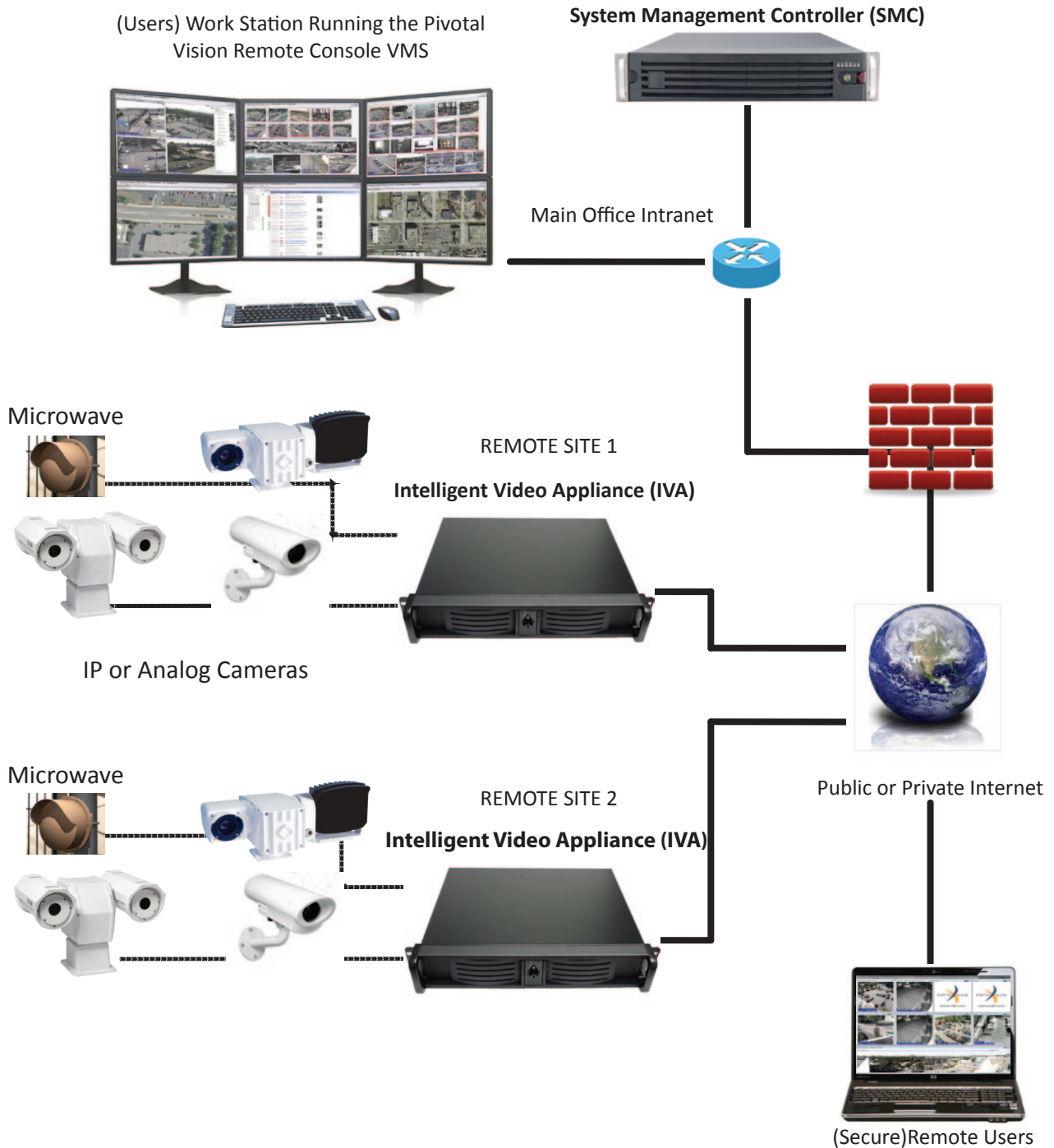


PIVOTAL VISION SYSTEM HARDWARE PRODUCT GUIDE

PIVOTAL VISION™ autonomous surveillance solutions



System Management Controller (SMC)

The Pivotal Vision™ System Management Controller (SMC) is the central command Appliance that manages the iAlert and iAlertHS system. The SMC is the event-based NVR as well as the traffic and repository of all priority system information. It also manages and authenticates all user access for cameras, alarm and I/O's and system configuration. The SMC provides superior security, access, and reporting. There is no direct user communication with any of the Intelligent Video Appliances - IVA (Geospatial Analytics Engine, Camera Controller, 24x7x365 NVR/DVR). All communication and viewing control of the devices are via the Pivotal Vision™ iAlert Remote Console VMS which connects users to the SMC.

