



# VICADS V100 (VIDEO IMAGE CONTROL AND DISPLAY SYSTEM)

SAFE | SECURE | CERTIFIED

## OVERVIEW

The V100 Video Management System (VMS) is the new version of VICADS 4.3 PL1N certified software running on Linux servers and Microsoft Windows “Mini” clients. Linux offers built in redundancy and encryption which allows advanced capabilities to keep the customer ahead of emerging threats. Microsoft Windows is the most widely used platform for the user and works seamlessly with the Linux server so the learning curve is minimized. Combining Linux and Microsoft platforms offers the customer a smaller footprint of hardware, more security, and greater processing capabilities.

The V100 consists of familiar PL1N certified VICADS-4 software hosted on Linux servers providing built-in encryption with advanced capabilities and data fusion keeping the customer ahead of emerging threats. This combined architecture provides high reliability and greater processing power. With Linux servers, serving Windows 10 OS Clients, V100 provides a common graphical user interface with the power of a supercomputer supplying the best of both worlds for our customers!

V100 uses a multi-node cluster model - think high availability Cloud computing- which allows for critical backups, provides a common operating picture for rapid decision making and response, video assessment, and easy installation for protecting critical information and disaster recovery.

V100 has a smaller hardware footprint with a multi-function open platform. Our advanced solution hosts GOTS/COTS developed software applications which condenses physical servers, rack space, complexity, and overall program cost.

Among the add-on integrations is our Cyber Security Solution with:

- DoD Risk Management Framework (RMF) Compliance
- Information Assurance
- Big Data Analytics Integration
- Active Directory Integration
- Inventory Management

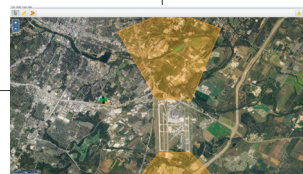
### VICADS® System (BDOC)



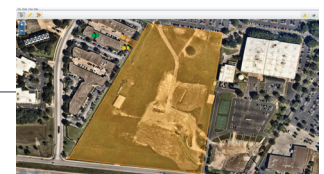
Viewable Cameras:



Building Cameras



Radar Coverage



Intelligent GIS



V100 Cluster

VICADS® Personal Viewer / Softwall / Radar Wall

Flightline Operations

Wing Commander

Building X - Owner User



VICADS Cluster	<p>Sturdy, scalable, serviceable</p> <p>Linux</p> <p>Server/NVR/VBS</p> <p>Scene Authentication</p>	<p>Deployed on 100+ Locations</p> <p>Redundancy and greater processing</p> <p>Smaller hardware footprint</p> <p>Real-time authentication of a video signal from inception (video scene) to the (viewing or storing)</p>
Witness Client	<p>Cyber Security</p> <p>Hybrid Cloud Technology</p> <p>Microsoft Windows</p> <p>Witness Viewer</p> <p>Investigator</p>	<p>New CSA config. Software on server</p> <p>Secure web browser interface for viewing</p> <p>Minimal user training</p> <p>View and control cameras</p> <p>Software tool to view recorded video</p>
Radar Wall/OwlEye	<p>Microsoft Windows</p> <p>Radar Wall</p> <p>OwlEye</p>	<p>Minimal user training</p> <p>Geographic information system (GIS) Ground Based Radar (GBR) integration</p> <p>Alarm video call up</p>
Perimeter Intrusion Detection Systems (PIDS)	<p>Softwall for DOE SEIWG Compliant, JIGSAW integration</p>	<p>Government off the Shelf (GOTS) annunciator PL1N (redundant)</p>

<b>PSG PSIM CLOUD SOFTWARE MINIMUM &amp; RECOMMENDED SPECS</b>		
	Minimum	Recommended
CPU	(2x) 2.3Ghz, 16C/32T	(2x) 3.0Ghz, 16C/32T
RAM	64 GB	128 GB
STORAGE	600GB	1.2TB
O/S	Ubuntu 20.04 LTS	Ubuntu 20.04 LTS
NETWORK	1Gb	(4x) 1Gb, (1x) 10G
<b>PSG PSIM OPERATOR INTERFACE SOFTWARE MINIMUM &amp; RECOMMENDED SPECS</b>		
	Minimum	Recommended
CPU	3.6G, 6C	3.8G, 6C
RAM	16GB	32GB
STORAGE	512G	512G
O/S	Windows 10 IOT Enterprise	Windows 10 IOT Enterprise
NETWORK	1GB	1GB
GPU	(1) PCI-e 4.0, 16GB, DDR6, 4D	(2x) PCI-e 4.0, 16GB, DDR6, 4DP

