



# **VESS A-SERIES NVR APPLIANCES** FOR IP VIDEO SURVEILLANCE

#### **Ideal Customer Profile**

- IP video surveillance deployments
- Surveillance customers who need to store data for anywhere from several weeks to vears
- Looking for an IP video surveillance solution that is inexpensive and easy to

# **Typical Customer Needs**

- Best price/performance
- Low latency recording
- Easy to deploy, use and maintain
- Failsafe data protection
- Easy to scale as needs grow

### **Typical Customer Pain Points**

- Applying storage designed for IT in surveillance applications
- Dropped video frames
- Difficulty in administering & maintaining storage solutions
- Too expensive
- Integrating hardware and software from several different vendors

### **Typical Use Cases**

Ideal for IP video surveillance deployments of any size and in any industry

























# Why Do Customers Buy the Vess A-Series?

- SmartBoost Technologies: Unique technologies which allow the systems to handle a much higher number of IP cameras:
  - Predictive Playback Utilizes idle recording times to monitor read patterns to predict where the next playback will be needed so the hard disk drives are not competing with the workload of the system.
  - Sequential Pattern Recording Eliminates the heavy workloads caused by random write patterns. Monitors recording patterns and collects data in the cache buffer and only writes data to the drives once a full stripe is ready, creating a sequential recording pattern with the smoothest performance.
- Reduces Deployment Costs and Complexity: Reduces support and equipment costs because there is no separate RAID storage unit to manage, eliminating the need for an extra server, controller cards, external cables, and a separate storage enclosure.
- Open Platform: Compatible with a range of VMS including Aimetis, Axxonsoft, CamlQ, CSVi, Digifort, OnSSI, SeeTec, Genetec, and Milestone and IP cameras from Axis, Bosch, Samsung and Sony.
- Milestone XProtect Plug-in: Makes storage management significantly more convenient for users as the Vess GUI is embedded in the XProtect application and runs as an integrated part of the software.
- Surveillance Project Design Tool: Helps determine the overall installation requirement of a given project by calculating total storage space, bandwidth needed, recording server and external storage requirements.
- Smooth Scalability: Easily expand via iSCSI by adding Promise Vess R2000 storage with built-in SmartBoost Technology either for live recording on external storage or for archiving.
- Easy Management & Serviceability: Hot swappable drive bays, redundant power supplies, & One Plug Auto Service.



