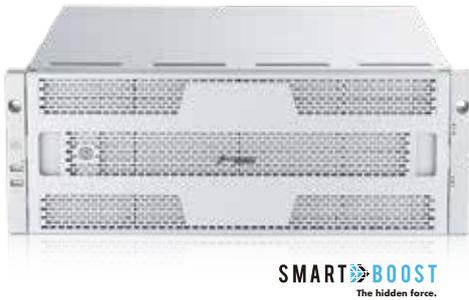




Vess A7000 Data Sheet



SMART BOOST
The hidden force.

Features

- ▶ **Optimized for Surveillance**
Storage appliance optimized for IP video surveillance.
- ▶ **Extensive VMS Support**
Certified/tested with the world's leading video management software.
- ▶ **Midsize to Large-Scale Solutions**
Ideal for more than a hundred full-HD IP cameras, perfect for banking, retail, gaming, manufacturing, and more.
- ▶ **Add-On Graphic Card Supported**
Capable of adding more extra GPU for advanced IVA applications. Support 1+1 add-on graphic card @A7600, 2+1 @A7800.
- ▶ **Easy to Administer & Maintain**
Hot swappable drive bays, redundant power supplies, & One Plug Auto Service (OPAS) ensure Vess is incredibly easy to administer and maintain.

Optimized for Video Surveillance

The Vess A7000 Series storage appliance is specially engineered for IP video surveillance deployment on medium to large scale; ideally suited for surveillance systems in banks, malls, casinos, factories, warehouses, and commercial, residential, governmental or private enterprises. The subsystems are capable of continuous recording and playback operation without dropping frames.

Server Level Performance & Expansion Design

Two options for large HDD capacity enclosures are available: a 3U 16-drive (Vess A7600) and 4U 24-drive (Vess A7800). The Intel E5 CPU combined with Promise Technology knowhow creates an outstanding combination of performance and reliability for Midsize to Large-Scale surveillance deployments. For larger storage system requirements, the system is cost effect using the Promise JBOD to extend capacity without the added expense of an additional RAID server.

SMARTBOOST™ Technology

PROMISE proprietary SMARTBOOST™ Technology provides you the most stable and high performance storage solution for your surveillance system. Performance limited by storage equipment bottlenecks is significantly improved by Promise SMARTBOOST™ Technology. With the optimized software features and FRU hardware design of Smart Boost Technology, you have the best stability and performance with the highest C/P ratio.

Purpose Built for Intelligent Video Analytics

To handle more advanced Intelligent Video Analytics (IVA) demand in Surveillance market, Vess A7000 series is designed to support multiple add-on graphic cards with embedded GPU to meet the requirement of such advanced projects in the field. The unique SMARTBOOST™ Video technology makes A7000 series more suitable for IVA applications with skill and ease.

Stepping Stone to Artificial Intelligence

Together with the hardware design of scalable add-on GPU, SMARTBOOST™ Video /Storage technology, Vess A7000 series is the best enter point of Artificial Intelligence (AI) applications for your future surveillance demand. Taking good care of your recording videos without frame dropped, reduce your system loading, scalable hardware design to add more GPU onto your system, brings you connected with AI technology without any risk of unnecessary cost.

Technical Specifications

	Vess A7600	Vess A7800
Model		
General Information		
Camera Range ¹	100	150
Form Factor	3U, 19" Rackmount	4U, 19" Rackmount
Number Of Drives	16 Drives (3.5")	24 Drives (3.5")
Drive Type	12Gbs SAS/ 6Gbs SATA @ 3.5", SSD capable @2.5", Hot Swappable	12Gbs SAS/ 6Gbs SATA @ 3.5", SSD capable @2.5", Hot Swappable
# of Controllers	Single	Single
System Processor	Intel® Xeon® E5-2603v4, E5-2600v4 series optional based on demand	Intel® Xeon® E5-2609v4, E5-2600v4 series optional based on demand
System Memory	8GB x 2 Default (Max 512GB ²)	8GB x 2 Default (Max 512GB ²)
I/O Interface	2x Gigabit Ethernet / 1xIPMI	2x Gigabit Ethernet / 1xIPMI
Internal Storage (M.2)	128GB	128GB
Storage Expansion	Optional Vess SAS and iSCSI Storage	Optional Vess SAS and iSCSI Storage
Max # of HDDs Supported	Up to 96 drives through SAS JBOD expansion(iSCSI optional)	Up to 104 drives through SAS JBOD expansion(iSCSI optional)
Other Interfaces		
# of USB Ports	2x USB 3.0, 4x USB 2.0	2x USB 3.0, 4x USB 2.0
PCI Express Ports	3x 16-lane Gen 3.0 PCIe2	3x 16-lane Gen 3.0 PCIe2
Graphics	D-sub VGA(Mgmt Purpose)/A7600 1(Wide)+1(Narrow)	D-sub VGA(Mgmt Purpose)/A7800 2(Wide)+1(Narrow)
Serial Interfaces	1x Serial Port	1x Serial Port
Microphone	3x 3.5mm Audio Jack	3x 3.5mm Audio Jack
RAID Operational Feature		
RAID Levels	0, 1, 1E, 3, 5, 6, 10 (0+1), 30, 50, 60. Any combination can exist at the same time	
Hot Spares	Multiple global or dedicated hot-spare drives with revertible option	
Max. LUNs per System/Array	256/32	
Software		
OS Supported (64-bit)	Windows 10, WS 2016, WS 2019	
Management Tools	Graphical UI/SNMP via Ethernet, CLI/CLU via Ethernet or Graphics, OPAS Service via USB, IPMI, SDK or API for Integration	
Appliance Mode	Surveillance Optimization @ Arrays in Normal and Degrade	
Event Notification	Email, SNMP, Buzzer, LEDs	
System Information		
AC Input	100 ~ 240 VAC, 60 ~ 50Hz	
Current (Maximum)	8-4A (550W) , 10A (800W-Vess A7800 only)	
Power Supply	Redundant 550W for each power, Hot swappable N+1 Design (800W optional with A7800 only)	
Controller	Replaceable FRU design	
Temperature	5° ~ 40°C (-40° ~ 60°C non-operational)	
Dimensions (H x W x D)	131 x 503 x 447 mm (5.1 x 19.8 x 17.6 in)	173 x 503 x 447 mm (6.8 x 19.8 x 17.6 in)
Weight	System W/O HDD: 17.656 kg System W/ HDD: 28.699 kg	System W/O HDD: 22.484 kg System W/ HDD: 39.048 kg
Safety/EMI	CE, FCC, VCCI, RCM, BSMI, KC, (EMI Class A), CB, cTUVus ³	
Warranty and Support		
Warranty	3 year limited warranty	
Optional Accessories	Sliding Rail, 4/8/16/32 GB DDR4 Memory	

¹ The ideal camera range were the test output with fully populated enclosure and 16GB memory under 1080P/30FPS/5Mbps, H.264 @Pure Recording.

² 256GB@RDIMM, 512GB @LRDIMM

³ cTUVus label marking is tested according to UL 62368-1

*The final spec may be various without further notice, please check with Promise website for the latest information