SYSTEM NOMENCLATURE & PART NUMBERS		
Part Number	Description	System Functional Description
10-10002-000	VICADS VMS V100 Video Vault Server, HP	The vault server is the core of the HPC. It provides data storage for security platforms as well as high availability and integration interfaces. They are deployed as single standalone nodes or as a base cluster of three to n nodes for scaling a system.
10-30007-020	V100 VICADS Performance Matched 2TB SAS HDD, HP	Storage drive added to vault servers to scale data storage
10-30007-021	V100 VICADS Performance Matched 4TB SAS HDD, HP	Storage drive added to vault servers to scale data storage
10-30007-022	V100 VICADS Performance Matched 6TB SAS HDD, HP	Storage drive added to vault servers to scale data storage
10-30007-023	V100 VICADS Performance Matched 8TB SAS HDD, HP	Storage drive added to vault servers to scale data storage
10-30007-025	V100 VICADS Performance Matched 12TB SAS HDD, HP	Storage drive added to vault servers to scale data storage
10-30007-026	V100 VICADS Performance Matched 14TB SAS HDD, HP	Storage drive added to vault servers to scale data storage
10-40000-002	VICADS VMS V100 Combined Server Site Licensing Bundle	Software licensing added to the vault server to enable VICADS 100 VMS
10-30000-002	V100, VICADS View-Only License (per Camera)	Software licensing added to the vault server to enable VICADS 100 VMS functions
10-30000-003	V100, VICADS View/Record License (per Camera)	Software licensing added to the vault server to enable VICADS 100 VMS functions
10-40004-002	V100, Geospatial Mapping Display Site License	Software licensing added to the vault server to enable automated target tracking
10-40004-003	V100 Site Specific Geo Database	Software licensing added to the vault server to enable site specific GIS database
<b>HARDWARE SPECIFICATIONS (Specifications subject to change without notice)</b>		
Specification	AMD Description	INTEL Description
Operating System	Ubuntu server 20.04.7 LTS	Ubuntu server 20.04.7 LTS
Processor	(2) AMD EPYC 7302 3.0Ghz, 16C/32T, 128M Cache, 155W, DDR4-3200	(2) Intel Xeon Gold 5218 2.3G, 16C/32T, 10.4GT/s, 22M Cache, Turbo, HT (125W) DDR4-2666
Memory	(4) HPE 32GB 2Rx4 PC4-3200AA-R Smart Kit	(6) HPE 16GB 1Rx4 PC4-2933Y-R Smart Kit
RAID Controller	HPE Smart Array P816i-a SR Gen10 Ctrlr	HPE Smart Array P816i-a SR Gen10 Ctrlr
O/S Drives	(2) HPE 600GB SAS 10K SFF SC MV HDD <b>{or comparable SAS/SSD/Nvme}</b>	(2) HPE 480GB SATA MU SFF SC SM883 SSD <b>{or comparable SAS/SSD/Nvme}</b>
Storage Options	(19 optional) 12 LFF with optional 4 LFF mid-plane and optional 3LFF + 2 SFF rear drive bay to total 19 LFF drives + 2 SFF drives	(19 optional) 12 LFF with optional 4 LFF mid-plane and optional 3LFF + 2 SFF rear drive bay to total 19 LFF drives + 2 SFF drives
Networking	INT I350 1GbE 4p BASE-T Adptr	INT I350 1GbE 4p BASE-T Adptr
Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 500W HPE 1.83m 10A C13-UL Dom Pwr Cord	Dual, Hot-plug, Redundant Power Supply (1+1), 800W HPE 1.83m 10A C13-UL Dom Pwr Cord
Security Features	HPE Gen10 Plus TPM BR Module Kit, HPE Smart Array Secure Encryption E-LTU	HPE Smart Array Secure Encryption E-LTU
Management Features	HPE iLO Adv 1-svr Lic 3yr Support	HPE iLO Adv 1-svr Lic 1yr Support
<b>MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS (Specifications subject to change without notice)</b>		
Specification	AMD Description	INTEL Description
Chassis	HPE DL385 Gen10+ 12LFF CTO Svr	HPE DL380 Gen10 12LFF NC CTO Svr
Operating Temperature/Humidity	50-95° F (10-35 C) / 8-90% RH non-condensing	50-95° F (10-35 C) / 8-90% RH non-condensing
Power Consumption	500W Maximum Peak Power per supply (1000W)	800W Maximum Peak Power per supply (1600W)
Cooling Requirements	4000 BTU/hr	6000 BTU/hr
Dimensions	2RU, Height: 3.82" (86.8mm), Width: 18.98" (482.0mm), Depth: 29.58" (751.34mm)	2RU, Height: 3.82" (86.8mm), Width: 18.98" (482.0mm), Depth: 29.58" (751.34mm)
Weight	Minimum: 32.75 Lbs (14.9 kg) / Maximum 51.5 lbs (23.6kg)	Minimum: 35.54 Lbs (16.12 kg) / Maximum 63.43 lbs (28.77kg)
Physical Security	2U LOCKING BEZEL	2U LOCKING BEZEL
Rack Rail Kit	INCLUDED	INCLUDED
Supply Chain Standards	HPE DL385 Gen10+ TAA FIO Enable Kit	HPE DL380 Gen10 TAA FIO Enable Kit

