems.

IronWolf Health Management (IHM)² Actively protect your NAS data with Prevention, Intervention, and Recovery recommendations to ensure peak system health.

Peace of mind with Data Recovery³ IronWolf drives include three years of complimentary Rescue Data Recovery Services - in-house secure facilities, with an industry-leading recovery rate of 95% - so you do not have to incur high recovery costs in the event of accidental data corruption or drive damage.

¹ Refer to specifications table for models supported.

² IHM is enabled on all leading NAS systems. Please check with your NAS vendor or a Seagate sales representative for more details.

³ Rescue services not available in all countries. Contact your Seagate sales representative for further details.



Specifications	18TB	16TB	14TB	12TB	10TB
Capacity	18TB	16TB	14TB	12TB	10TB
Standard Model Number	ST18000VN000	ST16000VN001	ST14000VN0008	ST12000VN0008	ST10000VN0008
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design (Air or Helium)	Helium	Helium	Helium	Helium	Helium
Workload Rate Limit (WRL)	180	180	180	180	180
Rotational Vibration (RV) Sensor	Yes	Yes	Yes	Yes	Yes
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	240MB/s	240MB/s	240MB/s	210MB/s	210MB/s
Spindle Speed (RPM)	7200	7200	7200	7200	7200
Cache (MB)	256	256	256	256	256
Reliability					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3	3	3
Warranty, Limited (years)	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power	7.7	7.3	7.3	7.3	7.8
Idle Power Average (W)	5.5W	5.1W	5.1W	5.1W	5.0W
Standby Mode/Sleep Mode, Typical (W)	1.0/1.0	1.28/1.28	1.17/1.17	1.17/1.17	1.17/1.17
Voltage Tolerance, Inc. Noise (5V / 12V)	1.0 / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature					
Operating Temperature (ambient, min °C)	0	0	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock					
Shock, Operating/Nonoperating: 2ms (max)	40Gs/200Gs	50Gs/200Gs	50Gs/200Gs	50Gs/200Gs	70Gs/250Gs
Environmental/Acoustics					
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	28	28	28	28	28
Acoustics, Seek (typical) (dBA)	30	30	30	30	30
Physical					
Height (mm/in)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	670g/1.477lb	670g/1.477lb	650g/1.433lb	650g/1.433lb	690g/1.521lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



Specifications	10TB	8TB	8TB	6TB	6TB
Capacity	10TB	8TB	8TB	6TB	6TB
Standard Model Number	ST10000VN000	ST8000VN004	ST8000VN002	ST6000VN006	ST6000VN001
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design (Air or Helium)	Air	Air	Air	Air	Air
Workload Rate Limit (WRL)	180	180	180	180	180
Rotational Vibration (RV) Sensor	Yes	Yes	Yes	Yes	Yes
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	210MB/s	210MB/s	202MB/s	202MB/s	190MB/s
Spindle Speed (RPM)	7200	7200	5400	5400	5400
Cache (MB)	256	256	256	256	256
Reliability					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3	3	3
Warranty, Limited (years)	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power	10.1	10.1	5.3	5.3	5.3
Idle Power Average (W)	7.8W	7.8W	3.4W	3.4W	3.4W
Standby Mode/Sleep Mode, Typical (W)	1.0/1.0	1.0/1.0	0.25/0.25	0.25/0.25	0.25/0.25
Voltage Tolerance, Inc. Noise (5V / 12V)	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature					
Operating Temperature (ambient, min °C)	0	0	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock					
Shock, Operating/Nonoperating: 2ms (max)	70Gs/300Gs	70Gs/300Gs	80Gs/300Gs	80Gs/300Gs	70Gs/250Gs
Environmental/Acoustics					
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	28	28	25	26	26
Acoustics, Seek (typical) (dBA)	32	32	27	28	27
Physical					
Height (mm/in)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	720g/1.59lb	720g/1.59lb	630g/1.389lb	630g/1.389lb	610g/1.345lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



Specifications	4TB	4TB	3TB	3TB	2TB
Capacity	4TB	4TB	3TB	3TB	2TB
Standard Model Number	ST4000VN006	ST4000VN008	ST3000VN006	ST3000VN007	ST2000VN003
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design (Air or Helium)	Air	Air	Air	Air	Air
Workload Rate Limit (WRL)	180	180	180	180	180
Rotational Vibration (RV) Sensor	Yes	Yes	Yes	No	No
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	202MB/s	180MB/s	202MB/s	180MB/s	180MB/s
Spindle Speed (RPM)	5400	5900	5400	5900	5400
Cache (MB)	256	64	256	64	256
Reliability					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3	3	3
Warranty, Limited (years)	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power	4.8	4.8	4.8	4.8	3.7
Idle Power Average (W)	3.96W	3.95W	3.96W	4.8W	2.5W
Standby Mode/Sleep Mode, Typical (W)	0.5/0.5	0.5/0.5	0.5/0.5	0.5/0.5	0.25/0.25
Voltage Tolerance, Inc. Noise (5V / 12V)	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature					
Operating Temperature (ambient, min °C)	0	0	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock					
Shock, Operating/Nonoperating: 2ms (max)	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs
Environmental/Acoustics					
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	23	23	23	23	19
Acoustics, Seek (typical) (dBA)	27	25	27	25	21
Physical					
Height (mm/in)	20.20mm/0.795in	26.11mm/1.028in	20.20mm/0.795in	26.11mm/1.028in	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	490g/1.08lb	610g/1.345lb	490g/1.08lb	610g/1.345lb	415g/0.915lb
Carton Unit Quantity	25	20	25	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



Specifications	2TB	1TB	1TB
Capacity	2TB	1TB	1TB
Standard Model Number	ST2000VN004	ST1000VN008	ST1000VN002
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance			
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR
Drive Design (Air or Helium)	Air	Air	Air
Workload Rate Limit (WRL)	180	180	180
Rotational Vibration (RV) Sensor	No	No	No
Dual-Plane Balance	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	180MB/s	180MB/s	180MB/s
Spindle Speed (RPM)	5900	5400	5900
Cache (MB)	64	256	64
Reliability			
Load/Unload Cycles	600,000	600,000	—
Nonrecoverable Read Errors Rate, Max	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3
Warranty, Limited (years)	3	3	3
Power Management			
Startup Current, Typical (12V, A)	1.8	1.8	1.2
Average Operating Power	4.3	3.7	3.76
Idle Power Average (W)	3.56W	2.5W	2.5W
Standby Mode/Sleep Mode, Typical (W)	0.5/0.5	0.25/0.25	0.5/0.5
Voltage Tolerance, Inc. Noise (5V / 12V)	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature			
Operating Temperature (ambient, min °C)	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock			
Shock, Operating/Nonoperating: 2ms (max)	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs
Environmental/Acoustics			
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	19	21	21
Acoustics, Seek (typical) (dBA)	21	23	23
Physical			
Height (mm/in)	26.11mm/1.028in	20.20mm/0.795in	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	535g/1.18lb	415g/0.915lb	415g/0.915lb
Carton Unit Quantity	20	25	25
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



DATA SHEET

Tough. Ready. Scalable.

IronWolf 510 SSD



Built for NAS, Seagate® IronWolf® 510 delivers high-endurance performance and caching speeds of up to 3150MB/s—or 3GB/s for NVMe-compatible systems. With capacities of up to 1.92TB, it's the go-to solution for creative pros and businesses needing 24×7 multi-user storage.



Best-Fit Applications

- Tiered caching on enabled NAS
- Creative pro NAS
- Small, medium enterprise NAS

Key Advantages

Tap into the power of SSD cache tiering and make 24×7 loading for multiple users a smooth, easy process.

Easily tackle the high-endurance requirements of NAS with 1 DWPD.

Offering best-in-class performance, IronWolf 510 SSD ensures low lag and low down time in multi-user environments.

Seagate has your back in almost every situation possible when it comes to a failed drive with a 2-year Rescue Data Recovery Services plan.

Enjoy long-term reliability with 1.8M hours MTBF in a PCIe form factor.

Choose from an extensive portfolio of capacity options including 240GB, 480GB, 960GB, and 1.92TB.



Specifications				
Capacity	1.92TB	960GB	480GB	240GB
Standard Model	ZP1920NM30001	ZP960NM30001	ZP480NM30001	ZP240NM30001
Features				
Interface	PCIe G3 x4, NVMe 1.3	PCIe G3 x4, NVMe 1.3	PCIe G3 x4, NVMe 1.3	PCIe G3 x4, NVMe 1.3
NAND Flash Type	3D TLC	3D TLC	3D TLC	3D TLC
Form Factor	M.2 2280-D2	M.2 2280-D2	M.2 2280-S2	M.2 2280-S2
Performance				
Sequential Read (MB/s) Sustained, 128KB QD32 ¹	3,150	3,150	2,650	2,450
Sequential Write (MB/s) Sustained, 128KB QD32 ¹	850	1,000	600	290
Random Read (IOPS) (QD32T4) ¹	270,000	345,000	193,000	100,000
Random Write (IOPS) (QD32T4) ¹	25,000	28,000	20,000	12,000
Random Read (IOPS) (QD32T8) ¹	290,000	380,000	199,000	100,000
Random Write (IOPS) (QD32T8) ¹	27,000	29,000	21,000	13,000
Endurance/Reliability				
Total Bytes Written (TB)	3,500	1,750	875	435
Nonrecoverable Read Errors per Bits Read	1 per 10E16	1 per 10E16	1 per 10E16	1 per 10E16
Mean Time Between Failures (MTBF, hours)	1,800,000	1,800,000	1,800,000	1,800,000
Warranty, Limited (years)	5	5	5	5
Power Management				
Power Supply	3.3V	3.3V	3.3V	3.3V
Active Max Average Power (W)	6.0	6.0	6.0	5.3
Average Idle Power (W)	2.0	1.95	1.83	1.75
Environmental				
Temperature, Operating Internal(°C)	0 to 70	0 to 70	0 to 70	0 to 70
Temperature, Nonoperating (°C)	−40 to 85	−40 to 85	−40 to 85	−40 to 85
Shock, 0.5ms (Gs)	1500	1500	1500	1500
Physical				
Height (in/mm, max)	0.140in/3.58mm	0.140in/3.58mm	0.087in/2.23mm	0.087in/2.23mm
Width (in/mm, max)	0.872in/22.15mm	0.872in/22.15mm	0.872in/22.15mm	0.872in/22.15mm
Depth (in/mm, max)	3.16in/80.15mm	3.16in/80.15mm	3.16in/80.15mm	3.16in/80.15mm
Weight (lb/g)	0.018lb/8.3g	0.017lb/8.1g	0.015lb/6.9g	0.014lb/6.5g
Carton Unit Quantity	10	10	10	10

¹ Performance data is based on testing under certain workload conditions and is subject to change.