Tachnical Specifications

| # of USB Ports   | <b>Technical Speci</b>    | fications  |   |                                       |  |
|--|---------------------------|--|---|---------------------------------------|--|
| Camera Ranger   Up to 35"  |                           | Vess A2330   | Vess A2200  | Vess A3340/A3340d                     | Vess A2600   |
| Form Factor   20,19* Rackmount   20,19* Rackmount   20,19* Rackmount   30,19* Rackmount   | General Information       |  |   |                                       |  |
| Number Of Drives   6 Drives (3.5")   6 Drives (3.5")   16 Drives (3.5")   17 Drives (3.5")   17 Drives (3.5")   18 Drives (3.   | Camera Range²             | Up to 35*  | Up to 64  | Up to 80*                             | Up to 128  |
| Drive Type   | Form Factor               | 2U, 19" Rackmount  | 2U, 19" Rackmount   | 2U, 19" Rackmount                     | 3U, 19" Rackmount  |
| Single   | Number Of Drives          | 6 Drives (3.5")  | 6 Drives (3.5")   | 8 Drives (3.5")                       | 16 Drives (3.5")   |
| System Processor   | Drive Type                |  | SATA (6Gb/s <sup>1</sup> or 3Gb/s), N                           | ICQ, TCQ, Hot Swappable               |  |
| System Memory   8GB DDR3   8GB Default (Max 16GB)   8GB DDR4 (Max 32GB)   8GB Default (Max 16GB)   | # of Controllers          |  | Sin   | gle                                   |  |
|  | System Processor          | Intel® Celeron J1900   | Intel® Core™ i3   | Intel® Xeon® E3                       | Intel® Xeon® E3  |
| Storage Expansion  | System Memory             | 8GB DDR3   | 8GB Default (Max 16GB)  | 8GB DDR4 (Max 32GB)                   | 8GB Default (Max 16GB)   |
| Description      | I/O Interface             | 2x Gigabit Ethernet  | 4x Gigabit Ethernet   | 2x Gigabit Ethernet                   | 4x Gigabit Ethernet  |
| ## of USB Parts  | Storage Expansion         |  | iSC   | CSI                                   |  |
| ## of USB Ports  | Max # of HDDs Supported   | =  |   |                                       | Up to 128 drives through iSCS<br>JBOD expansion  |
| PCI Express Ports   N/A   1x 16-lane Gen 2.0 PCIe, 2x 8-lane Gen 2.0 PCIe, 2x 8-lane Gen 2.0 PCIe   1x PCIe 3.0 x 8   1x 16-lane Gen 2.0 PCIe   3x 8-lane Gen 2.0 PCIe      | Other Interfaces          |  |   |                                       |  |
| PCL Express POTS   | # of USB Ports            | 4x USB 3.0, 2x USB 2.0   | 4x USB 3.0, 2x USB 2.0  | 6x USB 3.0, 2x USB 2.0                | 4x USB 2.0   |
| Serial Interfaces  Audio & Microphone  2x 3.5mm Audio Jack  2x 3.5mm Audio Jack  3x 3.5mm Audio Jack + SPDIF  2x 3.5mm Audio Jack  3x 3.5mm Audio Jack + SPDIF  2x 3.5mm Audio Jack  Sensor In Compatible w/ DC3.3V to 24V, photo coupler input x 8  Alarm Out  AAID Operational Features  RAID Levels  Hot Spares  Multiple global or dedicated hot-spare drives with revertible option  Max. LUNs per System/ Array  OS Supported  Windows Embedded Standard 7 Runtime (WS7P), Windows 10, Windows Server 2012R2 Standard  Management Tools  Graphical UI/SNMIP via Ethernet, CLI/CLU via Ethernet or Graphics, OPAS Service via USB, SDK or API for Integration  Event Notification  Event Notification  AC Input  Current (Maximum)  1.1A  4A (100V); 2A (240V)  2.5A  4A (100V); 2A (240V)  Three redundant 250W, Energy-efficient 30PLUS Certified, 90-2 264V full-ranging w/PFC, Hot swappable Mest 10 288 BTU/hr  Fan Swappable  BTU  375.43 BTU/h  Fan Swappable  6.8kg (14.96 lbs) w/o drives  10.4kg (24.1 lbs) w/drives  10.4kg (24.1 lbs) w/drives  10.4kg (24.2  | PCI Express Ports         | N/A  |   |                                       |  |
| Audio & Microphone 2x 3.5mm Audio Jack 2x 3.5mm Audio Jack 3x 3.5mm Audio Jack 3x 3.5mm Audio Jack 5PDIF 2x 3.5mm Audio Ja | Graphics                  | D-sub and HDMI   | D-sub VGA and HDMI  | D-sub, HDMI and Display Port          | D-sub VGA and HDMI   |