SYSTEM NOMENCLATURE & PART NUMBERS		
Part Number	Description	System Functional Description
10-80001-000	VICADS Cyber Security Solution Hardware & Software Bundle, HP *For additional options, call factory to design and order	The cyber vault is the core of the cyber security solution. It provides an integrated virtual environment with a base set of cyber security management tools and solutions. The base platform consists of the hardware and software to provide auditing, continuous updates, scanning, asset management and domain control authentication.
10-80003-001	Cyber PKI Option	Software licensing added to the vault server to enable HSM based PKI for the CSS
10-80001-004	Cyber Security Asset Management, Auditing & Compliance Annual Maintenance Fee	Annual software maintenance to provide updates to baselines, patching and tools
<b>HARDWARE SPECIFICATIONS (Specifications subject to change without notice)</b>		
Specification	AMD Description	INTEL Description
Operating System	VMware vSphere 8 Standard for 1 CPU, up to 32 cores, 3 Year License and Subscription	VMware vSphere 8 Standard for 1 CPU, up to 32 cores, 3 Year License and Subscription
Processor	(2) AMD EPYC 7302 3.0Ghz, 16C/32T, 128M Cache, 155W, DDR4-3200	(2) Intel Xeon Gold 5218 2.3G, 16C/32T, 10.4GT/s, 22M Cache, Turbo, HT (125W) DDR4-2666
Memory	(4) HPE 32GB 2Rx4 PC4-3200AA-R Smart Kit	(6) HPE 16GB 1Rx4 PC4-2933Y-R Smart Kit
RAID Controller	HPE Smart Array P816i-a SR Gen10 Ctrlr	HPE Smart Array P816i-a SR Gen10 Ctrlr
O/S Drives	(2) HPE 600GB SAS 10K SFF SC MV HDD <b>{or comparable SAS/SSD/Nvme}</b>	(2) HPE 480GB SATA MU SFF SC SM883 SSD <b>{or comparable SAS/SSD/Nvme}</b>
Storage Options	(19 optional) 12 LFF with optional 4 LFF mid-plane and optional 3LFF + 2 SFF rear drive bay to total 19 LFF drives + 2 SFF drives	(19 optional) 12 LFF with optional 4 LFF mid-plane and optional 3LFF + 2 SFF rear drive bay to total 19 LFF drives + 2 SFF drives
Networking	INT I350 1GbE 4p BASE-T Adptr	INT I350 1GbE 4p BASE-T Adptr
Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 500W HPE 1.83m 10A C13-UL Dom Pwr Cord	Dual, Hot-plug, Redundant Power Supply (1+1), 800W HPE 1.83m 10A C13-UL Dom Pwr Cord
Security Features	HPE Gen10 Plus TPM BR Module Kit, HPE Smart Array Secure Encryption E-LTU	HPE Smart Array Secure Encryption E-LTU
Management Features	HPE iLO Adv 1-svr Lic 3yr Support	HPE iLO Adv 1-svr Lic 1yr Support
<b>MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS (Specifications subject to change without notice)</b>		
Specification	AMD Description	INTEL Description
Chassis	HPE DL385 Gen10+ 12LFF CTO Svr	HPE DL380 Gen10 12LFF NC CTO Svr
Operating Temperature/Humidity	50-95° F (10-35 C) / 8-90% RH non-condensing	50-95° F (10-35 C) / 8-90% RH non-condensing
Power Consumption	500W Maximum Peak Power per supply (1000W)	800W Maximum Peak Power per supply (1600W)
Cooling Requirements	4000 BTU/hr	6000 BTU/hr
Dimensions	2RU, Height: 3.82" (86.8mm), Width: 18.98" (482.0mm), Depth: 29.58" (751.34mm)	2RU, Height: 3.82" (86.8mm), Width: 18.98" (482.0mm), Depth: 29.58" (751.34mm)
Weight	Minimum: 32.75 Lbs (14.9 kg) / Maximum 51.5 lbs (23.6kg)	Minimum: 35.54 Lbs (16.12 kg) / Maximum 63.43 lbs (28.77kg)
Physical Security	2U LOCKING BEZEL	2U LOCKING BEZEL
Rack Rail Kit	INCLUDED	INCLUDED
Supply Chain Standards	HPE DL385 Gen10+ TAA FIO Enable Kit	HPE DL380 Gen10 TAA FIO Enable Kit