Ordering Information			
Specifications			
Retail Packaging	Box Dimensions	Master Carton Dimensions	Pallet Dimensions
Depth/Length (in/mm)	0.944in/24mm	6.023in/153mm	47.24in/1200mm
Width (in/mm)	4.291in/109mm	11.496in/292mm	39.38in/1000mm
Height (in/mm)	6.102in/155mm	5.511in/140mm	52inch/1320mm
Weight (lb/kg)	0.14lb/0.062kg	1.9lb/0.88kg	448lb/203.2kg
Quantities			
Boxes per Master Carton	10		
Master Cartons per Pallet	196		
Pallet Layers	7		

System Requirements	What's Included
---------------------	-----------------

- Windows® 10, Windows 8.1
- Linux
- Seagate® IronWolf® 510 SSD

Region	Model Number	Capacity	Limited Warranty (years)	UPC Code	EAN Code	Multi-Pack UPC
WW	ZP1920NM30011	1.92TB	5	763649135983	8719706018357	10763649135980
WW	ZP960NM30011	960GB	5	763649135976	8719706018340	10763649135973
WW	ZP480NM30011	480GB	5	763649135969	8719706018333	10763649135966
WW	ZP240NM30011	240GB	5	763649135952	8719706018326	10763649135959

seagate.com



© 2020 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology, and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. IronWolf and the IronWolf logo are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Actual data rates may vary depending on operating environment and other factors, such as chosen interface and disk capacity. Seagate reserves the right to change, without notice, product offerings or specifications. DS2032.1-2002US February 2020

asustor

LOCKERSTOR IO AS6510T

**Shift into overdrive with dual Intel 10GbE,
M.2 SSD Cache and 2.5GbE!**



- Intel Denverton-based Atom C3538 Quad-Core CPU
- 8GB DDR4-2133 SO-DIMM - 30% faster than DDR3
- Dual Intel 10-Gigabit Ethernet ports - Supports up to 20 Gbps under Link Aggregation
- Dual Realtek 2.5-Gigabit Ethernet ports - Supports up to 5 Gbps under Link Aggregation
- Supports 10x 3½" SATA hard drives and SSDs
- Dual M.2 NVMe SSD ports for fast caching
- Supports an extra 128 TB with the AS6004U
- Thumbscrews for easy M.2 SSD installation
- Supports Wake on LAN and Wake on WAN
- Efficient cooling design
- Best in class three year warranty



Performance
King



Boundless
Functionality



Intuitive
UI



Incredible
Value



3 Year
Warranty

Smallest Enterprise Intel 10-Gigabit NAS

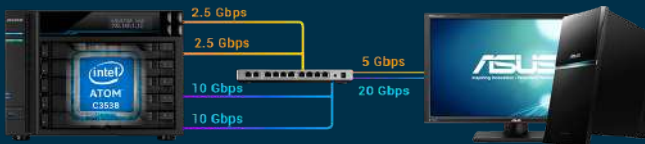
All new front panel design.



Dual 10 and 2.5 Gigabit ports. Faster than ever

The all new Lockerstor series of NAS feature dual Intel 10-Gigabit Ethernet ports as well as dual Realtek 2.5-Gigabit Ethernet ports. With a managed switch that supports multiple speeds, take advantage of up to 20 gbps of speed with both 10-Gigabit ports or up to 5 gbps on both 2.5-Gigabit ports.

*Two Cat 6a and two Cat 5e cables included in box.

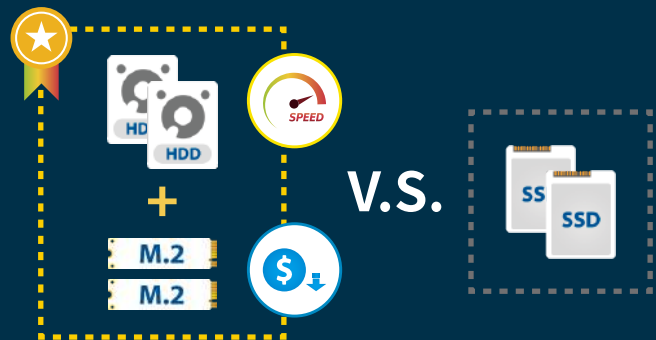


SSD Speeds for Hard Drive Prices - SSD Caching

The recently updated ADM features an updated Linux Kernel and additional performance enhancements. The Lockerstor series introduce M.2 PCIe NVMe SSD caching increasing performance.

1. Lockerstor NVMe SSD caching increases performance by up to 60%.
2. Lockerstor NVMe SSD caching is faster than if all bays were filled with SATA SSDs while remaining cheaper.

With dual 10-Gigabit Ethernet, bottlenecks on NVMe SSDs have been lifted, making the Lockerstor one of the fastest NAS devices ever.



Link Aggregation (RAID 5) 10 GbE

2348 MB/s

Read

1040 MB/s

Write

Link Aggregation (RAID 5) 2.5 GbE

565 MB/s

Read

553 MB/s

Write

* Performance figures are achieved in the ASUSTOR lab using state of the art client computers under optimized network settings, and could vary in different environments. Ordinary desktop or notebook computers may be unable to reproduce these figures.

Ten Bays with Flexible M.2 SSD Caching

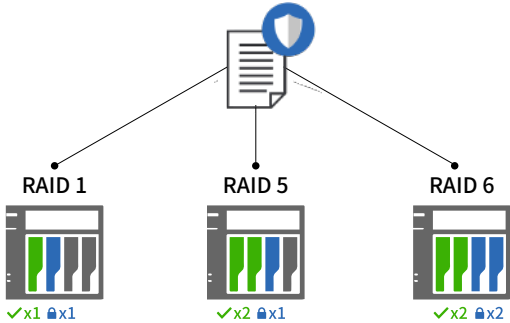
The AS6510T is a cost-effective large capacity NAS designed for enterprise environments. The AS6510T supports online capacity expansion, allowing for the flexible purchase of enterprise storage equipment. When your budget and storage requirements are smaller, you can purchase a smaller number of hard disks. Additional disks can be purchased as your storage requirements grow. Combined with ASUSTOR's MyArchive storage technology, this allows you to effectively achieve unlimited storage.



Data Protection Starts with ASUSTOR RAID

.....

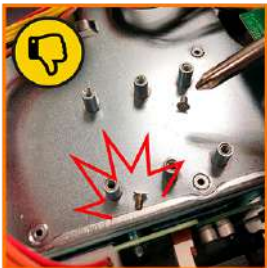
ASUSTOR understands that your data is priceless, therefore an ASUSTOR NAS provides different RAID options, giving your data various levels of protection from the moment it is first stored on the NAS. We recommend you plan your storage protection based on your NAS model and number of hard drives. Data protection has never been so simple.



	Single	JBOD	RAID 0	RAID 1	RAID 5	RAID 6	RAID 10
Minimum number of disks	1	2	2	2	3	4	4
Faulty Disks Tolerated	×	×	×	1	1	2	1
Increased System performance	×	×	✓	×	✓	✓	✓
Maximum use of Storage space	✓	✓	✓	Ⓛ x 1/2	Ⓛ -1	Ⓛ -2	Ⓛ x 1/2

Thumbscrews for easy M.2 SSD installation

.....

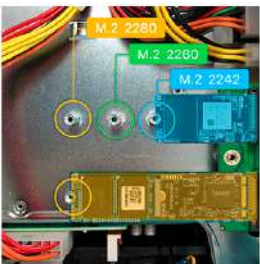


Regular screws are difficult to handle

Thumbscrews are easier to manipulate



Two M.2 2280, 2260 or 2242 slots supporting NVMe and AHCI SSDs



Powerful and high efficient cooling design

.....

The Lockerstor utilizes PWM fans with smart speed controls and heatsinks with push-pin mounting to achieve optimal airflow, enhancing stability and maintaining high performance even under high loads. The Lockerstor's improved design features improved heatsinks that are taller than previous models to ensure even more efficient cooling and heat dissipation.



Protected From the Inside and Out

Protect your data from loss, damage and attacks with the Nimbestor 2 and 4. A Nimbestor is better protected by running the Linux-based ADM, employing a built-in firewall, ClamAV Antivirus, MyArchive and ADM's various backup tools help protect ransomware even better.



Network Attack Protection

- Firewall
- ADM Defender

Secure Data Transmission

- VPN connection
- SSL certificate connection
- Automatic logout

Internal Data

- MyArchive offline backup
- AES-256 folder encryption
- Antivirus software - ClamAV

Access Control

- File/folder/app isolation
- 2-Step Verification
- Wake-on-LAN (WOL)
- Wake-on-WAN (WAN)

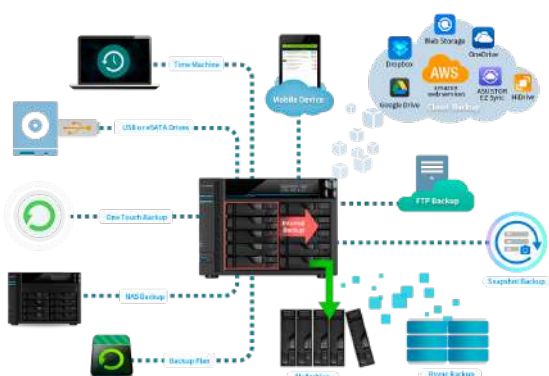
Wake Up From Anywhere

The Lockerstor 8 and 10 feature Wake on WAN technology. No specialized equipment or settings are needed to wake the NAS. Simply use ASUSTOR's wide variety of mobile apps, including but not limited to AiMaster, AiMusic, AiVideos and AiData to turn the NAS on or off remotely. Wake on WAN helps protect data by keeping the NAS powered off when not in use; thereby helping to prevent attacks, protects data integrity by remaining powered off during power failures and Wake on WAN also saves electricity, making for an even more efficient NAS.