USER ACCESS AND MANAGEMENT FEATURES

- Streams cameras to many users using only one video stream from the remote Intelligent Video Appliance
- Adjust video quality and frame rate from remote sites on-demand according to user settings and network conditions
- Receives video streams only from cameras that are being used
- Distributes video recordings and alarms to users viewing the system via the Remote Console client VMS software
- Archives videos based on site and event

MODELS:

SMC2U-63 Series-6 System Management Controller



The Series 6 SMC2U-63 is Pivotal Vision's System Management Controller specifically designed for cyber security, and capable of recording high-quality event based video to its on-board one terabyte of usable video storage and is designed to easily expand that storage by adding an iSCSI external video storage device. Protected from network threats, the SMC employs Pivotal Vision's proprietary configuration and encryption between Users and each Intelligent Video Appliance (IVA). The Pivotal Vision™ Series 6 System Management Controller is designed to meet all security focused environments.

SMC1U-73 Series-7 System Management Controller



Must be used with a
Video Management Appliance

The Series 7 SMC1U-73 is Pivotal Vision's System Management Controller specifically designed for cyber security, and external video storage appliances. Capable of recording high-quality event based images via a Video Storage Appliance (VSA), four Gigabit network ports and for optional redundancy expandable to two 300 GB drives Raid 1 Mirroring configurations available. The SMC is the only point of entry into the system, each Intelligent Video Appliance and User connection is secure from network threats via Pivotal Vision's proprietary configuration and encryption — the Pivotal Vision™ Series 7 System Management Controller is designed for large single site camera deployments or a large network of remote sites.

SMC2U-83R Series-8 System Management Controller



Must be used with a
Video Management Appliance

The Series 8 SMC2U-83R is Pivotal Vision's high powered System Management Controller specifically designed for cyber security, redundancy and external video storage appliances. Capable of recording high-quality event based Images via a Video Storage Appliance (VSA), 800W Redundant AC power supply, four Gigabit network ports and two 300 GB drives configured for Raid 1 Mirroring. Additionally, the SMC2U-83R utilizes Pivotal Vision's proprietary configuration and encryption between Users and each Intelligent Video Appliance (IVA) to ensure the system is secure from network threats — the Pivotal Vision™ Series 8 SMC2U-83R System Management Controller is designed to meet the highest security focused environments.

SMC2U-93 Series-9 System Management Controller



The Series 9 SMC2U-93 is Pivotal Vision's newest high powered Management Controller specifically designed for cyber security and onboard video storage. Capable of recording high-quality event based Images to an on-board four- one terabytes Raid 5 Video System (2.8 TB Usable Storage). Additionally, the SMC2U-93 utilizes Pivotal Vision's proprietary configuration and encryption between Users and each Intelligent Video Appliance (IVA) to ensure the system is secure from network threats — the Pivotal Vision™ Series 9 SMC2U-93 System Management Controller is designed for medium to large systems.

Intelligent Video Appliance (IVA)

All of the site processing is accomplished at each Intelligent Video Appliance. The IVA is local at a remote site and all local resources attach to this appliance. The Pivotal Vision™ system has the ability to connect to the cameras in many ways, including wired, wireless, fiber, and even USB. The IVA is the local appliance that drives the “geospatial edge analytics engine” and all remote site functions. It includes the embedded video and thermo analytics engine, local 24-hour DVR/NVR, automation engine, communications manager, self-health monitor, and local device manager. The IVA processes all inputs and requests from the user and produces the outputs of videos, images and alerts to the Pivotal Vision™ System Management Controller.

GENERAL FEATURES

- Autonomous PTZ Tracking - Motion tracking with moving camera and moving background
- Automated Guard Tours - Areas Defined by GPS Coordinates
- Motion detection on all Sensors of a Multi-Sensor PTZ - Multi-Sensor Autonomous PTZ Tracking
- Adaptive Logic Analytics Engine
- Encoding of video to MPEG4 for 24 hour archiving
- Megapixel and HD Camera Capable
- Event-based video extraction which is sent to the System Management Controller for reporting

MODELS:

IVA2U-63 Series-6 Intelligent Video Appliance (IVA)



The Series 6 IVA is Pivotal Vision’s most common Intelligent Video Appliance. The IVA2U-63 is a solution that manages video from IP cameras and encoders exclusively through an Ethernet connection and analog cameras through optional 4 and 8 channels Hybrid and IP only configurations. The IVA2U-63 contains dual Gigabit network interface card so that users can segment the network traffic to the incoming IP camera traffic, while the other connects to the System Management Controller, transmitting all of the outputs of videos, images and alerts. With the iAlert video and iSensor thermo embedded analytics engine, automation engine and bandwidth management, the Series 6 IVA is designed to meet all types of security environments.