SYSTEM NOMENCLATURE & PART NUMBERS		
Part Number	Description	System Functional Description
10-80001-000	VICADS Cyber Security Solution Hardware & Software Bundle, HP *For additional options, call factory to design and order	The cyber vault is the core of the cyber security solution. It provides an integrated virtual environment with a base set of cyber security management tools and solutions. The base platform consists of the hardware and software to provide auditing, continuous updates, scanning, asset management and domain control authentication.
10-80003-001	Cyber PKI Option	Software licensing added to the vault server to enable HSM based PKI for the CSS
10-80001-004	Cyber Security Asset Management, Auditing & Compliance Annual Maintenance Fee	Annual software maintenance to provide updates to baselines, patching and tools
HARDWARE SPECIFICATIONS (Specifications subject to change without notice)		
Specification	AMD Description	INTEL Description
Operating System	VMware vSphere 7 Standard for 1 CPU, up to 32 cores, 3 Year License and Subscription	VMware vSphere 7 Standard for 1 CPU, up to 32 cores, 3 Year License and Subscription
Processor	(2) AMD EPYC 7302 3.0Ghz, 16C/32T, 128M Cache, 155W, DDR4-3200	(2) Intel Xeon Gold 5218 2.3G, 16C/32T, 10.4GT/s, 22M Cache, Turbo, HT (125W) DDR4-2666
Memory	(4) HPE 32GB 2Rx4 PC4-3200AA-R Smart Kit	(6) HPE 16GB 1Rx4 PC4-2933Y-R Smart Kit
RAID Controller	HPE Smart Array P816i-a SR Gen10 Ctrlr	HPE Smart Array P816i-a SR Gen10 Ctrlr
O/S Drives	(2) HPE 600GB SAS 10K SFF SC MV HDD <i>{or comparable SAS/SSD/Nvme}</i>	(2) HPE 480GB SATA MU SFF SC SM883 SSD <i>{or comparable SAS/SSD/Nvme}</i>
Storage Options	(19 optional) 12 LFF with optional 4 LFF mid-plane and optional 3LFF + 2 SFF rear drive bay to total 19 LFF drives + 2 SFF drives	(19 optional) 12 LFF with optional 4 LFF mid-plane and optional 3LFF + 2 SFF rear drive bay to total 19 LFF drives + 2 SFF drives
Networking	INT I350 1GbE 4p BASE-T Adptr	INT I350 1GbE 4p BASE-T Adptr
Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 500W HPE 1.83m 10A C13-UL Dom Pwr Cord	Dual, Hot-plug, Redundant Power Supply (1+1), 800W HPE 1.83m 10A C13-UL Dom Pwr Cord
Security Features	HPE Gen10 Plus TPM BR Module Kit, HPE Smart Array Secure Encryption E-LTU	HPE Smart Array Secure Encryption E-LTU
Management Features	HPE iLO Adv 1-svr Lic 3yr Support	HPE iLO Adv 1-svr Lic 1yr Support
MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS (Specifications subject to change without notice)		
Specification	AMD Description	INTEL Description
Chassis	HPE DL385 Gen10+ 12LFF CTO Svr	HPE DL380 Gen10 12LFF NC CTO Svr
Operating Temperature/Humidity	50-95° F (10-35 C) / 8-90% RH non-condensing	50-95° F (10-35 C) / 8-90% RH non-condensing
Power Consumption	500W Maximum Peak Power per supply (1000W)	800W Maximum Peak Power per supply (1600W)
Cooling Requirements	4000 BTU/hr	6000 BTU/hr
Dimensions	2RU, Height: 3.82" (86.8mm), Width: 18.98" (482.0mm), Depth: 29.58" (751.34mm)	2RU, Height: 3.82" (86.8mm), Width: 18.98" (482.0mm), Depth: 29.58" (751.34mm)
Weight	Minimum: 32.75 Lbs (14.9 kg) / Maximum 51.5 lbs (23.6kg)	Minimum: 35.54 Lbs (16.12 kg) / Maximum 63.43 lbs (28.77kg)
Physical Security	2U LOCKING BEZEL	2U LOCKING BEZEL
Rack Rail Kit	INCLUDED	INCLUDED
Supply Chain Standards	HPE DL385 Gen10+ TAA FIO Enable Kit	HPE DL380 Gen10 TAA FIO Enable Kit