Comprehensive Backup Solutions

ASUSTOR's comprehensive backup solution provides more than twelve backup options, including, but not limited to Amazon S3, Dropbox, Google Drive, and Onedrive. ASUSTOR Backup Plan for Windows as well as Time Machine for macOS provide easy backups for desktop and laptops while MyArchive removable hard drives provide long term storage. Btrfs is now supported and with Snapshot Center, can take snapshots of your information in the event of unintentional modification. Restore previous versions easily with Snapshot Center.



Cross-Platform Multi-User Access

The ASUSTOR NAS provides seamless cross-platform and multi-user access, allowing you to easily connect to your NAS from Windows, Mac OS X or Unix-like operating systems no matter if you are using a PC, notebook, tablet or smartphone.

4096

Accounts

512

Groups

512

Shared Folders

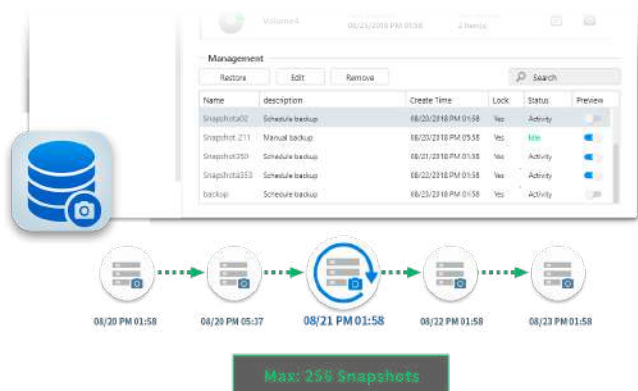
512

Concurrent Connections



Snapshot Center

Snapshot Center is a new feature for ASUSTOR NAS devices to utilize Btrfs and iSCSI volumes to take snapshots of the information inside a NAS. Snapshot Center supports up to 256 snapshots of a volume and can be done every five minutes, creating a backup that can be restored easily if data is damaged or lost.



Portainer

– Easy Docker Deployments

Even more possibilities for ADM with Portainer for Docker images. With thousands of images, Portainer can download and deploy more types of programs than ever before. Portainer is incredibly user friendly and employs a graphical interface to make Docker images easier to deploy than ever.



ASUSTOR EZ Sync

1. All new UI. Simpler and easier to operate. View NAS information quickly.
2. More complete settings - offering detailed folder lists. Easily select folders and files not in a folder.
3. Notifications for abnormal status
4. Support 2-step verification increase account safety.
5. Improve NAS connecting and file sync system stability for better user experience.



Exclusive MyArchive Cold Backup Technology Unlimited Capacity Expansion

MyArchive cold backup technology turns NAS hard disks into removable storage archives. Directly insert a MyArchive hard disk into the NAS to easily access, backup and share terabytes of content.

MyArchive

- Saves power during system standby
- Create an unlimited number of MyArchive hard disks
- Utilizes SATA III at 6 Gbps for faster data transfers
- Compatible with NTFS/EXT4/HFS+/exFAT
- Supports AES 256-bit encryption
- Decryption via physical USB key



Enterprise Versatility

.....

ASUSTOR NAS offers rich variety of services for business users. For the price of one NAS you can create a multifunctional server that is worth much more.



Comprehensive Surveillance System

.....

The powerful ASUSTOR NAS provides optimal reliability for home and SMB users looking to set up a surveillance system. 4 free camera channels are offered, making it an extremely cost-effective surveillance solution for users with smaller demands. For users with larger demands, the number of camera channels can be expanded up to 64 via purchasable camera licenses. After installing Surveillance Center and its corresponding mobile app AiSecure, users will also be able to stream live surveillance feeds to their smartphones while on the go, keeping an eye on their most valued assets from anywhere.

5 Steps 60 Seconds

- Start quick installation wizard
- Automatic camera search
- Add cameras with just one click
- Configure video format
- Configure recording schedule



File Editing and Project Collaboration

.....

NextCloud and OnlyOffice make collaborating on projects easier than ever by creating a cloud office suite for offices to work on documents, spreadsheets, presentations and more.



App Central

.....

Unleash the unlimited potential of ASUSTOR NAS. The applications that come pre-installed with each ASUSTOR NAS device are just the beginning. At your convenience, you can browse through and download any applications that pique your interest from App Central. Whether your interests lie in business, website construction or even digital home entertainment, App Central has got you covered. With over 200 unique Apps, App Central provides you with the boundless variety of applications that you require to satisfy your digital lifestyle needs. Explore the unlimited potential of ASUSTOR NAS devices while creating a personalized NAS device for yourself.



Mobile Apps

.....

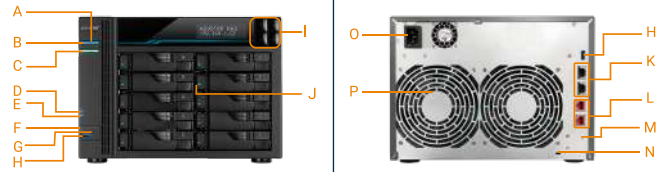
ASUSTOR's exclusive EZ Connect technology allows you to connect to your NAS from anywhere with your Mobile device in order to access and share your files. ASUSTOR mobile apps provide pass code lock functions in order to protect your privacy and data. You can also make use of HTTPS connections for even more added security.



Hardware Specification

LOCKERSTOR 10 (AS6510T)

Processor	Intel ATOM C3538 2.1GHz Quad-Core Processor
Memory	8GB SO-DIMM DDR4 Expandable. max. 64GB, 32GB x2)
M.2 Drive Slots	2x M.2 PCIe(NvMe) or SATA3 supported M.2 2280, 2260 and 2242
Drive Bays	10x SATA3 6Gb/s; 3.5"/2.5" HDD/SSD
Network	10 Gigabit Ethernet x2; 2.5 Gigabit Ethernet x2
External Device Interface	2x USB 3.2 Gen 1 (1x Front ; 1x Rear)
Dimensions (HxWxD)	215.5(H) x 293(W) x 230(D) mm
Weight	6.4 (kg)/14.1 (lb)
Power	Internal Power Supply: 250W
Operation/Disk Hibernation/ Sleep Mode(S3)	76.8W/41.1W/No Sleep Mode
Volume Type	Single, JBOD, RAID 0/1/5/6/10, RAID 1/5/6/10 + Hot Spare



- A. Power Button
- B. Power LED
- C. System Status LED
- D. 2.5-Gigabit Network LEDs
- E. 10-Gigabit Network LEDs
- F. USB LED
- G. One Touch Backup Button
- H. USB 3.2 Gen1 Ports

- I. Control Buttons
- J. Hard Drive LEDs
- K. 10-Gigabit RJ45 Ports
- L. 2.5-Gigabit RJ45 Ports
- M. Reset Button
- N. K-Lock
- O. AC Input
- P. System Fans

Software & Features

Operating System

- ADM 3.4 Onwards
- Supports Online Firmware Updates

Supported OS

- Windows XP, Vista, 7, 8, 10, Server 2003, Server 2008, Server 2012
- Mac OS X 10.6 and up
- UNIX, Linux, and BSD

Access Control

- Maximum Number of Users: 4096
- Maximum Number of Groups: 512
- Maximum Number of Shared Folders: 512
- Maximum Number of Concurrent Connections: 512
- Supports Windows Active Directory
- Supports Windows Active Directory / LDAP

File Explorer

- Web-based File Management
- ISO File Mounting
- Share Links
- Task Monitor
- Browse Files on Local PC
- Thumbnail Previews
- Data Access via External Optical Drive
- Supports video playback

System Administration

- Log Type:
 - System Log, Connection Log, File Access Log
- Real-time Online User Monitor
- Real-time System Monitor
- User Quota
- Virtual Drive (ISO Mounting, Maximum 16)
- UPS Support

Storage Management

- Support Multiple Volumes with Spare Disks
- Volume Type: Single disk, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
- Support for Online RAID Level Migration

Disk Management

- Scheduled Bad Block Scans
- Scheduled S.M.A.R.T Scans

External Devices

- Supports USB External Storage Devices
- USB Wi-Fi Dongle Support
- Bluetooth Dongle/Speaker Support
- USB Printer Support
- USB DAC/IR Receiver/Keyboard/Mouse Support
- USB CD ROM Drives/DVD ROM Drives/BD-ROM Drives

Energy Control

- Configurable Disk Hibernation and Sleep Mode Wait Time
- Configurable Time Period for Sleep Mode Activation
- Automatic Sleep

Supported Browsers

- Internet Explorer 11 Onwards, Firefox, Chrome, Safari, Microsoft Edge

Network

- TCP/IP (IPv4 & IPv6)
- Link Aggregation: Supports 802.3ad and Six Other Modes for Load Balancing and/or Network Failover
- Jumbo Frame (MTU)
- VLAN
- EZ Connect
- Wireless Network
- DDNS/EZ-Router
- Supports Wake-on-LAN (WOL)
 - Only supported on 2.5 GbE port
- Supports Wake-on-WAN (WOW)
 - Only supported on 2.5 GbE port

Network Protocols

- CIFS / SMB, SMB 2.0 / 3.0, AFP, NFS, FTP (Unicode Supported), TFTP, WebDAV, Rsync, SSH, SFTP, iSCSI/IP-SAN, HTTP, HTTPS, Proxy, SNMP, Syslog

Security

- AES 256-Bit Encryption
- Firewall: Prevent Unauthorized Access
- Alert Notifications: E-mail, SMS
- Encrypted Connections: HTTPS, FTP over SSL/TLS, SSH, SFTP, Rsync over SSH
- Built-in Hardware Encryption Engine: AS10/31/32/61/62/63/64/70/ Nimblestor/Lockerstor(AS65) series

Backup Solutions

- Rsync (Remote Sync) Backup · Cloud Backup
- FTP Backup · External Backup
- One Touch Backup · EZ Sync

EZ Sync Manager

- Automatically synchronizes files between a PC and NAS
- Can restore previous versions of files
- Supports file sharing
- AiData now supports accessing EZ Sync files

Network Recycle Bin

- Share folder-based
- Maintains original directory structure and file permission
- On-click restore
- Supports scheduled emptying
- Filtering rules
 - 1.File size 2.File extension
- Deletion Settings
 - 1.File size 2.File date