| Sensor In Alarm Out Compatible w/ DC3.3V to 24V, photo coupler input x 8 Alarm Out Max. DC 24V/1A, mechanical relay output x 8 AAID Operational Features  RAID Levels O, 1, 1E, 3, 5, 6, 10 (0+1), 30, 50; 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  OS Supported Windows Embedded Standard 7 Runtime (WS7P), Windows 10, Windows Embedded Standard 7 Runtime (WS7P), Windows 10, Windows Server 2012R2 Standard  Management Tools Graphical UI/SNMP via Ethernet, CLI/CLU via Ethernet or Graphics, OPAS Service via USB, SDK or API for Integration  Surveillance Optimization Event Notification  AC Input 100 ~ 240 VAC, 60 ~ 50Hz  Current (Maximum) 1.1A 4A (100V); 2A (240V) 2.5A 4A (100V); 2A (240V)  Power Supply 250W Three redundant 250W, Energy- efficient 800PLUS Certified, 90- 264V full-ranging w/PFC, Hot swappable N+1 Design  BTU 375.43 BTU/h 1288 BTU/hr 853.25 BTU/h 1729 BTU/hr Fan Swappable Hot swappable design Redundant Hot swappable design  Temperature S** 40°C (-40° ~ 60°C non-operational)  Safebu/EMI FCC/CE/YCCI/RCM/BSMI/UL/CUL/C CE, FCC Class A, BSMI, CB, KC, UL/FCC/CE/YCCI/RCM/BSMI/UL/CUL/C CE, FCC Class A, BSMI, CB, KC, UL/FCC/FCCI/RCM/BSMI/UL/CUL/C CE, FCC Class A, BSMI, CB, KC, UL/FCCI/RCM/BSMI/UL/CUL/C CE, FCC Class A, BSMI, CB, KC, UL/FCC | Serial Interfaces         | 3x RS-232  | 2x RS-232C (D-sub 9-pin)  | 1x RS-232                             | 2x RS-232C (D-sub 9-pin)   |
| Sensor In Alarm Out Max. DC 24V/1A, mechanical relay output x 8  **RAID Operational Features**  RAID Levels  | Audio & Microphone        | 2x 3.5mm Audio Jack  | 2x 3.5mm Audio Jack   | 3x 3.5mm Audio Jack + SPDIF           | 2x 3.5mm Audio Jack  |
| Alarm Out  Max. DC 24V/1A, mechanical relay output x 8  AND Operational Features  RAID Levels  RAID Levels  Hot Spares  Multiple global or dedicated hot-spare drives with revertible option  Array  256/32  Software  Windows Embedded Standard 7 Runtime (W57P), Windows 10 Windows Embedded Standard 7 Runtime (W57P), Windows 10 Windows Server 2012R2 Standard  Management Tools  Graphical UI/SNMP via Ethernet, CLI/CLU via Ethernet or Graphics, OPAS Service via USB, SDK or API for Integration  Surveillance Optimization  Event Notification  AC Input  Current (Maximum)  AC Input  Current (Maximum)  1.1A  4A (100V); 2A (240V)  Three redundant 250W, Energy-efficient 80PLUS Certified, 90-264 full-ranging w/PFC, Hot swappable N+1 Design  BTU  375.43 BTU/h  Fan  Swappable  Hot swappable design  Temperature  Weight  6.8kg (14.96 lbs) w/o drives 10.94kg (24.1 lbs) w/o drives 10.94kg (28.88 lbs) w/odrives 10.94kg (28.88 lbs) w/odrives 10.94kg (28.81 lbs) w/odrives 10.94kg (28.81 lbs) w/odrives 10.94kg (26.21 lbs) w/odrives 10.94kg (28.81 lbs) w/odrives 10.94 | Sensor Input/Alarm Oເ     | ıtput  |   |                                       |  |
| RAID Levels RAID Levels RAID Levels Hot Spares Max. LUNs per System/ Array  OS Supported Windows Embedded Standard 7 Runtime (WS7P), Windows 10 Windows Embedded Standard 7 Runtime (WS7P), Windows 10 Windows Server 2012R2 Standard Runtime (W57P), Windows 10, Windows Server 2012R2 Standard Windows Server 2012R2 Standard Runtime (W57P), Windows 10, Windows 2012R2 Standard Runtime (W57P), Windows 10, Windows 2012, Wind | Sensor In                 |  | Compatible w/ DC3.3V to 2                                       | 4V, photo coupler input x 8           |  |