SYSTEM NOMENCLATURE & PART NUMBERS		
Part Number	Description	System Functional Description
10-10003-000	VICADS VMS V100 Analytics Vault Server, HP	The analytics vault is the core of the data and video analytics engine. It provides specialized processing and AI/ML features. They are deployed as nodes within an existing cluster of three to n nodes.
10-30007-020	V100 VICADS Performance Matched 2TB SAS HDD, HP	Storage drive added to vault servers to scale data storage
10-30007-021	V100 VICADS Performance Matched 4TB SAS HDD, HP	Storage drive added to vault servers to scale data storage
10-30007-022	V100 VICADS Performance Matched 6TB SAS HDD, HP	Storage drive added to vault servers to scale data storage
10-30007-023	V100 VICADS Performance Matched 8TB SAS HDD, HP	Storage drive added to vault servers to scale data storage
10-30007-025	V100 VICADS Performance Matched 12TB SAS HDD, HP	Storage drive added to vault servers to scale data storage
10-30007-026	V100 VICADS Performance Matched 14TB SAS HDD, HP	Storage drive added to vault servers to scale data storage
10-40005-000	VICADS Scene Authentication License, Per Camera	Software licensing added to the vault server to enable Scene Authentication in Servers
10-40005-001	Scene Authentication Channel License, Per Camera	Software licensing added to the vault server to enable Scene Authentication in Edge Devices
10-31000-001	VICADS Video Analytics License, Per Camera	Software licensing added to the vault server to enable video analytics functions
10-31000-002	VICADS Video Analytics Year 1 Customer Care, Per Camera	Annual subscription to software updates
<b>HARDWARE SPECIFICATIONS (Specifications subject to change without notice)</b>		
Specification	AMD Description	INTEL Description
Operating System	Ubuntu server 20.04.7 LTS	Ubuntu server 20.04.7 LTS
Processor	(2) AMD EPYC 7402 2.8Ghz (Turbo 3.35Ghz), 24C/48T, 128M Cache, 180W, DDR4-3200	(2) Intel Xeon Gold 6240 2.6G (Turbo 3.90Ghz), 18C/36T, 24.75M Cache, HT (150W) DDR4-2933
Memory	(4) HPE 32GB 2Rx4 PC4-3200AA-R Smart Kit	(4) HPE 32GB 2Rx4 PC4-2933Y-R Smart Kit
RAID Controller	HPE Smart Array P408i-a SR Gen10 Ctrlr	HPE Smart Array P408i-a SR Gen10 Ctrlr
O/S Drives	(2) HPE 300GB SAS 15K SFF SC MV HDD <b>{or comparable SAS/SSD/Nvme}</b>	(2) HPE 480GB SATA MU SFF SC SM883 SSD <b>{or comparable SAS/SSD/Nvme}</b>
Storage Options	(4 optional) 8 LFF with (4) HPE 4TB SAS 7.2K LFF SC MV HDD	(4 optional) 8 LFF with (4) HPE 4TB SAS 7.2K LFF SC MV HDD
Networking	INT I350 1GbE 4p BASE-T OCP3 Adptr	HPE 1GbE 4p FLR-T BCM5719 Adptr
Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 500W HPE 1.83m 10A C13-UL Dom Pwr Cord	Dual, Hot-plug, Redundant Power Supply (1+1), 500W HPE 1.83m 10A C13-UL Dom Pwr Cord
Security Features	HPE Gen10 Plus TPM BR Module Kit, HPE Smart Array Secure Encryption E-LTU	HPE Gen10 Plus TPM BR Module Kit, HPE Smart Array Secure Encryption E-LTU
Management Features	HPE iLO Adv 1-svr Lic 3yr Support	HPE iLO Adv 1-svr Lic 1yr Support
<b>MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS (Specifications subject to change without notice)</b>		
Specification	AMD Description	INTEL Description
Chassis	HPE DL385 Gen10+ 12LFF CTO Svr	HPE DL380 Gen10 12LFF NC CTO Svr
Operating Temperature/Humidity	50-95° F (10-35 C) / 8-90% RH non-condensing	50-95° F (10-35 C) / 8-90% RH non-condensing
Power Consumption	500W Maximum Peak Power per supply (1000W)	500W Maximum Peak Power per supply (1000W)
Cooling Requirements	4000 BTU/hr	4000 BTU/hr
Dimensions	2RU, Height: 3.82" (86.8mm), Width: 18.98" (482.0mm), Depth: 29.58" (751.34mm)	2RU, Height: 3.82" (86.8mm), Width: 18.98" (482.0mm), Depth: 29.58" (751.34mm)
Weight	Minimum: 32.75 Lbs (14.9 kg) / Maximum 51.5 lbs (23.6kg)	Minimum: 35.54 Lbs (16.12 kg) / Maximum 63.43 lbs (28.77kg)
Physical Security	2U LOCKING BEZEL	2U LOCKING BEZEL
Rack Rail Kit	INCLUDED	INCLUDED
Supply Chain Standards	HPE DL385 Gen10+ TAA FIO Enable Kit	HPE DL380 Gen10 TAA FIO Enable Kit