Supported Languages

- Deutsch, English, Français, Italiano, Nederlands, Русский, 日本語, 한글, 简体中文, 繁体中文, Česká, Polski, Svenska, Dansk, Norsk, Suomi, Português, Türkçe, Español, Magyar

File System Support

- Internal: ext4, Btrfs
- External: FAT32, NTFS, ext3, ext4, HFS+, exFAT, Btrfs

ACL

- Provides both Windows ACL and Linux ACL permission configuration methods
- Supports Windows ACL for specific shared folders
- Comprehensive support for 13 types of advanced permission settings found in Windows
- Can view Windows ACL permission settings from within ADM
- Supports local users and groups
- Exclusive permission reset feature allows users to quickly restore default permissions

SSD Cache

- SSD-like performance with traditional hard drives
- supports read-only access and read-write cache mode
- Supported Models: AS31/32/50/51/61/62/63/64/70/ Nimblestor/Lockerstor(AS65) series

Snapshots

- Btrfs Snapshots
- 256 snapshots
- iSCSI LUNs
- Support model: AS31/32/40/50/51/61/62/63/64/70/ Nimblestor/Lockerstor(AS65) series. Snapshot Center will not display Volume snapshots information in other models.

iSCSI/IP-SAN

- Maximum Targets: 256
- Maximum LUNs: 256
- Maximum Snapshot Versions of a Single LUN: 256
- Target Masking
- LUN Mapping
- ISO File Mounting
- Supports MPIO
- Persistent (SCSI-3) Reservations

Sever

- VPN server, SNMP server, RADIUS server, Syslog server, Mail server, DHCP server, Web server, FTP server, Print server, Rsync server

Featured Apps

- Antivirus
- Download Center
- FTP Explorer
- DataSync for CloudDrive
- iTunes Server
- VirtualBox
- RADIUS Server
- Mail Server
- LooksGood
- Photo Gallery
- SoundsGood
- Takeasy
- Linux Center
- Surveillance Center
- UPnP Media Server
- VPN Server
- VPN Client

Mobile Apps

- AiMaster
- AiFoto
- AiMusic
- AiVideo
- AiData
- AiDownload
- AiSecure
- AiRemote



ASUSTOR Inc.

3F, No.136, Daye Rd., Beitou Dist., Taipei City 112, Taiwan Tel: +886 2 7737 0888 www.asustor.com
Designs and specifications are subject to change without notice.
© ASUSTOR Inc. ASUSTOR and all other ASUSTOR product names are trademarks or registered trademarks of ASUSTOR Inc.
All other product and company names mentioned herein are the trademarks of their respective owners.

Dealer Seal

LOCKERSTOR 10 (AS6510T)

Hardware & Packaging



[Product Datasheet \(https://www.asustor.com/materials/datasheet/Datasheet_LOCKERSTOR 10 \(AS6510T\)_ENG.pdf\)](https://www.asustor.com/materials/datasheet/Datasheet_LOCKERSTOR 10 (AS6510T)_ENG.pdf)

Hardware Specifications

Software & Features

Featured Apps

Hardware Specifications

CPU

CPU Model	Intel ATOM C3538
CPU Architecture	x64 64-bit
CPU Frequency	Quad-Core 2.1GHz

Memory

Memory	8GB SO-DIMM DDR4 Compatibility (https://www.asustor.com/service/memory?id=memory&lan=en)
Memory Module Pre-installed	8GB (1x 8GB)
Total Memory Slots	2
Memory Expandable up to	64GB (2x 32GB) Installation Guide (https://s3.amazonaws.com/download.asustor.com/download/docs/Memory_Installation/AS65_Series_Memory_Installation_Guide_ENG.pdf?t=1701437084) <ul style="list-style-type: none">Support mixed capacity

We use cookies to help us improve our webpage. Please read our [Cookie Policy](#) (/privacy).

OK

Hardware Specifications

Storage

Drive Bays	10
M.2 Drive Slots	2 Installation Guide (https://s3.amazonaws.com/download.asustor.com/download/docs/Memory_Installation/AS65_Series_M.2_SSD_Drive_Installation_Guide_ENG.pdf?t=1701437084)
Compatible Drive Type Compatibility (https://www.asustor.com/service/compatibility?lan=en)	<ul style="list-style-type: none">▪ 3.5" SATA HDD▪ 2.5" SATA HDD▪ 2.5" SATA SSD▪ M.2 2280 NVMe▪ M.2 2280 SATA 3▪ M.2 2260 SATA 3▪ M.2 2242 SATA 3
Maximum Drive Bays with Expansion Unit (https://www.asustor.com/product/AS6004U)	18
Supports Hot Swappable Drives ⓘ	✓

External Ports

Expansion	2x USB 3.2 Gen 1
Network	2x 10 Gigabit Ethernet(10G/1G); 2x 2.5 Gigabit Ethernet (2.5G/1G/100M)
Multimedia Output	N/A

Others

System Fan	2x 120mm
LCD Panel	✓
Power Supply Unit / Adapter	250W x1
Input Power Voltage	100V to 240V AC
Certification	FCC, CE, VCCI, BSMI, C-TICK
Warranty	3 Years

Operation

Power Consumption	76.8W (Operation); 41.1W (Disk Hibernation); ⓘ
Noise Level	22dB (HDD idle)

We use cookies to help us improve our webpage. Please read our [Cookie Policy \(/privacy\)](#).

Noise Level

OK

Hardware Specifications

Operation Temperature	0°C~40°C (32°F~104°F)
-----------------------	-----------------------

Humidity	5% to 95% RH
----------	--------------

Size and Weight

Size	215.5(H) x 293(W) x 230(D) mm
------	-------------------------------

Weight	6.4 (kg) / 14.1 (lb) Package Contents (package_contents?p_id=64)
--------	--

We use cookies to help us improve our webpage. Please read our [Cookie Policy \(/privacy\)](#).

OK

Support

Downloads (<https://www.asustor.com/en/service/downloads>)
NAS Selector (https://www.asustor.com/en/service/nas_selector)
NVR Selector (https://www.asustor.com/en/service/nvr_selector)
Compatibility (<https://www.asustor.com/en/service/compatibility>)
RAID Calculator (https://www.asustor.com/en/service/RAID_calculator)
Online Support Form (<https://support.asustor.com/>)
Getting Started (http://www.asustor.com/getting_start/landing?lan=en)
FAQ (<http://www.asustor.com/knowledge>)

ASUSTOR Online

Live Demo (https://www.asustor.com/en/live_demo)
ASUSTOR College (<https://www.asustor.com/en/online/College>)
Community (<https://www.asustor.com/en/online/community>)
From App Central (https://www.asustor.com/en/app_central)
ASUSTOR Developer Corner (<https://developer.asustor.com/>)

About Us

About ASUSTOR (https://www.asustor.com/en/about/about_asustor)
News (<https://www.asustor.com/en/news/sNews?year=2023>)
Contact Us (https://www.asustor.com/en/about/contact_us)
Press Release (https://www.asustor.com/en/news/news_list?year=2023)
Media Review (<https://www.asustor.com/en/news/review?year=2023>)
Newsletter (<https://www.asustor.com/en/news/newsletter?year=2023>)
Success Stories (https://www.asustor.com/en/success_story/)

Other Services

Job Opportunities (<https://www.asustor.com/en/about/hiring>)
Accessories Store (<https://shop.asustor.com/>)
Where to buy (https://www.asustor.com/en/service/where_to_buy)
ASUS (<https://www.asus.com>)
Partners (<https://www.asustor.com/en/partners>)
(<https://www.asustor.com/en/support/ars>)
(<https://www.asustor.com/en/support/bot>)

(https://www.asustor.com/en/about/contact_us)
(<https://www.asustor.com/en/news/sNews?year=2023>)
(https://www.asustor.com/en/about/contact_us)
(https://www.asustor.com/en/news/news_list?year=2023)
(<https://www.asustor.com/en/news/review?year=2023>)
(<https://www.asustor.com/en/news/newsletter?year=2023>)
(https://www.asustor.com/en/success_story/)

US English

Copyright © 2023 ASUSTOR Inc. Terms of Use (https://www.asustor.com/terms_of_use) | Privacy Policy (<https://www.asustor.com/privacy>)

We use cookies to help us improve our webpage. Please read our Cookie Policy (</privacy>).

OK



3.5 HDD DATA SHEET

Tough. Ready. Scalable Purpose-built for Connected-Home, SOHO, & Small-to-Medium Business NAS Environments



IronWolf™ is designed for consumer and commercial NAS.
Delivering Tough, Ready and Scalable 24x7 performance in multi-bay, networked environments.



Best-Fit Applications

- Consumer and Commercial NAS
- Desktops and Workstations
- Multimedia Servers



Key Advantages

Optimized for NAS with AgileArray™ enables Dual-Plane Balancing and Time-Limited Error Recovery to deliver best-in-class RAID performance in multi-bay systems.

Always On, Always Accessible IronWolf drives are designed for 24x7 usage, allowing users to access their data any time, anywhere.

All-CMR Portfolio All IronWolf drives utilize Conventional Magnetic Recording (CMR) technology for consistent, best-in-class NAS performance.

Up to 18TB Broad range of capacity options to deliver scalable and cost-efficient storage solutions.

Built Tough IronWolf drives are rated for 180TB/year workload, allowing consumer and commercial NAS users to seamlessly store and work with large amounts of networked data.

Superior Reliability and Dependability IronWolf drives are rated for 1M hours MTBF and include a 3-year limited warranty for hassle-free data storage and best-in-class total cost of ownership (TCO)

Rotational Vibration (RV) sensors¹. Built-in RV sensors for vibration tolerance and consistent performance in multi-bay systems.

IronWolf Health Management (IHM)² Actively protect your NAS data with Prevention, Intervention, and Recovery recommendations to ensure peak system health.

Peace of mind with Data Recovery³ IronWolf drives include three years of complimentary Rescue Data Recovery Services - in-house secure facilities, with an industry-leading recovery rate of 95% - so you do not have to incur high recovery costs in the event of accidental data corruption or drive damage.

¹ Refer to specifications table for models supported.

² IHM is enabled on all leading NAS systems. Please check with your NAS vendor or a Seagate sales representative for more details.

