PROMETHEUS™
SECURITY GROUP GLOBAL

RADAR WALL

RELIABLE | INTELLIGENT | CERTIFIED

Product Overview

VICADS® has dramatically enhanced the platform capabilities with the advent of the Owl Eye Radar Wall. Delivering advanced wide area protection and surveillance capabilities paired with Geo coordinated mapping, automatic target tracking and video switching, the Owl Eye serves as a robust and valuable addition to the VICADS® video management solution.

The VICADS® server processes ground-based radar data and uses this to coordinate Pan- Tilt-Zoom (PTZ) cameras with absolute positions to follow intruder tracks automatically in real time. Multiple tracks, zones and cameras can be managed simultaneously through a single user interface providing the operator enhanced situational awareness and early detection capabilities. For fixed zone deployments, the system allows the user to augment automated tracking cameras with fixed or PTZ cameras attached to the radar detection zone view. Zones can be layered and prioritized as the distance to the resource gets closer so that the system shows the operator the most important threat information.

Features	Benefits
Sturdy, Scalable, Serviceable	Designed for high reliability minimal downtime applications, expansion without obsolescence and ease of maintenance.
Critical Infrastructure Protection of Wide Area Perimeters	Challenging areas such as Borders, Waterways or Wide Area Perimeters with little or no security are now defendable and enhanced situational awareness is gained through early detection and response.
Geographic Information System (GIS) & Ground Based Radar (GBR) Integration	Active tile high quality GIS mapping interface with pan, scroll and zoom, dynamic status icons, geo-located cameras and interactive operator controls.
Redundancy and Regionalization	Fully redundant hardware configurations for mission critical applications. Regional monitoring & management deployment options.
Intelligent Event Integration	Fully integrated with radars and provides robust automatic tracking logic to follow intruders, handoff targets and prioritize based on user defined resource priorities (polygons of interest). Uses real time global positioning data of intruders and the trajectory in relation to resources to prioritize threats
Cybersecurity Aware Platform & Information Assurance Posture	(RMF) Compliant Secure, Encrypted Web Configuration Active Directory Integration

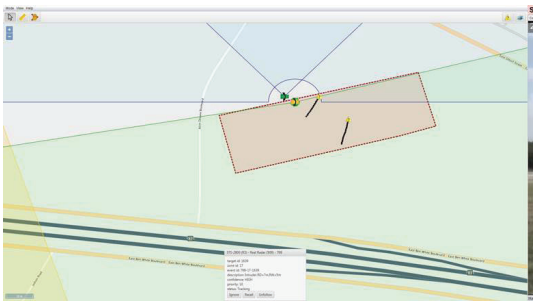
HARDWARE SPECIFICATIONS

SPECIFICATION	DESCRIPTION	NOTES
Operating System	WIN10 Enterprise LTSC	HP Z4 G4
Processor	1: Intel Xeon W-2133, 3.6 GHz	Six Cores with Hyper Threading
Graphics	1: Nvidia Quadro P4000, 1st GFX, 8GB Graphics	4 ports, max resolution 5120 x 2880
Memory	2: 16GB DDR4-2666- ECC Reg RAM	32GB total
Storage	1: 480 GB SATA Enterprise SSD Drive	Solid State
Network	2: 1Gb network interface	RJ-45 standard, Fiber NIC options available
Power Supply	1000W, Custom PSU, Wide Ranging Active PFC	90% efficient
Power Consumption	1.75A (210W) @ 120VAC, 60Hz	Per station
Peripherals	6: USB 3.1G1 Type-A (rear) 4: USB 3.1G1 Type-A (front) 2: USB 3.1G2 Type-C, DVD-RW, mouse, keyboard	No Monitors included
Form Factor	Tower, Rack Mount (4-RU if racked)	Workstation rack mount kit required
Warranty	3-year standard, 5-year optional	Limited
Hardware Part Numbers	10-20005-001 10-50000-000	VICADS® Radar Wall Workstation, Rack Mount, Windows 10 Video System Joystick Controller
Software Part Number	10-40004-000 10-40004-001	VICADS® Radar Wall Site License, Version 4 (Supports 15 Radars) VICADS® Site Specific Geo Database, Version 4

PERFORMANCE SPECIFICATIONS

SPECIFICATION	DESCRIPTION
# of Simultaneous Radars[2]	Up to 15 hosted on VICADS® Server; more possible with additional hardware
# of Tracking Monitors	Up to 3 video tracking per station; a minimum of 2 monitors (one Geo Map, one tracking) must be deployed with the solution.
# of Simultaneous Tracks	Configuration dependent, maximum of 3 per station
# of Radar Zones	Unlimited
# of Cameras per Zone	1 tracking camera per intruder with auto hand off Up to 4 (fixed or PTZ) per intrusion zone view, live video only
# of Users	Unlimited
Mapping Interface[3]	GeoServer
Deployment Options[4]	Integrated with Command and Control Display Equipment (CCDE) or Standalone and integrated directly with FLIR Radar Server
Tracking Cameras Supported[5]	FLIR: Ranger MS-UC (DefendIR), Axis VAPIX** ONVIF 2.0**
Tracking Radars Supported	FLIR: Rangers Series (R1, R2, R3, R3D, R5, R5D & R20SS) Any GBR device conformant to SEIWIG ICD-XML standard
Supported Encoding Protocols	MJPEG, MPEG2 TS/ES, MPEG4, MPEG 4 part 10 (H.264)
Active Directory Integration	Yes; with Kerberos security for user authentication
Certifications & Approvals	USAF Approved for PL1-PL4, DIACAP compliant, SEIWG ICD-XML compliant

[1] Fiber optic network interface option card requires SFP+ fiber optic transceivers sold separately.
[2] The system can support more simultaneous radars with additional hardware. Please contact the factory for more information.
[3] Requires a site-specific geo database be created for the project.
[4] System has an Application Programming Interface (API) & Software Development Kit for third party systems integration.
[5] Requires a Pan-Tilt-Zoom (PTZ) camera with adequate range and absolute positioning support to automate tracking.
† Specifications are subject to change without notice. PSG is not responsible for customer use of this data.



Radar following tractor—GIS mapping on left with track, video tracking on right

The test equipment setup