SYSTEM NOMENCLATURE & PART NUMBERS		
<i>Part Number</i>	<i>Description</i>	<i>System Functional Description</i>
10-20009-000	VICADS VMS Video Client Workstation, Tower, 4k Variant, HP	This is a video client workstation for running the OwlEye or Witness applications for surveillance, dynamic video switching or automated target tracking via the radar wall functions of the VICADS V100 VMS. This version is specifically setup to handle up to four 4K monitors and 1080P up to 4K video.
10-40002-001	V100, OwlEye Software License (Softwall)	This is software added to the client workstation to enable the OwlEye software functions.
10-40001-001	V100, Witness Software License (Personal Viewer)	This is software added to the client workstation to enable the Witness & Investigator software functions.
<b>HARDWARE SPECIFICATIONS (Specifications subject to change without notice)</b>		
<i>Specification</i>	<i>Description</i>	
Operating System	Windows 10 IoT Enterprise LTSC High End PKEA	
Processor	Intel Xeon W-2235 3.8GHz 2933MHz 6C 130W CPU	
Memory	(2) DDR4 2933 DIMM ECC Registered WW Memory	
O/S Drives	(1) HP Z Turbo Drive M.2 512GB TLC SSD <b>{or comparable SAS/SSD/Nvme}</b>	
Graphics Card	Nvidia RTX A4000, 16GB, 4DP (Precision 3650T)	
Networking	(1) 1G Ethernet LAN (RJ45) Port	
Peripherals	ENERGY STAR Qualified, Keyboard (US), Optical Mouse - MS116 (Black),US Power Cord, 9.5mm DVD-Writer 1st ODD	
Security Features	Trusted Platform Module (TPM 2.0); chassis Intrusion switch; Setup/BIOS Password; I/O Interface Security; lockable front bezel, Dell Data Guardian, Dell Endpoint Security Suite	
Management Features	3/3/3 (material/labor/onsite) Warranty US	
<b>MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS (Specifications subject to change without notice)</b>		
<i>Specification</i>	<i>Description</i>	
Chassis	HP Z4 G4 90 1000W Chassis	
Operating Temperature/Humidity	50-95° F (10-35 C) / 8-90% RH non-condensing	
Power Consumption	1000W Maximum Peak Power	
Cooling Requirements	3425 BTU/hr	
Dimensions	WxDxH: 15.2 x 6.65 x 17.5 in   38.6 x 16.9 x 44.5 cm	
Weight	22.4 lb (10.2 kg)	
Supply Chain Standards	TAA Compliant	