³ Rescue services not available in all countries. Contact your Seagate sales representative for further details.



Specifications	18TB	16TB	14TB	12TB	10TB
Capacity	18TB	16TB	14TB	12TB	10TB
Standard Model Number	ST18000VN000	ST16000VN001	ST14000VN0008	ST12000VN0008	ST10000VN0008
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design (Air or Helium)	Helium	Helium	Helium	Helium	Helium
Workload Rate Limit (WRL)	180	180	180	180	180
Rotational Vibration (RV) Sensor	Yes	Yes	Yes	Yes	Yes
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	240MB/s	240MB/s	240MB/s	210MB/s	210MB/s
Spindle Speed (RPM)	7200	7200	7200	7200	7200
Cache (MB)	256	256	256	256	256
Reliability					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3	3	3
Warranty, Limited (years)	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power	7.7	7.3	7.3	7.3	7.8
Idle Power Average (W)	5.5W	5.1W	5.1W	5.1W	5.0W
Standby Mode/Sleep Mode, Typical (W)	1.0/1.0	1.28/1.28	1.17/1.17	1.17/1.17	1.17/1.17
Voltage Tolerance, Inc. Noise (5V / 12V)	1.0 / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature					
Operating Temperature (ambient, min °C)	0	0	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock					
Shock, Operating/Nonoperating: 2ms (max)	40Gs/200Gs	50Gs/200Gs	50Gs/200Gs	50Gs/200Gs	70Gs/250Gs
Environmental/Acoustics					
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	28	28	28	28	28
Acoustics, Seek (typical) (dBA)	30	30	30	30	30
Physical					
Height (mm/in)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	670g/1.477lb	670g/1.477lb	650g/1.433lb	650g/1.433lb	690g/1.521lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



Specifications	10TB	8TB	8TB	6TB	6TB
Capacity	10TB	8TB	8TB	6TB	6TB
Standard Model Number	ST10000VN000	ST8000VN004	ST8000VN002	ST6000VN006	ST6000VN001
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design (Air or Helium)	Air	Air	Air	Air	Air
Workload Rate Limit (WRL)	180	180	180	180	180
Rotational Vibration (RV) Sensor	Yes	Yes	Yes	Yes	Yes
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	210MB/s	210MB/s	202MB/s	202MB/s	190MB/s
Spindle Speed (RPM)	7200	7200	5400	5400	5400
Cache (MB)	256	256	256	256	256
Reliability					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3	3	3
Warranty, Limited (years)	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power	10.1	10.1	5.3	5.3	5.3
Idle Power Average (W)	7.8W	7.8W	3.4W	3.4W	3.4W
Standby Mode/Sleep Mode, Typical (W)	1.0/1.0	1.0/1.0	0.25/0.25	0.25/0.25	0.25/0.25
Voltage Tolerance, Inc. Noise (5V / 12V)	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature					
Operating Temperature (ambient, min °C)	0	0	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock					
Shock, Operating/Nonoperating: 2ms (max)	70Gs/300Gs	70Gs/300Gs	80Gs/300Gs	80Gs/300Gs	70Gs/250Gs
Environmental/Acoustics					
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	28	28	25	26	26
Acoustics, Seek (typical) (dBA)	32	32	27	28	27
Physical					
Height (mm/in)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	720g/1.59lb	720g/1.59lb	630g/1.389lb	630g/1.389lb	610g/1.345lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



Specifications	4TB	4TB	3TB	3TB	2TB
Capacity	4TB	4TB	3TB	3TB	2TB
Standard Model Number	ST4000VN006	ST4000VN008	ST3000VN006	ST3000VN007	ST2000VN003
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design (Air or Helium)	Air	Air	Air	Air	Air
Workload Rate Limit (WRL)	180	180	180	180	180
Rotational Vibration (RV) Sensor	Yes	Yes	Yes	No	No
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	202MB/s	180MB/s	202MB/s	180MB/s	180MB/s
Spindle Speed (RPM)	5400	5900	5400	5900	5400
Cache (MB)	256	64	256	64	256
Reliability					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3	3	3
Warranty, Limited (years)	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power	4.8	4.8	4.8	4.8	3.7
Idle Power Average (W)	3.96W	3.95W	3.96W	4.8W	2.5W
Standby Mode/Sleep Mode, Typical (W)	0.5/0.5	0.5/0.5	0.5/0.5	0.5/0.5	0.25/0.25
Voltage Tolerance, Inc. Noise (5V / 12V)	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature					
Operating Temperature (ambient, min °C)	0	0	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock					
Shock, Operating/Nonoperating: 2ms (max)	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs
Environmental/Acoustics					
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	23	23	23	23	19
Acoustics, Seek (typical) (dBA)	27	25	27	25	21
Physical					
Height (mm/in)	20.20mm/0.795in	26.11mm/1.028in	20.20mm/0.795in	26.11mm/1.028in	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	490g/1.08lb	610g/1.345lb	490g/1.08lb	610g/1.345lb	415g/0.915lb
Carton Unit Quantity	25	20	25	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



Specifications	2TB	1TB	1TB
Capacity	2TB	1TB	1TB
Standard Model Number	ST2000VN004	ST1000VN008	ST1000VN002
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance			
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR
Drive Design (Air or Helium)	Air	Air	Air
Workload Rate Limit (WRL)	180	180	180
Rotational Vibration (RV) Sensor	No	No	No
Dual-Plane Balance	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	180MB/s	180MB/s	180MB/s
Spindle Speed (RPM)	5900	5400	5900
Cache (MB)	64	256	64
Reliability			
Load/Unload Cycles	600,000	600,000	—
Nonrecoverable Read Errors Rate, Max	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3
Warranty, Limited (years)	3	3	3
Power Management			
Startup Current, Typical (12V, A)	1.8	1.8	1.2
Average Operating Power	4.3	3.7	3.76
Idle Power Average (W)	3.56W	2.5W	2.5W
Standby Mode/Sleep Mode, Typical (W)	0.5/0.5	0.25/0.25	0.5/0.5
Voltage Tolerance, Inc. Noise (5V / 12V)	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature			
Operating Temperature (ambient, min °C)	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock			
Shock, Operating/Nonoperating: 2ms (max)	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs
Environmental/Acoustics			
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	19	21	21
Acoustics, Seek (typical) (dBA)	21	23	23
Physical			
Height (mm/in)	26.11mm/1.028in	20.20mm/0.795in	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	535g/1.18lb	415g/0.915lb	415g/0.915lb
Carton Unit Quantity	20	25	25
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



3.5 HDD DATA SHEET

Tough. Ready. Scalable Purpose-built for Connected-Home, SOHO, & Small-to-Medium Business NAS Environments



IronWolf™ is designed for consumer and commercial NAS.
Delivering Tough, Ready and Scalable 24x7 performance in multi-bay, networked environments.



Best-Fit Applications

- Consumer and Commercial NAS
- Desktops and Workstations
- Multimedia Servers



Key Advantages

Optimized for NAS with AgileArray™ enables Dual-Plane Balancing and Time-Limited Error Recovery to deliver best-in-class RAID performance in multi-bay systems.

Always On, Always Accessible IronWolf drives are designed for 24x7 usage, allowing users to access their data any time, anywhere.

All-CMR Portfolio All IronWolf drives utilize Conventional Magnetic Recording (CMR) technology for consistent, best-in-class NAS performance.

Up to 18TB Broad range of capacity options to deliver scalable and cost-efficient storage solutions.

Built Tough IronWolf drives are rated for 180TB/year workload, allowing consumer and commercial NAS users to seamlessly store and work with large amounts of networked data.

Superior Reliability and Dependability IronWolf drives are rated for 1M hours MTBF and include a 3-year limited warranty for hassle-free data storage and best-in-class total cost of ownership (TCO)

Rotational Vibration (RV) sensors¹. Built-in RV sensors for vibration tolerance and consistent performance in multi-bay systems.

IronWolf Health Management (IHM)² Actively protect your NAS data with Prevention, Intervention, and Recovery recommendations to ensure peak system health.

Peace of mind with Data Recovery³ IronWolf drives include three years of complimentary Rescue Data Recovery Services - in-house secure facilities, with an industry-leading recovery rate of 95% - so you do not have to incur high recovery costs in the event of accidental data corruption or drive damage.

¹ Refer to specifications table for models supported.

² IHM is enabled on all leading NAS systems. Please check with your NAS vendor or a Seagate sales representative for more details.

³ Rescue services not available in all countries. Contact your Seagate sales representative for further details.



Specifications	18TB	16TB	14TB	12TB	10TB
Capacity	18TB	16TB	14TB	12TB	10TB
Standard Model Number	ST18000VN000	ST16000VN001	ST14000VN0008	ST12000VN0008	ST10000VN0008
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design (Air or Helium)	Helium	Helium	Helium	Helium	Helium
Workload Rate Limit (WRL)	180	180	180	180	180
Rotational Vibration (RV) Sensor	Yes	Yes	Yes	Yes	Yes
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	240MB/s	240MB/s	240MB/s	210MB/s	210MB/s
Spindle Speed (RPM)	7200	7200	7200	7200	7200
Cache (MB)	256	256	256	256	256
Reliability					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3	3	3
Warranty, Limited (years)	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power	7.7	7.3	7.3	7.3	7.8
Idle Power Average (W)	5.5W	5.1W	5.1W	5.1W	5.0W
Standby Mode/Sleep Mode, Typical (W)	1.0/1.0	1.28/1.28	1.17/1.17	1.17/1.17	1.17/1.17
Voltage Tolerance, Inc. Noise (5V / 12V)	1.0 / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature					
Operating Temperature (ambient, min °C)	0	0	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock					
Shock, Operating/Nonoperating: 2ms (max)	40Gs/200Gs	50Gs/200Gs	50Gs/200Gs	50Gs/200Gs	70Gs/250Gs
Environmental/Acoustics					
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	28	28	28	28	28
Acoustics, Seek (typical) (dBA)	30	30	30	30	30
Physical					
Height (mm/in)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	670g/1.477lb	670g/1.477lb	650g/1.433lb	650g/1.433lb	690g/1.521lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



