

SAAV Situation awareness system

Delivering fully automated 360°
situational awareness
for ground vehicles.



Product description

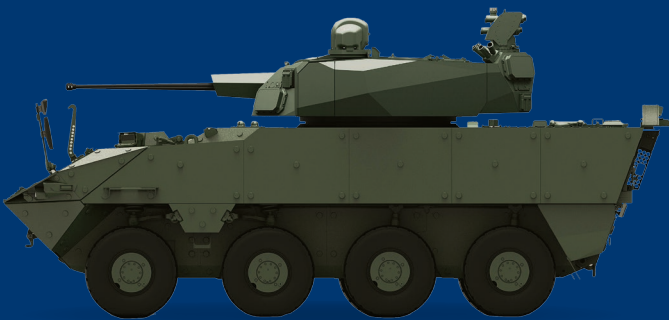
A cutting-edge, AI-driven solution designed to support real-time decision-making. It allows the commander to maintain full operational control with hatches closed, delivering comprehensive situational awareness from the immediate surroundings (LOS) in one seamless view. SAAV minimizes mental strain and focus demands, while boosting the vehicle’s survivability and combat effectiveness. This modular system integrates AI clusters (featuring day/night cameras, GPU, and advanced algorithms) with a central processing unit.

- **Automated Target Detection:** Effortlessly identifies and tracks both stationary and moving targets.
- **Ultra-Low Latency Video System:** Distributes real-time video communication with minimal delay.
- **Flexible Modular Design:** Seamlessly integrates individual components into existing situational awareness setups.
- **Distributed GPU Processing:** Combines decentralized embedded GPUs with centralized computing power.
- **Extensive Connectivity Options:** Enhances input range for broader operational coverage.
- **AI-Powered Recording Solution:** Captures and processes critical data with intelligence.



TACTICAL DATA

- Recognition and Tracking
- ATR for the covered area of ~ 360°
- Human and vehicle recognition and tracking
- Optical Radar
- Target localization (range and azimuth estimation) and visualization in bird eye view
- Action recognition & Alert modes
- Alert when a specific target is detected
- Alert when human approaching above a specific speed or range
- Performance for Demonstration (Pd-90%):



TECHNICAL DATA

Device Type	Camera Resolution	Camera Setting	ATR Range (m) Human (Frontal) 0.5 m x 1.6 m	ATR Range (m) Vehicle 2.3 m x 2.3 m
EO camera (day)	1920 x 1080 (FHD)	HFOV (50°)	100 m	150 m
Device Type	Sensors	AI Computation	Storage	I/O (Changes upon request)
AI Cluster	Global Shutter EO, VGA LWIR TI	NVIDIA Xavier™ NX + Optional Hailo-8™	Optional SSD	HD-SDI, 1G Ethernet, Discretes, VSync
Device Type	Video Outputs	AI Computation	Storage upon request)	I/O (Changes upon request)
AI Central Server	Upon request	2 X NVIDIA Xavier™ AGX + 2 X Optiaonl Hailo-8™	Optional SSD	12 (selectable) input HD-SDI channels, 1G Ethernet, USB, Discretes, VSync

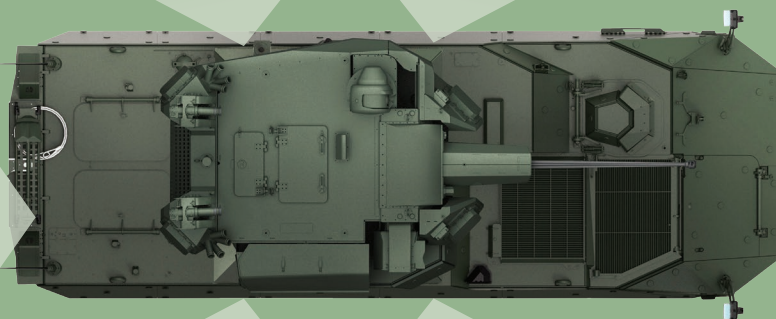
ENVIROMENTAL DATA

OPERATING TEMP*	VIBRATION	OPERATING SHOCK	RELATIVE HUMIDITY	DUST/SA LT	EMI/R FI
MIL-STD 810E -10°C: +55°C	V2 PER VITA 47 Tracked vehicle vibration profile	MIL-STD 810E 40g/11ms	MIL-STD 810E 0 – 100%	MIL-STD-810F	MIL-STD-461F

* Adjustable according to customer’s specifications.

CONFIGURATION TABLE

Product	Product number
Day + Night camera	SVV8301
Day camera	SVV8302
AI Central	ACP8301
Dell Latitude 7030	AWS8301



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