<b>SYSTEM NOMENCLATURE &amp; PART NUMBERS</b>		
<b>Part Number</b>	<b>Description</b>	<b>System Functional Description</b>
10-20011-000	VICADS VMS Video Client Workstation, Tower, Dual 4k Variant, HP	This is a video client workstation for running the OwlEye or Witness applications for surveillance, dynamic video switching or automated target tracking via the radar wall functions of the VICADS V100 VMS. This version is specifically setup to handle up to eight 4K monitors and 1080P up to 4K video.
10-40002-001	V100, OwlEye Software License (Softwall)	This is software added to the client workstation to enable the OwlEye software functions.
10-40001-001	V100, Witness Software License (Personal Viewer)	This is software added to the client workstation to enable the Witness & Investigator software functions.
<b>HARDWARE SPECIFICATIONS (Specifications subject to change without notice)</b>		
<b>Specification</b>	<b>Description</b>	
Operating System	Windows 10 IoT Enterprise LTSC High End PKEA	
Processor	Intel Xeon W-2235 3.8GHz 2933MHz 6C 130W CPU	
Memory	(2) DDR4 2933 DIMM ECC Registered WW Memory	
O/S Drives	(1) HP Z Turbo Drive M.2 512GB TLC SSD <b>{or comparable SAS/SSD/Nvme}</b>	
Graphics Card	(2) Nvidia RTX A4000, 16GB, 4DP (Precision 3650T)	
Networking	(1) 1G Ethernet LAN (RJ45) Port	
Peripherals	ENERGY STAR Qualified, Keyboard (US), Optical Mouse - MS116 (Black), US Power Cord, 9.5mm DVD-Writer 1st ODD	
Security Features	Trusted Platform Module (TPM 2.0); chassis Intrusion switch; Setup/BIOS Password; I/O Interface Security; lockable front bezel, Dell Data Guardian, Dell Endpoint Security Suite	
Management Features	3/3/3 (material/labor/onsite) Warranty US	
<b>MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS (Specifications subject to change without notice)</b>		
<b>Specification</b>	<b>Description</b>	
Chassis	HP Z4 G4 90 1000W Chassis	
Operating Temperature/Humidity	50-95° F (10-35 C) / 8-90% RH non-condensing	
Power Consumption	1000W Maximum Peak Power	
Cooling Requirements	3425 BTU/hr	
Dimensions	WxDxH: 15.2 x 6.65 x 17.5 in   38.6 x 16.9 x 44.5 cm	
Weight	22.4 lb (10.2 kg)	
Supply Chain Standards	TAA Compliant	

<b>SYSTEM NOMENCLATURE &amp; PART NUMBERS</b>		
<b>Part Number</b>	<b>Description</b>	<b>System Functional Description</b>
10-01002-001	VICADS VMS 1080P up to 4K video Client Workstation, Rack Mount, Dell	This is a video client workstation for running the OwlEye or Witness applications for surveillance, dynamic video switching or automated target tracking via the radar wall functions of the VICADS V100 VMS. This version is specifically setup to handle up to four 4K monitors and 1080P up to 4K video in a 1RU form factor.
10-40002-001	V100, OwlEye Software License (Softwall)	This is software added to the client workstation to enable the OwlEye software functions.
10-40001-001	V100, Witness Software License (Personal Viewer)	This is software added to the client workstation to enable the Witness & Investigator software functions.
<b>HARDWARE SPECIFICATIONS (Specifications subject to change without notice)</b>		
<b>Specification</b>	<b>Description</b>	
Operating System	Windows 10 IoT Enterprise LTSC High End PKEA	
Processor	Intel Xeon E-2246G,(6 Core, 12MB Cache, 3.6Ghz, 4.8Ghz Turbo w/UHD Graphics 630)	
Memory	(4) 8GB DDR4 UDIMM ECC Memory	
O/S Drives	(1) M.2 256GB SED OPAL PCIe NVMe Class 40 Solid State Drive <b>{or comparable SAS/SSD/Nvme}</b>	
Graphics Card	(1) Nvidia Quadro RTX5000, 16GB, 4DP, VirtualLink (3930R)	
Networking	(1) Intel I210 1Gb Ethernet Adapter (1X1GbE)	
Peripherals	ENERGY STAR Qualified, Dell KB813 Smart Card Keyboard (US), Dell Optical Mouse - MS116 (Black),US Power Cord	
Security Features	Trusted Platform Module (TPM 2.0); chassis Intrusion switch; Setup/BIOS Password; I/O Interface Security; lockable front bezel, Dell Data Guardian, Dell Endpoint Security Suite	
Management Features	ProSupport Plus: Next Business Day Onsite, 3 Years, 7x24 Technical Support, 3 Years, Accidental Damage Service, 3 Years , Keep Your Hard Drive, 3 Years	
<b>MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS (Specifications subject to change without notice)</b>		
<b>Specification</b>	<b>Description</b>	
Chassis	HP Z4 G4 90 1000W Chassis	
Operating Temperature/Humidity	50-95° F (10-35 C) / 8-90% RH non-condensing	
Power Consumption	550W Maximum Peak Power	
Cooling Requirements	1900 BTU/hr	
Dimensions	HxWxD: 1RU - 1.68" (42.8 mm) x 18.98" (482.0 mm) x 23.19" (589.1 mm) with Bezel or 22.74" (577.6 mm)	
Weight	19.27 lb (8.74 kg)	
Rack Rails	HP RACK KIT	
Supply Chain Standards	TAA Compliant	

