

# Vess R2000 Solution Brief



## The Ultimate in Value, Flexibility, and Reliability Unified storage that is everything it should be

The Vess R2000 Series consolidates both block and file storage onto a single platform, providing SMBs a cost-effective way to meet performance goals while simplifying administration and adding flexibility. The high availability active-active Vess R2000 is designed for a diverse range of data-intensive industries, including midsize to large scale surveillance installations, file-sharing pools for compressed video ingest and playback or cloud data centers.

### How does Vess R2000 support my business on the next level?

#### Scale past 100 drives to handle any project scope.

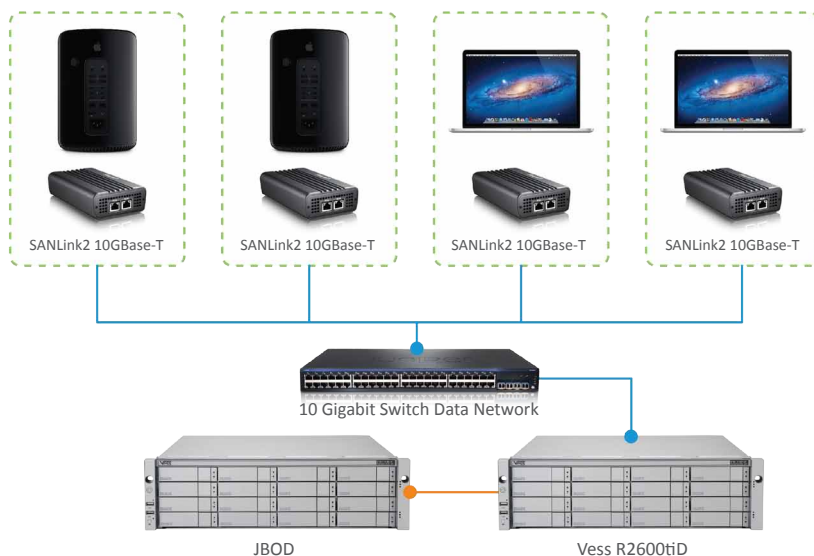
- Expand up to 112 drives through the Vess JBOD enclosures to tackle any sized project for your growing business.

#### Leverage technology that is globally virtualization and backup certified.

- Compatible with VMware vSphere, Microsoft Hyper-V, and Citrix XenServer for your virtualization infrastructure. Also certified with DataCore SANsymphony-V.

#### Optimized precisely for surveillance applications.

- Certified with industry leading video management software for years.



10Gbit NAS Test Topology – Dual Controller

## Rich Media Streaming

The Vess R2000 Series is an ideal content distribution solution for many small unstructured data media files. As the consumerization of IT proliferates into the datacenter, the use of video is becoming more pervasive. IT managers need a way to not only manage this data over time, but effectively allow users to access and distribute.

The Vess R2000 Series is an ideal file-sharing NAS solution for compressed video editing workflows using Apple Final Cut Pro X and Adobe Premiere Pro CC. The Vess R2000 Series can support up to 22 ProRes streams (ProRes 422 HQ [1080 at 29.97fps]) with a dual active controller setup.

### Single Controller vs. Dual Controller Playback Test Results (OS X 10.10.2)

| App         | Playback   | Data Rate MBs | Single Controller | Dual Controller |
|-------------|--|---------------|-------------------|-----------------|
|             | Load   |               |                   |                 |
| FCPX 10.1.3 | PreRes4444 10bit QuadHD 3840x2160 @59.94fps .mov | 304.9         | 1                 | 1               |
|             | PreRes4444 10bit QuadHD 3840x2160 @50fps .mov    | 254.4         | 1                 | 2               |
|             | PreRes4444 10bit QuadHD 3840x2160 @29.97fps .mov | 152.5         | 2                 | 3               |
|             | PreRes4444 10bit QuadHD 3840x2160 @23.98fps .mov | 122.1         | 3                 | 6               |
|             | ProRes 422 HQ (1080 @29.97fps) .mov              | 27.8          | 11                | 22              |
|             | DVCPro HD 1280x1080 @29.97fps.mov                | 14.6          | 21                | 42              |

NOTE: The R2000 series video performance playback test results are provided as a test-lab result with Apple Final Cut Pro X software performed by PROMISE. The model used was a 10Gb iSCSI storage system with 16GB memory per controller and fully loaded HGST hard disk drives at RAID5 configuration. For more audio and video loads streaming test configuration, please visit our website.