Specifications	10TB	8TB	8TB	6TB	6TB
Capacity	10TB	8TB	8TB	6TB	6TB
Standard Model Number	ST10000VN000	ST8000VN004	ST8000VN002	ST6000VN006	ST6000VN001
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design (Air or Helium)	Air	Air	Air	Air	Air
Workload Rate Limit (WRL)	180	180	180	180	180
Rotational Vibration (RV) Sensor	Yes	Yes	Yes	Yes	Yes
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	210MB/s	210MB/s	202MB/s	202MB/s	190MB/s
Spindle Speed (RPM)	7200	7200	5400	5400	5400
Cache (MB)	256	256	256	256	256
Reliability					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3	3	3
Warranty, Limited (years)	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power	10.1	10.1	5.3	5.3	5.3
Idle Power Average (W)	7.8W	7.8W	3.4W	3.4W	3.4W
Standby Mode/Sleep Mode, Typical (W)	1.0/1.0	1.0/1.0	0.25/0.25	0.25/0.25	0.25/0.25
Voltage Tolerance, Inc. Noise (5V / 12V)	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature					
Operating Temperature (ambient, min °C)	0	0	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock					
Shock, Operating/Nonoperating: 2ms (max)	70Gs/300Gs	70Gs/300Gs	80Gs/300Gs	80Gs/300Gs	70Gs/250Gs
Environmental/Acoustics					
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	28	28	25	26	26
Acoustics, Seek (typical) (dBA)	32	32	27	28	27
Physical					
Height (mm/in)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	720g/1.59lb	720g/1.59lb	630g/1.389lb	630g/1.389lb	610g/1.345lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



Specifications	4TB	4TB	3TB	3TB	2TB
Capacity	4TB	4TB	3TB	3TB	2TB
Standard Model Number	ST4000VN006	ST4000VN008	ST3000VN006	ST3000VN007	ST2000VN003
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design (Air or Helium)	Air	Air	Air	Air	Air
Workload Rate Limit (WRL)	180	180	180	180	180
Rotational Vibration (RV) Sensor	Yes	Yes	Yes	No	No
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	202MB/s	180MB/s	202MB/s	180MB/s	180MB/s
Spindle Speed (RPM)	5400	5900	5400	5900	5400
Cache (MB)	256	64	256	64	256
Reliability					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3	3	3
Warranty, Limited (years)	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power	4.8	4.8	4.8	4.8	3.7
Idle Power Average (W)	3.96W	3.95W	3.96W	4.8W	2.5W
Standby Mode/Sleep Mode, Typical (W)	0.5/0.5	0.5/0.5	0.5/0.5	0.5/0.5	0.25/0.25
Voltage Tolerance, Inc. Noise (5V / 12V)	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature					
Operating Temperature (ambient, min °C)	0	0	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock					
Shock, Operating/Nonoperating: 2ms (max)	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs
Environmental/Acoustics					
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	23	23	23	23	19
Acoustics, Seek (typical) (dBA)	27	25	27	25	21
Physical					
Height (mm/in)	20.20mm/0.795in	26.11mm/1.028in	20.20mm/0.795in	26.11mm/1.028in	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	490g/1.08lb	610g/1.345lb	490g/1.08lb	610g/1.345lb	415g/0.915lb
Carton Unit Quantity	25	20	25	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



Specifications	2TB	1TB	1TB
Capacity	2TB	1TB	1TB
Standard Model Number	ST2000VN004	ST1000VN008	ST1000VN002
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance			
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR
Drive Design (Air or Helium)	Air	Air	Air
Workload Rate Limit (WRL)	180	180	180
Rotational Vibration (RV) Sensor	No	No	No
Dual-Plane Balance	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	180MB/s	180MB/s	180MB/s
Spindle Speed (RPM)	5900	5400	5900
Cache (MB)	64	256	64
Reliability			
Load/Unload Cycles	600,000	600,000	—
Nonrecoverable Read Errors Rate, Max	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3
Warranty, Limited (years)	3	3	3
Power Management			
Startup Current, Typical (12V, A)	1.8	1.8	1.2
Average Operating Power	4.3	3.7	3.76
Idle Power Average (W)	3.56W	2.5W	2.5W
Standby Mode/Sleep Mode, Typical (W)	0.5/0.5	0.25/0.25	0.5/0.5
Voltage Tolerance, Inc. Noise (5V / 12V)	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature			
Operating Temperature (ambient, min °C)	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock			
Shock, Operating/Nonoperating: 2ms (max)	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs
Environmental/Acoustics			
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	19	21	21
Acoustics, Seek (typical) (dBA)	21	23	23
Physical			
Height (mm/in)	26.11mm/1.028in	20.20mm/0.795in	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	535g/1.18lb	415g/0.915lb	415g/0.915lb
Carton Unit Quantity	20	25	25
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.

© 2021 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology, and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. AgileArray and IronWolf are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Actual data rates may vary depending on operating environment and other factors. Seagate reserves the right to change, without notice, product offerings or specifications. DS1904.20-2111US November 2021



DATA SHEET

Tough. Ready. Scalable.

IronWolf 510 SSD



Built for NAS, Seagate® IronWolf® 510 delivers high-endurance performance and caching speeds of up to 3150MB/s—or 3GB/s for NVMe-compatible systems. With capacities of up to 1.92TB, it's the go-to solution for creative pros and businesses needing 24×7 multi-user storage.



Best-Fit Applications

- Tiered caching on enabled NAS
- Creative pro NAS
- Small, medium enterprise NAS

Key Advantages

Tap into the power of SSD cache tiering and make 24×7 loading for multiple users a smooth, easy process.

Easily tackle the high-endurance requirements of NAS with 1 DWPD.

Offering best-in-class performance, IronWolf 510 SSD ensures low lag and low down time in multi-user environments.

Seagate has your back in almost every situation possible when it comes to a failed drive with a 2-year Rescue Data Recovery Services plan.

Enjoy long-term reliability with 1.8M hours MTBF in a PCIe form factor.

Choose from an extensive portfolio of capacity options including 240GB, 480GB, 960GB, and 1.92TB.



Specifications				
Capacity	1.92TB	960GB	480GB	240GB
Standard Model	ZP1920NM30001	ZP960NM30001	ZP480NM30001	ZP240NM30001
Features				
Interface	PCIe G3 x4, NVMe 1.3	PCIe G3 x4, NVMe 1.3	PCIe G3 x4, NVMe 1.3	PCIe G3 x4, NVMe 1.3
NAND Flash Type	3D TLC	3D TLC	3D TLC	3D TLC
Form Factor	M.2 2280-D2	M.2 2280-D2	M.2 2280-S2	M.2 2280-S2
Performance				
Sequential Read (MB/s) Sustained, 128KB QD32 ¹	3,150	3,150	2,650	2,450
Sequential Write (MB/s) Sustained, 128KB QD32 ¹	850	1,000	600	290
Random Read (IOPS) (QD32T4) ¹	270,000	345,000	193,000	100,000
Random Write (IOPS) (QD32T4) ¹	25,000	28,000	20,000	12,000
Random Read (IOPS) (QD32T8) ¹	290,000	380,000	199,000	100,000
Random Write (IOPS) (QD32T8) ¹	27,000	29,000	21,000	13,000
Endurance/Reliability				
Total Bytes Written (TB)	3,500	1,750	875	435
Nonrecoverable Read Errors per Bits Read	1 per 10E16	1 per 10E16	1 per 10E16	1 per 10E16
Mean Time Between Failures (MTBF, hours)	1,800,000	1,800,000	1,800,000	1,800,000
Warranty, Limited (years)	5	5	5	5
Power Management				
Power Supply	3.3V	3.3V	3.3V	3.3V
Active Max Average Power (W)	6.0	6.0	6.0	5.3
Average Idle Power (W)	2.0	1.95	1.83	1.75
Environmental				
Temperature, Operating Internal(°C)	0 to 70	0 to 70	0 to 70	0 to 70
Temperature, Nonoperating (°C)	-40 to 85	-40 to 85	-40 to 85	-40 to 85
Shock, 0.5ms (Gs)	1500	1500	1500	1500
Physical				
Height (in/mm, max)	0.140in/3.58mm	0.140in/3.58mm	0.087in/2.23mm	0.087in/2.23mm
Width (in/mm, max)	0.872in/22.15mm	0.872in/22.15mm	0.872in/22.15mm	0.872in/22.15mm
Depth (in/mm, max)	3.16in/80.15mm	3.16in/80.15mm	3.16in/80.15mm	3.16in/80.15mm
Weight (lb/g)	0.018lb/8.3g	0.017lb/8.1g	0.015lb/6.9g	0.014lb/6.5g
Carton Unit Quantity	10	10	10	10

¹ Performance data is based on testing under certain workload conditions and is subject to change.



Ordering Information			
Specifications			
Retail Packaging	Box Dimensions	Master Carton Dimensions	Pallet Dimensions
Depth/Length (in/mm)	0.944in/24mm	6.023in/153mm	47.24in/1200mm
Width (in/mm)	4.291in/109mm	11.496in/292mm	39.38in/1000mm
Height (in/mm)	6.102in/155mm	5.511in/140mm	52inch/1320mm
Weight (lb/kg)	0.14lb/0.062kg	1.9lb/0.88kg	448lb/203.2kg
Quantities			
Boxes per Master Carton	10		
Master Cartons per Pallet	196		
Pallet Layers	7		

System Requirements	What's Included
---------------------	-----------------

- Windows® 10, Windows 8.1
- Linux
- Seagate® IronWolf® 510 SSD

Region	Model Number	Capacity	Limited Warranty (years)	UPC Code	EAN Code	Multi-Pack UPC
WW	ZP1920NM30011	1.92TB	5	763649135983	8719706018357	10763649135980
WW	ZP960NM30011	960GB	5	763649135976	8719706018340	10763649135973
WW	ZP480NM30011	480GB	5	763649135969	8719706018333	10763649135966
WW	ZP240NM30011	240GB	5	763649135952	8719706018326	10763649135959

seagate.com



© 2020 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology, and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. IronWolf and the IronWolf logo are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Actual data rates may vary depending on operating environment and other factors, such as chosen interface and disk capacity. Seagate reserves the right to change, without notice, product offerings or specifications. DS2032.1-2002US February 2020



3.5 HDD DATA SHEET

Tough. Ready. Scalable Purpose-built for Connected-Home, SOHO, & Small-to-Medium Business NAS Environments



IronWolf™ is designed for consumer and commercial NAS.
Delivering Tough, Ready and Scalable 24x7 performance in multi-bay, networked environments.