SYSTEM NOMENCLATURE & PART NUMBERS		
Part Number	Description	System Functional Description
10-20009-000	VICADS VMS Video Client Workstation, Tower, HP	This is a video client workstation for running the OwlEye or Witness applications for surveillance, dynamic video switching or automated target tracking via the radar wall functions of the VICADS V100 VMS. This version is specifically setup to handle up to four 4K monitors and 1080P up to 4K video.
10-40002-001	V100, OwlEye Software License (Softwall)	This is software added to the client workstation to enable the OwlEye software functions.
10-40001-001	V100, Witness Software License (Personal Viewer)	This is software added to the client workstation to enable the Witness & Investigator software functions.
<b>HARDWARE SPECIFICATIONS (Specifications subject to change without notice)</b>		
Specification	Description	
Operating System	Windows 10 IoT Enterprise LTSC High End PKEA	
Processor	Intel Xeon W-2235 3.8GHz 2933MHz 6C 130W CPU	
Memory	(2) DDR4 2933 DIMM ECC Registered WW Memory	
O/S Drives	(1) HP Z Turbo Drive M.2 512GB TLC SSD {or comparable SAS/SSD/Nvme}	
Graphics Card	Nvidia RTX 4000, 16GB, 3DP +Usbc GFX	
Networking	(1) 1G Ethernet LAN (RJ45) Port	
Peripherals	ENERGY STAR Qualified, Keyboard (US), Optical Mouse - MS116 (Black), US Power Cord, 9.5mm DVD-Writer 1st ODD	
Security Features	Trusted Platform Module (TPM 2.0); chassis Intrusion switch; Setup/BIOS Password; I/O Interface Security; lockable front bezel, Dell Data Guardian, Dell Endpoint Security Suite	
Management Features	3/3/3 (material/labor/onsite) Warranty US	
<b>MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS (Specifications subject to change without notice)</b>		
Specification	Description	
Chassis	HP Z4 G4 90 1000W Chassis	
Operating Temperature/Humidity	50-95° F (10-35 C) / 8-90% RH non-condensing	
Power Consumption	1000W Maximum Peak Power	
Cooling Requirements	3425 BTU/hr	
Dimensions	WxDxH: 15.2 x 6.65 x 17.5 in   38.6 x 16.9 x 44.5 cm	
Weight	22.4 lb (10.2 kg)	
Supply Chain Standards	TAA Compliant	

SYSTEM NOMENCLATURE & PART NUMBERS		
<i>Part Number</i>	<i>Description</i>	<i>System Functional Description</i>
10-20008-001	VICADS VMS Video Client Workstation, Mini, HP	This is a video client workstation for running the OwlEye or Witness applications for surveillance, dynamic video switching or automated target tracking via the radar wall functions of the VICADS V100 VMS. This version is specifically setup to handle up to two 1080P up to 4K videomonitors and 1080P up to 4K video.
10-40002-001	V100, OwlEye Software License (Softwall)	This is software added to the client workstation to enable the OwlEye software functions.
10-40001-001	V100, Witness Software License (Personal Viewer)	This is software added to the client workstation to enable the Witness & Investigator software functions.
<b>HARDWARE SPECIFICATIONS (Specifications subject to change without notice)</b>		
<i>Specification</i>	<i>Description</i>	
Operating System	Windows 10 IoT Enterprise LTSC High End PKEA	
Processor	Intel Xeon W-1250 3.3GHz 2666MHz 6C 80W CPU	
Memory	(1) 16GB DDR4 3200 SODIMM NECC Memory	
O/S Drives	(1) Z Turbo Drive 512GB 2280 TLC Solid State Drive <b>{or comparable SAS/SSD/Nvme}</b>	
Graphics Card	(1) NVIDIA Quadro P620 4 GB Standard Cooler MXM Graphics	
Networking	(1) Intel 1Gb NIC PCIe Card (Low Profile)	
Peripherals	ENERGY STAR Qualified, Dell KB813 Smart Card Keyboard (US), Dell Optical Mouse - MS116 (Black),US Power Cord	
Security Features	Trusted Platform Module (TPM 2.0); chassis Intrusion switch; Setup/BIOS Password; I/O Interface Security; lockable front bezel, Dell Data Guardian, Dell Endpoint Security Suite	
Management Features	3/3/3 (material/labor/onsite) Mini Warranty US	
<b>MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS (Specifications subject to change without notice)</b>		
<i>Specification</i>	<i>Description</i>	
Chassis	HP Z2MG5 Z2 Mini WKS	
Operating Temperature/Humidity	50-95° F (10-35 C) / 8-90% RH non-condensing	
Power Consumption	280W Maximum Peak Power	
Cooling Requirements	1000 BTU/hr	
Dimensions	HxWxD: 8.5 x 8.5 x 2.28 in	
Weight	4.6 lb	
Supply Chain Standards	TAA Compliant	