IVA3U-73 Series-7 Intelligent Video Appliance (IVA)



The Series 7 IVA is one of Pivotal Vision’s newest high powered 16-channel 640x480 IP/Analog and Megapixel/HD capable Intelligent Video Appliance. The IVA3U-73 is a solution that manages video from IP cameras and encoders exclusively through an Ethernet connection and analog cameras with the 16x BNC Hybrid IVA3U-73 configuration. Optional IP only and Megapixel only configurations are also available. The IVA3U-73 contains 2 dual Gigabit network interface cards so that users can segment the network traffic from the incoming IP camera traffic, while the other connects to the System Management Controller, transmitting all of the outputs of videos, images and alerts. Capable of recording high quality images combined with the embedded iAlert video and iSensor thermo analytics engine, automation engine, bandwidth management, four Gigabit NIC’s, and Raid-5 video storage -the Pivotal Vision™ IVA3U-73 Intelligent Video Appliance is designed for single site environments with 60 plus camera deployments.

IVA3U-83R Series-8 Intelligent Video Appliance (IVA)



The Series 8 IVA is Pivotal Vision’s newest high powered 16-channel IP/Analog and Megapixel capable Intelligent Video Appliance. The IVA3U-83R is a solution that manages video from IP cameras and encoders exclusively through an Ethernet connection and analog cameras through optional 16x BNC inputs with the Hybrid configuration and IP only. The IVA3U-83R contains 2 dual Gigabit network interface cards so that users can segment the network traffic from the incoming IP camera traffic, while the other connects to the System Management Controller, transmitting all of the outputs of videos, images and alerts. Capable of recording high-quality images combined with the embedded iAlert video and iSensor thermo analytics engine, automation engine, bandwidth management, 760W Triple-Redundant AC power supply, four Gigabit NIC cards, Raid-5 Video Storage drives—the Pivotal Vision IVA3U-83R Intelligent Video Appliance is designed to meet the highest security focused environments with 60 plus camera deployments.

System Management Controller (SMC) Details

Models:	SMC1TB2U-63	SMC3001U-73	SMC3002U-83R	SMC3TB2U-93
Software:	WinSvr08 R2 Embedded OS, PV iAlert or iAlertHS System	WinSvr08 R2 Embedded OS, PV iAlert or iAlertHS System	WinSvr08 R2 Embedded OS, PV iAlert or iAlertHS System	WinSvr08 R2 Embedded OS, PV iAlert or iAlertHS System
Processor:	Xeon Quad Core 2.93GHz	Xeon Quad Core 3.46GHz	Xeon Quad Core 3.46GHz	Xeon Quad Core 3.46GHz
Hard Drive:	300GB 15k RPM - 1TB Video	70 -300GB 15k RPM, 70R - 2X 300GB 15k RPM Raid-1	2x 300GB 15k RPM Raid-1	300GB 15k RPM
Video Storage:	Onboard 1 TB Usable Video Storage , optional Via External iSCSI configuration for a Video Storage Appliance	Via External iSCSI Video Storage Appliance, optional Onboard 1 TB Usable Video Storage	Via External iSCSI Video Storage Appliance, optional Onboard 3TB Usable Video Storage	Onboard 3TB Usable Video Storage, optional Via External iSCSI configuration for a Video Storage Appliance
Network Protocol:	TCP/IP and Proprietary Pivotal Vision™ protocol between the RCVMS, SMC and IVA's	TCP/IP and Proprietary Pivotal Vision™ protocol between the RCVMS, SMC and IVA's	TCP/IP and Proprietary Pivotal Vision™ protocol between the RCVMS, SMC and IVA's	TCP/IP and Proprietary Pivotal Vision™ protocol between the RCVMS, SMC and IVA's
Network Interface:	2x Ethernet (RJ-45, 10/1000) 2x on-board	4x Ethernet (RJ-45, 10/1000) 2x on-board and 2x via PCI Express	4x Ethernet (RJ-45, 10/1000) 2x on-board and 2x via PCI Express	4x Ethernet (RJ-45, 10/1000) 2x on-board and 2x via PCI Express
Power Supply:	400 Watts	560 Watts	800W (1 + 1) Redundant	720 Watts
System Update:	Via Network or USB	Via Network or USB	Via Network or USB	Via Network or USB
Features Access:	Via front panel, iAlertSMC GUI, iAlertHSSMC GUI and via the network- the PV Remote Console VMS (RCVMS) GUI	Via front panel, iAlertSMC GUI, iAlertHSSMC GUI and via the network- the PV Remote Console VMS (RCVMS) GUI	Via front panel, iAlertSMC GUI, iAlertHSSMC GUI and via the network- the PV Remote Console VMS (RCVMS) GUI	Via front panel, iAlertSMC GUI, iAlertHSSMC GUI and via the network- the PV Remote Console VMS (RCVMS) GUI
Rack Mount/Size:	2U / Depth: 13.9" Width: 16.9" Height: 4.3"	1U / Depth: 25.6" Width: 17.2" Height: 1.7"	2U / Length: 25.2" Width: 17.2" Height: 3.5"	2U / Length: 25.2" Width: 17.2" Height: 3.5"