Best-Fit Applications

- Consumer and Commercial NAS
- Desktops and Workstations
- Multimedia Servers



Key Advantages

Optimized for NAS with AgileArray™ enables Dual-Plane Balancing and Time-Limited Error Recovery to deliver best-in-class RAID performance in multi-bay systems.

Always On, Always Accessible IronWolf drives are designed for 24x7 usage, allowing users to access their data any time, anywhere.

All-CMR Portfolio All IronWolf drives utilize Conventional Magnetic Recording (CMR) technology for consistent, best-in-class NAS performance.

Up to 18TB Broad range of capacity options to deliver scalable and cost-efficient storage solutions.

Built Tough IronWolf drives are rated for 180TB/year workload, allowing consumer and commercial NAS users to seamlessly store and work with large amounts of networked data.

Superior Reliability and Dependability IronWolf drives are rated for 1M hours MTBF and include a 3-year limited warranty for hassle-free data storage and best-in-class total cost of ownership (TCO)

Rotational Vibration (RV) sensors¹. Built-in RV sensors for vibration tolerance and consistent performance in multi-bay systems.

IronWolf Health Management (IHM)² Actively protect your NAS data with Prevention, Intervention, and Recovery recommendations to ensure peak system health.

Peace of mind with Data Recovery³ IronWolf drives include three years of complimentary Rescue Data Recovery Services - in-house secure facilities, with an industry-leading recovery rate of 95% - so you do not have to incur high recovery costs in the event of accidental data corruption or drive damage.

¹ Refer to specifications table for models supported.

² IHM is enabled on all leading NAS systems. Please check with your NAS vendor or a Seagate sales representative for more details.

³ Rescue services not available in all countries. Contact your Seagate sales representative for further details.



Specifications	18TB	16TB	14TB	12TB	10TB
Capacity	18TB	16TB	14TB	12TB	10TB
Standard Model Number	ST18000VN000	ST16000VN001	ST14000VN0008	ST12000VN0008	ST10000VN0008
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design (Air or Helium)	Helium	Helium	Helium	Helium	Helium
Workload Rate Limit (WRL)	180	180	180	180	180
Rotational Vibration (RV) Sensor	Yes	Yes	Yes	Yes	Yes
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	240MB/s	240MB/s	240MB/s	210MB/s	210MB/s
Spindle Speed (RPM)	7200	7200	7200	7200	7200
Cache (MB)	256	256	256	256	256
Reliability					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3	3	3
Warranty, Limited (years)	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power	7.7	7.3	7.3	7.3	7.8
Idle Power Average (W)	5.5W	5.1W	5.1W	5.1W	5.0W
Standby Mode/Sleep Mode, Typical (W)	1.0/1.0	1.28/1.28	1.17/1.17	1.17/1.17	1.17/1.17
Voltage Tolerance, Inc. Noise (5V / 12V)	1.0 / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature					
Operating Temperature (ambient, min °C)	0	0	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock					
Shock, Operating/Nonoperating: 2ms (max)	40Gs/200Gs	50Gs/200Gs	50Gs/200Gs	50Gs/200Gs	70Gs/250Gs
Environmental/Acoustics					
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	28	28	28	28	28
Acoustics, Seek (typical) (dBA)	30	30	30	30	30
Physical					
Height (mm/in)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	670g/1.477lb	670g/1.477lb	650g/1.433lb	650g/1.433lb	690g/1.521lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



Specifications	10TB	8TB	8TB	6TB	6TB
Capacity	10TB	8TB	8TB	6TB	6TB
Standard Model Number	ST10000VN000	ST8000VN004	ST8000VN002	ST6000VN006	ST6000VN001
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design (Air or Helium)	Air	Air	Air	Air	Air
Workload Rate Limit (WRL)	180	180	180	180	180
Rotational Vibration (RV) Sensor	Yes	Yes	Yes	Yes	Yes
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	210MB/s	210MB/s	202MB/s	202MB/s	190MB/s
Spindle Speed (RPM)	7200	7200	5400	5400	5400
Cache (MB)	256	256	256	256	256
Reliability					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3	3	3
Warranty, Limited (years)	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power	10.1	10.1	5.3	5.3	5.3
Idle Power Average (W)	7.8W	7.8W	3.4W	3.4W	3.4W
Standby Mode/Sleep Mode, Typical (W)	1.0/1.0	1.0/1.0	0.25/0.25	0.25/0.25	0.25/0.25
Voltage Tolerance, Inc. Noise (5V / 12V)	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature					
Operating Temperature (ambient, min °C)	0	0	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock					
Shock, Operating/Nonoperating: 2ms (max)	70Gs/300Gs	70Gs/300Gs	80Gs/300Gs	80Gs/300Gs	70Gs/250Gs
Environmental/Acoustics					
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	28	28	25	26	26
Acoustics, Seek (typical) (dBA)	32	32	27	28	27
Physical					
Height (mm/in)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	720g/1.59lb	720g/1.59lb	630g/1.389lb	630g/1.389lb	610g/1.345lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



Specifications	4TB	4TB	3TB	3TB	2TB
Capacity	4TB	4TB	3TB	3TB	2TB
Standard Model Number	ST4000VN006	ST4000VN008	ST3000VN006	ST3000VN007	ST2000VN003
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design (Air or Helium)	Air	Air	Air	Air	Air
Workload Rate Limit (WRL)	180	180	180	180	180
Rotational Vibration (RV) Sensor	Yes	Yes	Yes	No	No
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	202MB/s	180MB/s	202MB/s	180MB/s	180MB/s
Spindle Speed (RPM)	5400	5900	5400	5900	5400
Cache (MB)	256	64	256	64	256
Reliability					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3	3	3
Warranty, Limited (years)	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power	4.8	4.8	4.8	4.8	3.7
Idle Power Average (W)	3.96W	3.95W	3.96W	4.8W	2.5W
Standby Mode/Sleep Mode, Typical (W)	0.5/0.5	0.5/0.5	0.5/0.5	0.5/0.5	0.25/0.25
Voltage Tolerance, Inc. Noise (5V / 12V)	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature					
Operating Temperature (ambient, min °C)	0	0	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock					
Shock, Operating/Nonoperating: 2ms (max)	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs
Environmental/Acoustics					
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	23	23	23	23	19
Acoustics, Seek (typical) (dBA)	27	25	27	25	21
Physical					
Height (mm/in)	20.20mm/0.795in	26.11mm/1.028in	20.20mm/0.795in	26.11mm/1.028in	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	490g/1.08lb	610g/1.345lb	490g/1.08lb	610g/1.345lb	415g/0.915lb
Carton Unit Quantity	25	20	25	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.



Specifications	2TB	1TB	1TB
Capacity	2TB	1TB	1TB
Standard Model Number	ST2000VN004	ST1000VN008	ST1000VN002
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance			
Drive Bays Supported	1-8 Bays	1-8 Bays	1-8 Bays
Recording Technology	CMR	CMR	CMR
Drive Design (Air or Helium)	Air	Air	Air
Workload Rate Limit (WRL)	180	180	180
Rotational Vibration (RV) Sensor	No	No	No
Dual-Plane Balance	Yes	Yes	Yes
Error Recovery Control	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	180MB/s	180MB/s	180MB/s
Spindle Speed (RPM)	5900	5400	5900
Cache (MB)	64	256	64
Reliability			
Load/Unload Cycles	600,000	600,000	—
Nonrecoverable Read Errors Rate, Max	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1,000,000	1,000,000	1,000,000
Rescue Data Recovery Services (years) ⁴	3	3	3
Warranty, Limited (years)	3	3	3
Power Management			
Startup Current, Typical (12V, A)	1.8	1.8	1.2
Average Operating Power	4.3	3.7	3.76
Idle Power Average (W)	3.56W	2.5W	2.5W
Standby Mode/Sleep Mode, Typical (W)	0.5/0.5	0.25/0.25	0.5/0.5
Voltage Tolerance, Inc. Noise (5V / 12V)	±5% / ±10%	±5% / ±10%	±5% / ±10%
Environmental/Temperature			
Operating Temperature (ambient, min °C)	0	0	0
Operating Temperature (drive reported, max °C) ⁵	65	65	65
Nonoperating Temperature (ambient, min / max °C)	-40 / 70	-40 / 70	-40 / 70
Environmental/Shock			
Shock, Operating/Nonoperating: 2ms (max)	80Gs/300Gs	80Gs/300Gs	80Gs/300Gs
Environmental/Acoustics			
Acoustics, Idle (typical, measured in Idle 1 state) (dBA)	19	21	21
Acoustics, Seek (typical) (dBA)	21	23	23
Physical			
Height (mm/in)	26.11mm/1.028in	20.20mm/0.795in	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	535g/1.18lb	415g/0.915lb	415g/0.915lb
Carton Unit Quantity	20	25	25
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8

⁴ Rescue services are not available in all countries. Contact your Seagate sales representative for more info.

⁵ It is not recommended to operate at sustained drive temperatures above 60 °C. Higher temperatures may affect drive health.

© 2021 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology, and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. AgileArray and IronWolf are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Actual data rates may vary depending on operating environment and other factors. Seagate reserves the right to change, without notice, product offerings or specifications. DS1904.20-2111US November 2021

A
Procuradoria-Geral de Justiça do Estado de Minas Gerais
Processo SIAD: Nº 254/2023
Unidade: 1091012
Processo SEI: Nº 19.16.1937.0064247/2023-12
Sessão: 28/11/2023 as 10:00 (horário de Brasília)

ANEXO V –DECLARAÇÃO NÃO EMPREGA MENOR

Processo Licitatório nº 254/2023

Objeto: Aquisição de servidores de arquivos tipo NAS (Network Attached Storage) - Sistema de discos para o armazenamento de dados em rede para uso nos GAECOS, com serviços de instalação, montagem e configuração dos servidores em comarcas de Minas Gerais, acompanhados da aquisição de discos rígidos avulsos.

