PROMISE
TECHNOLOGY

Vess Data Sheet

Vess R3000

Maximum Value, Minimal Cost

Vess R3000 Series unified storage consolidates SAN and NAS onto a single hardware platform for flexible, easy to administer, cost-effective and high-performance enterprise storage.

Enterprise level capability and bundled advanced storage services make the Vess R3000 Series the most cost-effective solutions for small business. Small businesses benefit from simplified administration features such as web-based management and One Plug Auto Service (OPAS) to enable faster tech support.

Proprietary features Predictive Data Migration (PDM), CacheGuard Data Protection and Advanced Battery Flash Backup provide additional data safety. Thin-Provisioning enables extra SAN capacity on demand, while expansion of physical capacity is seamlessly enabled via additional JBOD units. Read/Write Flash Cache Acceleration intelligent data caching and Snapshot capability provides additional data protection.

Highlights

Unified Storage Solution

Block and file protocols available on a single hardware platform.

Scalability

Easily scale up capacity from Terabytes to Petabytes with additional JBOD storage.

Flexibility

Available 10G or 1G network connection, 8/16/32G FC option available, with 12G/6G SAS and 6G SATA backward compatibility.

Proprietary Data Protection

CacheGuard Data Protection and Predictive Data Migration (PDM) available exclusively from PROMISE provides additional layer of data safety on top of robust

Enterprise Applications

Well suited for high-availability/high-capacity enterprise environments, virtualized environments, video surveillance and IT infrastructure.

Technical Specifications

Model S: Single Controller / D: Dual Controller	Vess R3600iS / R3600iD	Vess R3600xiS / R3600xiD	Vess R3604FiS / R3604FiD	Vess R3600tiS / R3600tiD*
General Information				
Drive Support	• Up to 16 3.5" drives • 6/12 Gb SAS, 6 Gb SATA HDD[2] and SSD • Supports any mix of SAS and SATA drives simultaneously in the same enclosure			
Memory	8GB x 1 per ctrl (up to 64GB)			
Host Connectivity per Ctrl	1x Quad port 1GbE	1x Quad port 1GbE 1x Dual port 10GbE SFP+	1x Quad port 1GbE 1 X Quad port 32G FC	1x Quad port 1GbE 1x Dual port 10GBASE-T
Capacity/Expansion	Online Capacity/Volume Expansion up-to 12 JBOD's, 208 drives			
Operational Features				
RAID Levels	0, 1 , 5, 6, 10, 50, 60			
Hot Spares	Global or dedicated with revertible option			
Max pool per System	Advance pool: 32 / Standard pool: 32			
Max Volumes per System	Advance pool: 1024 / Standard pool: 991			
Max Volumes per Pool	Advance pool: 256 / Standard pool: 31			
Advanced Storage Features	• Advanced Cache Mirroring over PCIe Gen3 • LUN Masking and Mapping	• I/O performance & power monitoring tools • PerfectFlash - Non-Disruptive Software Update	• Asymmetric LUN Unit Access (ALUA) • USB Service Log	
Data Services[1] (Advanced Pool)	• Thin Provision • Snapshot • Thin Clone • Thick Clone • SSD Cache			
Background Activities	• Media Patrol • Foreground Initialization • Redundancy Check • Feature rich task scheduler for background activities	• Background Synchronization • Rebuild • Disk SMART Polling • UPS Monitoring		
PerfectRAID Features	• Predictive Data Migration (PDM) • Intelligent Bad Sector Remapping • SMART Error Handling	• NVRAM Error Logging • Disk Slot Power Control		
SAN Protocol	8/16/32G FC ; Max 256 Sessions per port, 1/10G iSCSI ; Max 1024 Sessions per controller			
Storage Expansion per Ctrl	1 x one 12Gb SAS Mini-SAS (SFF-8644)			
Management per Ctrl	1 x RJ-45 1Gb Ethernet and 1x RJ11 Serial Port			
GreenRAID Features	Four levels of advanced power management disk drive (MAID) support, Efficient 80Plus Certified Power Supply			
NAS Feature[1]				
Supported Network Protocols	SMB/CIFS (Windows, MAC), NFS (Linux/Unix), FTP, WebDAV			
Max. NAS Share	1024 per pool			
NAS Share Size	1PB			
Max. no. of Concurrent Sessions	4096			
Max. Account	10K			
Supported Domain	Microsoft Active Directory, LDAP, Apple Open Directory			
Max. Domain Account	100k			
Data Management	Permission Management, Quota Management, Online Expansion			
System Management				
Management Interfaces	• Web Based management using WebPAM PROe (Ethernet) • Command Line Interface (CLI) • Third Party Management Support via SNMP			
Supported OSs	Windows Server 2008R2 SP1 2012 R2, 2016, 2019, 2022, macOS Sierra 10.12.6, Ventura 13.1, RHEL 7.2, SLES 11 SP4, 12 SP1, VMWare ESXi 6.0, 6.5, 6.7, 7.0, 8.0, Citrix Hypervisor 7.0 LTSR, 7.1 LTSR, 8.0, 8.1, 8.2 LTSR			
Mechanical Specifications				
Power Supply	CRPS 550W ; Efficiency 80PLUS Certified Redundant Power Supply			
Voltage	AC: 100-240VAC; DC: 180-320VDC Auto-Ranging			
Current	< 8A@100-240VAC@full load; < 8A@180-320VDC@full load			
Power Conversion Efficiency	>80% @ 110V (>20% load), >80% @ 240V (>20% load) Temperature Range			
Temperature Range	Operational: 5° to 35°C, Non-Operational: -40° to 60°C			
Humidity	Operational: 20% to 80% (Non-Condensing), Non--Operational: ~ 95% (Non-Condensing)			
Acoustic Noise Levels	< 60dB, 25C			
Shock	Operational: 5G, 11 ms duration, Non-Operational: 30G, 11ms duration			
Vibration	Operational: 0.2G, 5 to 500Hz (sine wave) ; 0.41G, 3-10-200-500Hz (Random) , Non-Operational: 1G, 5 to 500Hz (sine wave) ; 2.256G, 5-80-350-500Hz (Random)			
Environmental Standards	RoHS, WEEE			
Dimensions (H x W x D)	131mm x 446.7mm x 507mm (5.2" x 17.6" x 19.96")			
Warranty and Support				
Warranty	3-years standard warranty, optional extended warranty, and on-site parts replacement program (PROMISE ServicePlus) available.			
Support	24/7 PROMISE eSupport Portal (support.promise.com), optional 24/7 phone and email support available.			

Note:[1] 64GB DRAM is required for NAS features and data services [2] SATA drives require a SAS-SATA adapter.

Contact us