Intelligent Video Appliance (IVA) Details

Models:	IVAMINI-63H IVAMINI-63IP	IV1TB2U-63H IVA1TB2U-63IP	IVA3TB3U-73H or IP IVA5TB3U-73H or IP	IVA3TBU-83HR or IPR IVA5TBU-83HR or IPR
Software:	Embedded iAlertIVA or Embedded iAlertHSIVA	Embedded iAlertIVA or Embedded iAlertHSIVA	Embedded iAlertIVA or Embedded iAlertHSIVA	Embedded iAlertIVA or Embedded iAlertHSIVA
Video Storage Config:	300GB - approx (70 days) of storage at 5 fps passive and 20% 15 fps active on 4 cameras	1TB HD - approx (75 days) of storage at 5 fps passive and 20% 15 fps active on 8 cameras	4 TB-Raid5 Standard for 16 640x480 and 6TB- Raid5 for MP	4 TB-Raid5 Standard for 16 640x480 and 6TB- Raid5 for MP
Hard Drive:	500GB Video	300GB 15k RPM -1TB Video	250GB + 4x 1TB or 6x 1TB Raid-5	250GB + 4x 1TB or 6x 1TB Raid-5
Camera Input:	Hybrid Models: 4 Ch analog/IP IP only Models: 4 Ch IP	Hybrid Models: 8 Ch analog/IP IP only Models: 8 Ch IP	Hybrid Models: 16 Ch analog/IP IP only Models: 16 Ch IP MP Models: 1MP=2 Analog (MP capacity varies on resolution)	Hybrid Models: 16 Ch analog/IP IP only Models: 16 Ch IP MP Models: 1MP=2 Analog (MP capacity varies on resolution)
Network Protocol:	TCP/IP, DHCP, HTTP, UDP, RTSP	TCP/IP, DHCP, HTTP, UDP, RTSP	TCP/IP, DHCP, HTTP, UDP, RTSP	TCP/IP, DHCP, HTTP, UDP, RTSP
Network Interface:	2x Ethernet (RJ-45, 10/1000) 2x on-board	2x Ethernet (RJ-45, 10/1000) 2x on-board	4x Ethernet (RJ-45, 10/1000)	4x Ethernet (RJ-45, 10/1000)
Power Supply:	120 Watts -12VDC (10 Amp)	400 Watts	650 Watts	920 Watts Redundant
System Updates:	Via Network SMC Federated	Via Network SMC Federated	Via Network SMC Federated	Via Network SMC Federated
Features Access:	Via front panel, iAlertIVA GUI, and via the network- the PV Remote Console VMS (RCVMS) GUI via the SMC	Via front panel, iAlertIVA GUI, and via the network- the PV Remote Console VMS (RCVMS) GUI via the SMC	Via front panel, iAlertIVA GUI, and via the network- the PV Remote Console VMS (RCVMS) GUI via the SMC	Via front panel, iAlertIVA GUI, and via the network- the PV Remote Console VMS (RCVMS) GUI via the SMC
Rack Mount/Size:	Wall Mount / Depth: 10.5" Width: 8.0" Height: 4.0"	2U / Depth: 20.8" Width: 19.0" Height: 3.5"	3U / Depth: 25.5" Width: 17.7" Height: 5.2"	3U / Depth: 25.5" Width: 17.7" Height: 5.2"