## Vess R2000 Entry SMB Unified Storage

### Product Advocates

- SMBs seeking cost effective backup for secondary or tertiary storage
- Workgroups requiring low resolution ProRes access or streaming
- Scalable storage for surveillance installations

### Customer Pains

- Limited IT budget and resources
- Difficulty in managing growing amounts of unstructured data
- Difficult installation and complex deployment

### Common Requests

- Entry-level “pay as you grow” scalable solution
- 8G FC block-based SAN performance, with 1/10Gb Ethernet access for NAS file-based workflows
- Entry storage for virtualization environments

### Market Applications

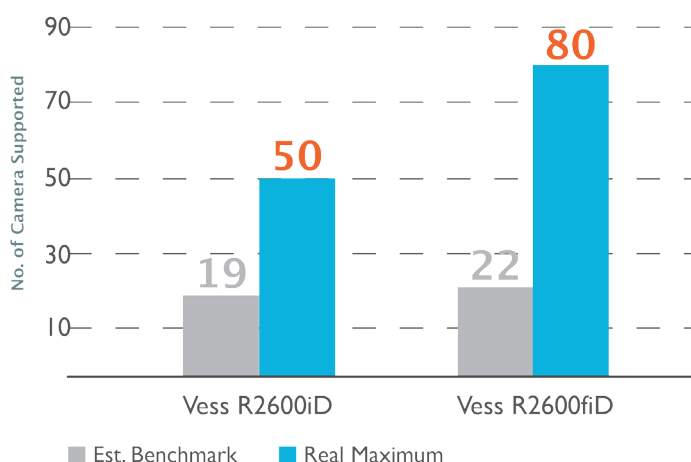
- Video Surveillance: Government agencies and SMBs
- Big Data: Generic IT backup or compliance environments and small data centers
- Video Groups: Rich Media IT management, or compressed video workflow for post-production applications

## Video Surveillance

Master all your company's surveillance cameras simultaneously. Enterprises that want to accomplish aggressive timelines and projects understand that you pay the price when subpar products are used. There comes a time when globally certified products that are made specifically for rich media video surveillance endeavors are needed over generic run-of-the-mill products.

From airports to government surveillance, the Vess A2600 is surveillance VMS certified and can scale with the Vess R2600. Cost effectively provide storage to hundreds of cameras simultaneously with a 1Gb iSCSI, 1/10Gb iSCSI (BaseT or SFP+), or 8Gb FC/1Gb configuration.

### Certified VMS Partners



*NOTE: The performance benchmark is provided as a test-lab result performed by Milestone that uses R2000 series product as the storage location for both the video live and archive database during the test. The number of cameras compares the maximum camera support capability between actual performance test measurement and predicted benchmark level recommended by the calculator.*

## High Throughput for Surveillance

The Vess R2000 Series is proven to deliver outstanding performance in surveillance environments. It performs as a video storage platform within the Milestone XProtect VMS system at a level that is two to four times higher than the benchmark levels determined by the Milestone Server and Storage Calculator. The system performs at a high level of data throughput, and with acceptable read/write latency when using the optimal logical disk configuration.

## SMB Backup and Archive

For established groups, it may have become difficult to initiate change. Unfortunately, as these groups grow, they require sophisticated and intuitive systems that make data management a breeze to not only manage but implement, too. Ensure that as your group grows, everything moves smoothly along with it.