| RAID Levels Hot Spares Max. LUNs per System/ Array  Multiple global or dedicated hot-spare drives with revertible option  256/32  Mindows Embedded Standard 7 Runtime (WS7P), Windows 10, Windows Embedded Standard 7 Runtime (WS7P), Windows 10, Windows Server 2012R2 Standard  Management Tools  Graphical UI/SNMP via Ethernet, CLI/CLU via Ethernet or Graphics, OPAS Service via USB, SDK or API for Integration  Surveillance Optimization Event Notification  For Supply  AC Input  Current (Maximum)  1.1A  4A (100V); 2A (240V) 2.5A  Three redundant 250W, Energy- efficient 80PLUS Certified, 90- 264V full-ranging w/PFC, Hot swappable N+1 Design  BTU  375.43 BTU/h  Swappable  BTU  375.43 BTU/h  FCA (2.4 Ibs) w/o drives 10.94kg (2.4.1 lbs) w/o drives 256/32  Windows Embedded Standard 7 Runtime (WS7P), Windows 10, Windows Embedded Standard 7 Runtime (WS7P), Windows 10, Windows Server 2012R2 Standard Windows Server 2012R2 Standard Windows Server 2012R2 Standard Windows Server 2012R2 Standard Runtime (WS7P), Windows 10, Windows Embedded Standard 7 Runtime (WS7P), Windows 10, Windows Server 2012R2 Standard Runtime (WS7P), Windows 10, Windows Embedded Standard 7 Runtime (WS7P), Windows 10, Windows Server 2012R2 Standard Windows Server 2012R2 Standard Runtim | Alarm Out                 |  | Max. DC 24V/1A, mech  | nanical relay output x 8              |  |
| Hot Spares  Max. LUNs per System/ Array  OS Supported  Windows Embedded Standard 7 Runtime (WS7P), Windows 10 Windows Embedded Standard 7 Runtime (WS7P), Windows 10 Windows Server 2012R2 Standard Vindows Server 2012R2 Standard Windows Server 2012R2 Standard Vindows Server 2012R2 Standard Windows Server 2012R2 Standard Windows Server 2012R2 Standard Windows Server 2012R2 Standard Windows Server 2012R2 Standard Vindows Server 2012R2 | RAID Operational Feat     | <b>ure</b> s   |   |                                       |  |
| Max. LUNs per System/ Array  Software  OS Supported  Windows Embedded Standard 7 Runtime (WS7P), Windows 10, Windows Server 2012R2 Standard  #untime (W57P), Windows 10, Windows 10, Windows Server 2012R2 Standard  Windows Server 2012R2 Standard  #untime (W57P), Windows 10, Windows 10, Windows 10, Windows 10, Windows Server 2012R2 Standard  #untime (W57P), Windows 10, Windows 1 | RAID Levels               |  | 0, 1, 1E, 3, 5, 6, 10 (0+1), 30, 50; Any co                     | ombination can exist at the same time | 9  |
| Software  OS Supported Windows Embedded Standard 7 Runtime (WS7P), Windows 10 Windows Server 2012R2 Standard 7 Runtime (WS7P), Windows 10, Windows Server 2012R2 Standard Windows Server 2 |                           |  | Multiple global or dedicated hot-s                              | pare drives with revertible option    |  |
| Windows Embedded Standard 7 Runtime (WS7P), Windows 10 Windows Server 2012R2 Standard 7 Runtime (WS7P), Windows 10, Windows Server 2012R2 Standard Windows Embedded Standard Windows Embed |                           |  | 256   | /32                                   |  |
| Windows Embedded Standard / Runtime (WS7P), Windows 10, Windows Server 2012R2 Standard  Management Tools  Graphical Ul/SNMP via Ethernet, CLI/CLU via Ethernet or Graphics, OPAS Service via USB, SDK or API for Integration  Surveillance Optimization  Event Notification  AC Input  Current (Maximum)  Power Supply  Power Supply  BTU  375.43 BTU/h  Fan  Swappable  BTU  375.43 BTU/h  Fan  Swappable  Hot swappable design  Temperature  Weight  6.8kg (14.96 lbs) w/o drives 10.94kg (24.1 lbs) w/o drives 10.94kg (24.1 lbs) w/drives  Safety/FMII  PC/CCE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CURRAL SERVICE VIDING STANCE (CLIZEZ Standard)  Runtime (WS7P), Windows 10, Windows 10, Windows Server 2012R2 Standard  Nel Standard  Windows Server 2012R2 Standard  Windows Server 2012R2 Standard  Wind | Software                  |  |   |                                       |  |
