

360° Advanced Situational Awareness Day & Night for Army Applications



The AN/VSS-502-360 situational awareness system is based on the same embedded platform of the driver day & night periscope system. Various embedded processing units can be connected and operate in a cluster. A number of different cameras and configurations are available. The system shown here represents only one of many different configurations.

Wärtsilä has developed a new Advanced Situational Awareness System (ASAS) platform for Degraded Visual Environments (DVE). This innovative modular vision system can be integrated in various versions of Main Battle Tank(s), Armored Personnel Carrier(s) (APC) and other special purpose vehicles.

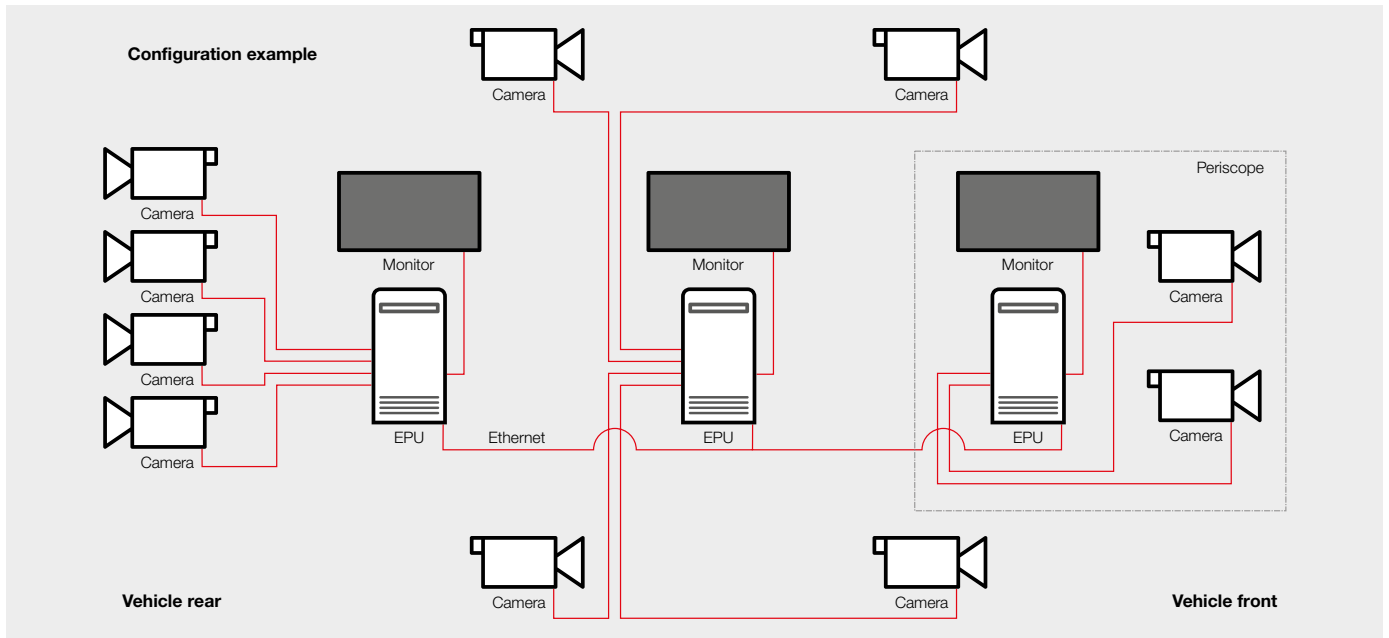
It consists of state-of-the-future sensors and electronic components designed with the latest technology. The components are selected to meet the requirements of MIL-STD 810 and MIL-STD 1275 equipment.

The electronics and sensors are housed in a modular body which is protection class IP68K. The system is extremely robust, reliable, proven, and well protected against harsh environmental conditions like gun fire shocks, vibrations, high and low temperatures, water, sand and dust. A special modular software for the image processing with low latency was developed. The software has various capabilities like image fusion, image stitching, on screen data display, zoom & pan mode. The SW can be expanded with further modules and functions.

Key features

- Modular system
- Lowest latency from glass to glass
- 360° HFOV & up to 270° VFOV
- Day & Night vision
- Advanced sensor offering
- Image fusion
- Image stitching algorithm
- Tracking capability
- High reliability
- Customized configurations
- 20 years support





Single LWIR camera housing

- IP68K with CBNR protection
- Operating temp: -40 to +85°C
- 640 x 480 Resolution



Dual camera housing

- IP68K with CBNR protection
- Operating temp: -40 to +85°C
- LWIR & CMOS or CCD cameras
- Various sensor configurations available



Wide FOV dual channel camera housing

- IP68K with CBNR protection
- Operating temp: -40 to +85°C
- Extreme low latency image fusion of LWIR & CMOS sensors
- Image stitching algorithm for wide HFOV
- Various sensor configurations available
- Optional rotatable and tilt unit
- Optional multi track SW
- Optional ballistic protection
- STANAG 4569 Lev. II or N.I.I.J 0108.01 Lev. III



Single & dual camera driver day & night periscope version with EPU

- Fast push-pull installation and disassembly
- IP68K with CBNR protection
- Detachable and adjustable monitor
- Operating temp: -40 to +71°C
- Passive system
- Digital image processing with low latency
- Various sensor configurations available



Embedded Processing Unit (EPU)

- Operating temp: -40 to +71°C
- 2x single or 2x dual Framegrabber
- 4x Output interfaces (monitor)
- Recording function
- 8x Output's for external control
- Fast & robust SLC SSD memory
- Linux operating system
- Low latency image processing
- Passive cooling



Monitor with key panel & joystick

- Ratio: 4:3 or 16:9 version
- Dimension: 7" / 8,4" / 9"
- Res.: XGA, WXGA, FHD
- Operating: -40°C to +71°C
- Housing: IP65
- Illuminated keys, dimmable
- Detachable and adjustable