A empresa PRIMETECH INFORMÁTICA EIRELI, inscrita no CNPJ sob o nº 03.812.745/0002-24, com endereço na Rua Raulino Gonçalves 169 sala 03 Enseada de SUA – CEP 29.050-405 Vitória -ES, por intermédio de seu representante legal o(a) Sr(a) CESAR LUCIANO CARDOSO SILVA, portador da Carteira de Identidade nº. 0512530386 SSP/BA e inscrito no CPF sob nº. 878.841.275-04, sob as penas da lei, para todos os fins, DECLARA, para os fins do disposto no inciso V do art. 27 da Lei Federal nº 8.666/93, que não emprega menor de dezoito anos em trabalho noturno, perigoso ou insalubre e não emprega menor de dezesseis anos.

Vitoria/ES -28/11/2023



Cesar Luciano Cardoso Silva
PRIMETECH INFORMÁTICA EIRELI
CNPJ: 03.812.745/0002-24

A
Procuradoria-Geral de Justiça do Estado de Minas Gerais
Processo SIAD: Nº 254/2023
Unidade: 1091012
Processo SEI: Nº 19.16.1937.0064247/2023-12
Sessão: 28/11/2023 as 10:00 (horário de Brasília)

ANEXO IV –DECLARAÇÃO REGULARIDADE

Processo Licitatório nº 254/2023

Objeto: Aquisição de servidores de arquivos tipo NAS (Network Attached Storage) - Sistema de discos para o armazenamento de dados em rede para uso nos GAECOS, com serviços de instalação, montagem e configuração dos servidores em comarcas de Minas Gerais, acompanhados da aquisição de discos rígidos avulsos.

A empresa PRIMETECH INFORMÁTICA EIRELI, inscrita no CNPJ sob o nº 03.812.745/0002-24, com endereço na Rua Raulino Gonçalves 169 sala 03 Enseada de SUA – CEP 29.050-405 Vitória -ES, por intermédio de seu representante legal o(a) Sr(a) CESAR LUCIANO CARDOSO SILVA, portador da Carteira de Identidade nº. 0512530386 SSP/BA e inscrito no CPF sob nº. 878.841.275-04, sob as penas da lei, para todos os fins, DECLARA, sob as penas da lei, que não está sob controle de grupo de pessoas, físicas ou jurídicas, já participante desta licitação como controlador de outra empresa.

DECLARA ainda, em cumprimento ao disposto na Resolução 37/09 do Conselho Nacional do Ministério Público, alterada pela Resolução nº 172/17, que não possui em seu quadro societário cônjuge, companheiro ou parente em linha reta, colateral ou por afinidade, até o terceiro grau, inclusive, de membros ocupantes de cargos de direção ou no exercício de funções administrativas, assim como de servidores ocupantes de cargos de direção, chefia e assessoramento vinculados direta ou indiretamente às unidades situadas na linha hierárquica da área encarregada da licitação, inclusive no período compreendido entre os 6 (seis) meses anteriores à publicação deste Edital até a presente data.

Vitoria/ES -28/11/2023



Cesar Luciano Cardoso Silva
PRIMETECH INFORMÁTICA EIRELI
CNPJ: 03.812.745/0002-24

A
Procuradoria-Geral de Justiça do Estado de Minas Gerais
Processo SIAD: Nº 254/2023
Unidade: 1091012
Processo SEI: Nº 19.16.1937.0064247/2023-12
Sessão: 28/11/2023 as 10:00 (horário de Brasília)

DECLARAÇÃO CONFORME CRITÉRIOS DE ACEITAÇÃO DA PROPOSTA

A empresa PRIMETECH INFORMÁTICA EIRELI, inscrita no CNPJ sob o nº 03.812.745/0002-24, com endereço na Rua Raulino Gonçalves 169 sala 03 Enseada de SUA – CEP 29.050-405 Vitória -ES, por intermédio de seu representante legal o(a) Sr(a) CESAR LUCIANO CARDOSO SILVA, portador da Carteira de Identidade nº. 0512530386 SSP/BA e inscrito no CPF sob nº. 878.841.275-04, sob as penas da lei, para todos os fins, DECLARA:

(X) Não ter sido condenado, o licitante ou seus dirigentes, por infringir as leis de combate à discriminação, em todas as suas formas, por motivos de raça, gênero e outros, conforme dispõe:

- a Constituição Federal de 1988 em seu inciso IV do art. 3º; inciso I do art. 5º; e
- os arts. 38 e 39 do Estatuto da Igualdade Racial, Lei nº 12.288, de 20 de julho de 2010.

(X) Não explorar o trabalho infante juvenil, em atenção ao que dispõe:

- o inciso XXXIII do art. 7º da Constituição Federal de 1988;
- o Título III do Capítulo IV do Decreto-Lei nº 5.452, de 1 de maio de 1943 (CLT);
- os arts. 60 a 69 da Lei nº 8.069, de 19 de julho de 1990 (ECA);
- a Lei nº 8.069, de 19 de julho de 1990;
- o Decreto nº 6.841, de 12 de junho de 2008, o qual trata da proibição das piores formas de trabalho infantil e ação imediata para sua eliminação.

(X) Não praticar, de nenhuma forma, ações que possam ser enquadradas nos arts. 1º e 170 da Constituição Federal, nos arts. 149, 203 e 207 do Código Penal (dispositivos que tratam do trabalho análogo ao de escravo e tráfico de pessoas para esse fim), Decreto nº 5.017/2004, que promulga o Protocolo de Palermo e as convenções OIT 29 e 105.

(X) não incidir em qualquer hipótese de vedação prevista no inc. VI e no § 3.º do art. 2º da Resolução CNJ 07/2005 (modificada pela Resolução CNJ 229/2016), e que não possui no quadro societário servidor público da ativa desta Instituição Pública (art. 17, inciso VII, da Lei 13.707/2018) - LDO 2019).

(x) atende aos critérios de qualidade ambiental e sustentabilidade socioambiental, respeitando as normas de proteção do meio ambiente, em conformidade com a Instrução Normativa de nº 01, de 19 de janeiro de 2010, da Secretaria de Logística e Tecnologia da Informação do Ministério do Planejamento, Orçamento e Gestão (SLTI/MPOG).

Vitoria/ES 28/11/2023



Cesar Luciano Cardoso Silva

PRIMETECH INFORMÁTICA EIRELI

CNPJ: 03.812.745/0002-24

A
Procuradoria-Geral de Justiça do Estado de Minas Gerais
Processo SIAD: Nº 254/2023
Unidade: 1091012
Processo SEI: Nº 19.16.1937.0064247/2023-12
Sessão: 28/11/2023 as 10:00 (horário de Brasília)

DECLARAÇÃO

Declaro que estou ciente e concordo com as condições contidas no edital e seus anexos, bem como de que cumpro plenamente os requisitos de habilitação definidos no edital.

Declaro sob as penas da lei, que até a presente data inexistem fatos impeditivos para a minha habilitação no presente processo licitatório, ciente da obrigatoriedade de declarar ocorrências posteriores.

Declaro para fins do disposto no inciso V do art. 27 da Lei nº 8.666, de 21 de junho de 1993, acrescido pela Lei nº 9.854, de 27 de outubro de 1999, que não emprego menor de 18 (dezoito) anos em trabalho noturno, perigoso ou insalubre e não emprego menor de 16 (dezesesseis) anos, salvo menor, a partir de 14 (quatorze) anos, na condição de aprendiz, nos termos do inciso XXXIII, do art. 7º da Constituição Federal.

Declaro que a proposta apresentada para essa licitação foi elaborada de maneira independente, de acordo com o que é estabelecido na Instrução Normativa Nº 2 de 16 de setembro de 2009 da SLTI/MP.

Declaro que não possuo, em minha cadeia produtiva, empregados executando trabalho degradante ou forçado, observando o disposto nos incisos III e IV do art.1º e no inciso III do art.5º da Constituição Federal.

Declaro que, conforme disposto no art. 93 da Lei nº 8.213, de 24 de julho de 1991, estou ciente do cumprimento da reserva de cargos prevista em lei para pessoa com deficiência ou para reabilitado da Previdência Social e que, se aplicado ao número de funcionários da minha empresa, atendo às regras de acessibilidade previstas na legislação.

Declaro sob as penas da Lei, que cumpro a cota de aprendizagem nos termos estabelecidos no art. 429 da CLT.

Vitoria/ES 28/11/2023



Cesar Luciano Cardoso Silva
PRIMETECH INFORMÁTICA EIRELI
CNPJ: 03.812.745/0002-24



VÁLIDA EM TODO O TERRITÓRIO NACIONAL

RÉGISTRO GERAL 05125303 86 DATA DE EXPEDIÇÃO 24/07/2002

NOME CESAR LUCIANO CARDOSO SILVA

FILIAÇÃO PEDRO DE JESUS SILVA IDACI CARDOSO DE SOUZA

NATURALIDADE SALVADOR BA DATA DE NASCIMENTO 19/09/1975

DOC ORIGEM CER-NAS CM-SALVADOR BA

DST-SAO PEDRO L-109 F-276 R-047472

CPF 878841275-04

SALVADOR-BA

ASSINATURA DO DIRETOR

LEI Nº 7.116 DE 29/08/83

TO VACINADO
BRASIL
LIVRE
DA RUBÉOLA

CARTÓRIO AZEVEDO BASTOS 1º OFÍCIO DE REGISTRO CIVIL DAS PESSOAS NATURAIS E TABELIONATO DE NOTAS - Código CNJ 06.870-0

Av. Presidente Epitácio Pessoa, 1141 - Bairro Dos Estúdios - João Pessoa/PB - CEP 53035-900 - Tel: (33) 3244-5404 - Fax: (33) 3244-5404

Autenticação Digital

De acordo com os artigos 1º, 3º e 7º Inc. V 8º, 41 e 52 da Lei Federal 8.935/1994 e Art. 6º Inc. XII da Lei Estadual 8.721/2008 autentico a presente imagem digitalizada, reprodução fiel do documento apresentado e conferido neste ato. O referido é verdade. Dou fé.

Cód. Autenticação: 67820511190948050912-2; Data: 05/11/2019 09:48:34

Selo Digital de Fiscalização Tipo Normal C: AJI38594-KEPC;
Valor Total do Ato: R\$ 4,42

Confira os dados do ato em: <https://selodigital.tjpb.jus.br>

Wálber Azevedo de Miranda Cavalcanti
Titular