| Surveillance Optimization Event Notification  AC Input  AC Input  Current (Maximum)  Power Supply  BTU  375.43 BTU/h  Fan  Swappable  Temperature  Weight  6.8kg (14.96 lbs) w/o drives 10.94kg (24.1 lbs) w/drives  10.4kg (22.9 lbs) w/o drives 10.94kg (24.1 lbs) w/drives  Safeby/FMII  FCC/CE/VCCI/RCM/BSMI/UL/  Email, SNMP, Buzzer, LEDs  SmartBoost Technologies for optimized video surveillance performance  Email, SNMP, Buzzer, LEDs  Email, SNMP, Buzzer, LEDs  100 ~ 240 VAC, 60 ~ 50Hz  44 (100V); 24 (240V)  2.5A  44 (100V); 24 (240V)  Three redundant 250W, Energy-efficient 80PLUS Certified, 90-264V full-ranging w/PFC, Hot swappable of Swappable with 10.853.25 BTU/h  1288 BTU/hr  853.25 BTU/h  129 BTU/hr  15.9kg (35.1 lbs) w/o drives 12.9kg (28.38 lbs) w/drives 15.9kg (35.1 lbs) w/o drives 12.9kg (28.38 lbs) w/drives 15.9kg (35.1 lbs) w/o drives 12.9kg (28.38 lbs) w/drives 15.9kg (35.1 lbs) w/o drives 17.9kg (61.51bs) w/drives 17.9kg (61.51bs) w/drives 17.9kg (61.51bs) w/drives  | OS Supported              |  | Runtime (WS7P), Windows 10,                                     | Runtime (WS7P), Windows 10,           | Windows Embedded Standard<br>Runtime (WS7P), Windows 10<br>Windows Server 2012R2 Stand |
| Event Notification  AC Input  AC Input  Current (Maximum)  1.1A  4A (100V); 2A (240V)  2.5A  4A (100V); 2A (240V)  Power Supply  250W  Three redundant 250W, Energy-efficient 80PLUS Certified, 90-264V full-ranging w/PFC, Hot swappable N+1 Design  BTU  375.43 BTU/h  Fan  Swappable  Hot swappable design  Temperature  5° ~ 40°C (-40° ~ 60°C non-operational)  Weight  6.8kg (14.96 lbs) w/o drives 10.94kg (24.1 lbs) w/drives  10.94kg (24.1 lbs) w/drives  Safety/FMII  FCC/CE/VCCI/RCM/BSMI/UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/R | Management Tools          | Graphical UI/SNMF  | via Ethernet, CLI/CLU via Ethernet or 0                         | Graphics, OPAS Service via USB, SDK o | or API for Integration   |
| AC Input  Current (Maximum)  1.1A  4A (100V); 2A (240V)  2.5A  4A (100V); 2A (240V)  Power Supply  250W  Three redundant 250W, Energy-efficient 80PLUS Certified, 90-264V full-ranging w/PFC, Hot swappable N+1 Design  BTU  375.43 BTU/h  Fan  Swappable  Hot swappable design  Temperature  5° ~ 40°C (-40° ~ 60°C non-operational)  Weight  6.8kg (14.96 lbs) w/o drives 10.94kg (24.1 lbs) w/drives  10.94kg (24.1 lbs) w/drives  FCC/CE/VCCI/RCM/BSMI/UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/   | Surveillance Optimization | SmartBoost Technologies for optimized video surveillance performance |   |                                       |  |
| AC Input  Current (Maximum)  1.1A  4A (100V); 2A (240V)  2.5A  4A (100V); 2A (240V)  Three redundant 250W, Energy-efficient 80PLUS Certified, 90-264V full-ranging w/PFC, Hot swappable N+1 Design  BTU  375.43 BTU/h  Fan  Swappable  Hot swappable design  Temperature  Weight  6.8kg (14.96 lbs) w/o drives 10.94kg (24.1 lbs) w/drives  Safety/FMI  FCC/CE/VCCI/RCM/BSMI/UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/CUL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  FCC/CE/VCC | Event Notification        |  |   |                                       |  |
| Current (Maximum)  1.1A  4A (100V); 2A (240V)  2.5A  4A (100V); 2A (240V)  Three redundant 250W, Energy-efficient 80PLUS Certified, 90-264V full-ranging w/PFC, Hot swappable N+1 Design  BTU  375.43 BTU/h  Fan  Swappable  Hot swappable design  Temperature  Weight  6.8kg (14.96 lbs) w/o drives 10.94kg (24.1 lbs) w/drives  Safety/FMI  FCC/CE/VCCI/RCM/BSMI/UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/  FCC/CE/VCCI/RCM/BSMI/UL/  CE, FCC Class A, BSMI, CB, KC, UL/   | System Information        |  |   |                                       |  |