Begin with the Vess R2000 Series entry SMB external storage solution, and “pay as you grow” for backup or archive. For virtualization environments, begin with a 1Gb iSCSI or 1/10Gb iSCSI (BaseT or SFP+) configuration. Or in data centers with some performance requirements, begin with the 8Gb FC/1GbE unified solution.

## Ideal for IT Environments

The Vess R2000 Series enables users to select an operation mode optimized for their business needs, delivering customized performance and flexibility for multiple storage requirements including unstructured data, archiving and cloud data centers. Additionally, the Vess R2000 is certified with VMware vSphere, Citrix XenServer, Microsoft Hyper-V and DataCore SANsymphony-V.



## File Sync and Share


Access and share your files from your mobile devices or online. No longer saturate email bandwidth by sending

links to large media files, which are stored on-premise and accessed through the cloud. The FileCruiser appliance configured with the Vess R2000 Series provides a private cloud solution for workflow collaboration. Share content without redundant files seamlessly, with individual privacy access controls.

## Scale-Out Storage

As much as 90 percent of the world's data has been created in the last two years - a trend which is only expected to accelerate. The explosion of data has created massive challenges for IT administrators who must now think on a petabyte scale. VSky A1100 is PROMISE's scale-out storage solution available as a 1U appliance server that connects to Vess R2000 storage providing a unified storage pool for a large number of clients to access.

### SMB STORAGE ARRAY SOLUTIONS

| Model Name                  | R2600iS/R2600iD   | R2600tiS/R2600tiD<br>R2600xiS/R2600xiD*  | R2600fiS/R2600fiD   |
|-----------------------------|---|--|---|
| Product image               |  |  |  |
| Product Category            | IP SAN Storage  | IP SAN Storage   | FC & IP SAN Storage   |
| Availability                | Released  | Released   | Released  |
| Form Factor                 | 3U16, 19" rackmount   | 3U16, 19" rackmount  | 3U16, 19" rackmount   |
| Controller                  | Single/Dual   | Single/Dual  | Single/Dual   |
| Drive Support               | SAS/SATA 6Gb/s  | SAS/SATA 6Gb/s   | SAS/SATA 6Gb/s  |
| Cache Memory per Controller | 2GB Standard (max. 16GB)  | 2GB Standard (max. 16GB)   | 2GB Standard (max. 16GB)  |
| Max. # of HDDs Supported    | 112   | 112  | 112   |
| Host Connect Interface      | 4x 1Gb iSCSI  | 2x 10Gb iSCSI<br>4x 1Gb iSCSI  | 2x 8Gb FC<br>4x 1Gb iSCSI   |
| RAID Levels                 | 0, 1, 1E, 3, 5, 6, 10 (0+1), 30, 50, 60   | 0, 1, 1E, 3, 5, 6, 10 (0+1), 30, 50, 60  | 0, 1, 1E, 3, 5, 6, 10 (0+1), 30, 50, 60   |
| Power Supply                | 500W (Three redundant 250W N+1 design)  | 500W (Three redundant 250W N+1 design)   | 500W (Three redundant 250W N+1 design)  |
| Dimensions (HxWxD)          | 131 x 447 x 507 mm  | 131 x 447 x 507 mm   | 131 x 447 x 507 mm  |
| Weight                      | 20.1 kg (44.3 lbs) w/o drives,<br>31.3 kg (69 lbs) w/ drives                        | 20.1 kg (44.3 lbs) w/o drives<br>31.3 kg (69 lbs) w/ drives                          | 20.1 kg (44.3 lbs) w/o drives<br>31.3 kg (69 lbs) w/ drives                           |
| Warranty                    | 3 years and EW plans  | 3 years and EW plans   | 3 years and EW plans  |

\*R2600ti supports 10GBASE-T 10 Gbit/s Ethernet over copper twisted pair cable, while R2600xi supports 10G SFP+ over fiber optic fabric