| Power Supply  250W  Three redundant 250W, Energy- efficient 80PLUS Certified, 90- 264V full-ranging w/PFC, Hot swappable N+1 Design  BTU  375.43 BTU/h  Fan  Swappable  Hot swappable design  Temperature  Weight  6.8kg (14.96 lbs) w/o drives 10.94kg (24.1 lbs) w/drives  Safety/FMI  FCC/CE/VCCI/RCM/BSMI/UL/  FCC/CE/VCCI/RCM/BSMI/UL/  Three redundant 250W, Energy- efficient 80PLUS Certified, 90-2 A3340: 350W A3340: Dual 350W  FThree redundant 250W, Energy- efficient 80PLUS Certified, 90-2 full-ranging w/PFC, Hot swappable Phylos A3340: 350W A3340: Dual 350W  FCC/CE/VCCI/RCM/BSMI/ULS  A3340: 350W A1340: 350W A3340: 350W A1340: 350W A3340: 350W A1340: 350W A3340: 350W A1340: 350W A3340: 350W A1340: 350W A3340: 350W A3340: 350W A3340: 350W A1340: 350W A3340: 350W A3340: 350W A1340: 350W A3340: 350W A1340 A3340: 350W A1320 A3340: 350W A3340: 350W A1320 A3340: 350W A | AC Input                  |  | 100 ~ 240 VA  | .C, 60 ~ 50Hz                         |  |
| Power Supply   250W   efficient 80PLUS Certified, 90-264V full-ranging w/PFC, Hot swappable N+1 Design   A3340: Dual 350W   A3340d: Dual 350W   full-ranging w/PFC, Hot swappable N+1 Design   N+1 Design   N+1 Design   | Current (Maximum)         | 1.1A   | 4A (100V); 2A (240V)  | 2.5A                                  | 4A (100V); 2A (240V)   |
| Fan Swappable Hot swappable design Redundant Hot swappable design  Temperature 5° ~ 40°C (-40° ~ 60°C non-operational)  Weight 0.8kg (14.96 lbs) w/o drives 10.4kg (22.9 lbs) w/o drives 14.9kg 7.38kg (16.23 lbs) w/o drives 10.94kg (24.1 lbs) w/drives (32.8lbs) w/drives 12.9kg (28.38 lbs) w/drives 27.9kg (61.5lbs) w/drives  Safety/FMI FCC/CE/VCCI/RCM/BSMI/UL/ CE, FCC Class A, BSMI, CB, KC, UL/ FCC/CE/VCCI/RCM/BSMI/UL/CUL/ CE, FCC Class A, BSMI, | Power Supply              | 250W   | efficient 80PLUS Certified, 90-<br>264V full-ranging w/PFC, Hot |                                       | efficient 80PLUS Certified, 90-2 full-ranging w/PFC, Hot swappa                        |
| Temperature 5° ~ 40°C (-40° ~ 60°C non-operational)  Weight 6.8kg (14.96 lbs) w/o drives 10.9kg (24.1 lbs) w/drives (32.8lbs) w/drives 12.9kg (28.38 lbs) w/drives 27.9kg (61.5lbs) w/drives  Safety/FMI FCC/CE/VCCI/RCM/BSMI/UL/ CE, FCC Class A, BSMI, CB, KC, UL/ FCC/CE/VCCI/RCM/BSMI/UL/CUL/ CE, FCC Class A, BSMI CA, UL/ FCC/CE/VCCI/RCM/BSMI/UL/CUL/ CE, FCC Class A, BSMI CA, UL/ FCC/CE/VCCI/RCM/BSMI/UL/CUL/ CE, FCC CIAS A, BSMI CA, UL/ FCC/CE/VC | BTU                       | 375.43 BTU/h   | 1288 BTU/hr   | 853.25 BTU/h                          | 1729 BTU/hr  |
| Weight Weight 6.8kg (14.96 lbs) w/o drives 10.4kg (22.9 lbs) w/o drives 14.9kg 7.38kg (16.23 lbs) w/o drives 12.9kg (28.38 lbs) w/drives 27.9kg (61.5lbs) w/o drives 12.9kg (28.38 lbs) w/drives 27.9kg (61.5lbs) w/drives 27.9kg  | Fan                       | Swappable  | Hot swappable design  | Redundant                             | Hot swappable design   |
| veight 10.94kg (24.1 lbs) w/drives (32.8lbs) w/drives 12.9kg (28.38 lbs) w/drives 27.9kg (61.5lbs) w/drives  Safety/FMI FCC/CE/VCCI/RCM/BSMI/UL/ CE, FCC Class A, BSMI, CB, KC, UL/ FCC/CE/VCCI/RCM/BSMI/UL/cUL/ CE, FCC Class A, BSMI, CB, KC, UL/ FCC/CE/VCCI/RCM/BSMI/UL/cul/ CE, FCC Class A, BSMI CB, WARRING CE, WAR | Temperature               |  | 5° ~ 40°C (-40° ~ 60'   | °C non-operational)                   |  |
| Satery/FIVII   | Weight                    | 0 1  | 0, , ,  |                                       |  |
|  | Safety/EMI                |  |   |                                       |  |
|  | \A/                       | Turar limited warman.  |   |                                       |  |

Warranty 3 year limited warranty

Optional Accessories Sliding Rail, 2/4/8GB DDR3 Memory

Specifications may change without prior notice



<sup>&</sup>lt;sup>1</sup> Hard disk drive still runs at 3Gb/s speed
<sup>2</sup> The ideal camera range were the test output with fully populated enclosure and 8GB memory under 20FPS, H.264 and High Video Quality compression
\*This number are tested under criteria w/o frame lost at 720p@30fps@H.264
\*\* Vess A3340 PoE will be released in Q4, 2016