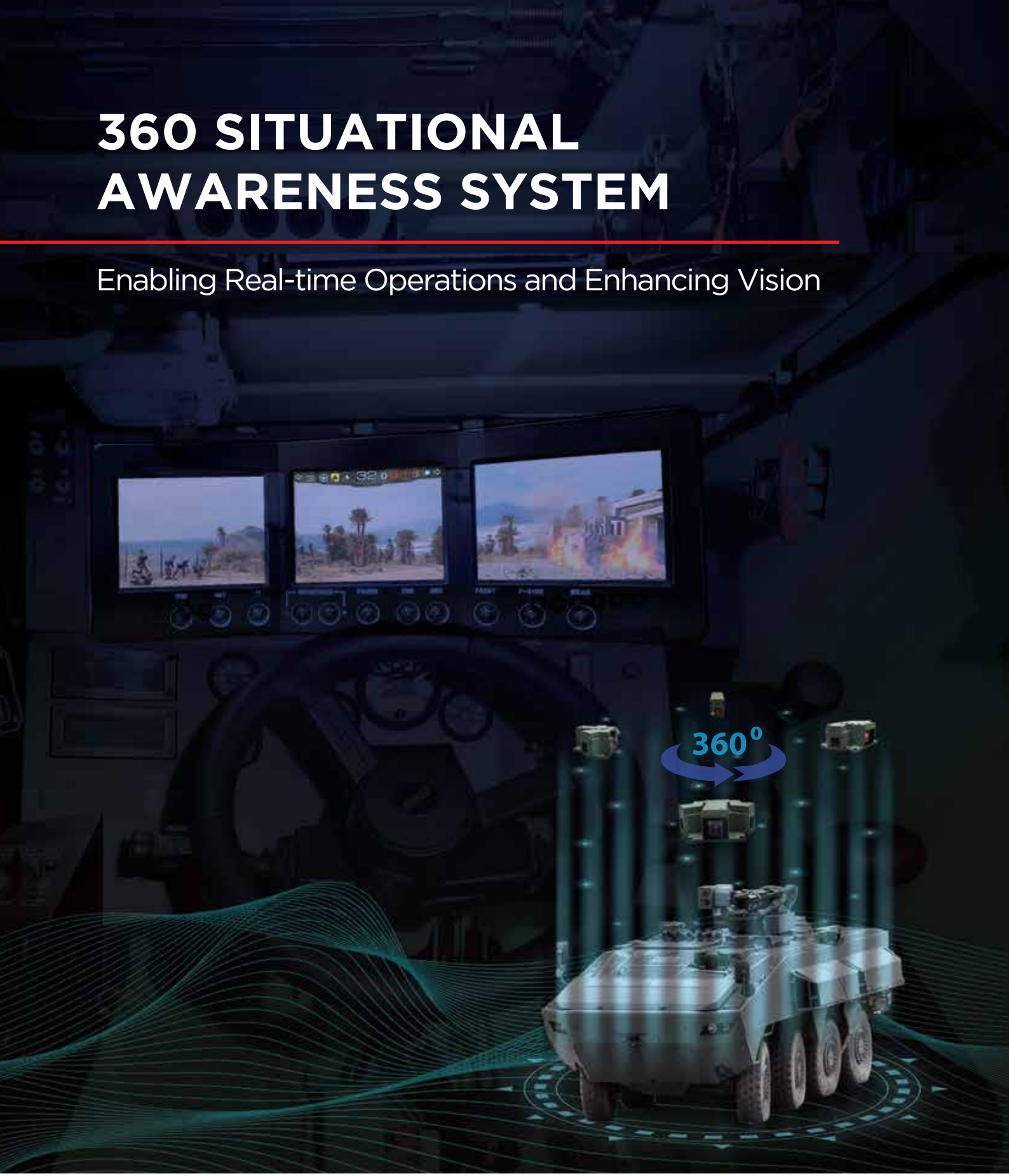
360 SITUATIONAL AWARENESS SYSTEM

Enabling Real-time Operations and Enhancing Vision



ST Engineering

360 Situational Awareness System

The 360 Situational Awareness System (360SA) is an integrated vision system for armoured vehicles.

The 360SA is a purpose-built, full vehicle camera and sensor system suitable for closed-hatch operations in paramilitary and combat vehicles. The system uses powerful at-the-edge processing to reduce latency thus enabling real-time operations with enhanced situational awareness.

The 360SA improves crew survivability with an all-round surveillance view outside the vehicle through real-time video monitoring. It keeps vehicle crew safe by providing threat assessment before dismount, enhancing driver's vision, and enabling driving under hatch. It is also able to reduce damages and accidents during manoeuvring.

The system's highly scalable design makes it suitable for all vehicle classes ranging from tracked, wheeled and armoured combat vehicles, as well as personnel carriers and support vehicles.

The modular 360SA is configurable for different mission needs. Its open system architecture allows easy integration with other C5ISR systems to support mission decision.

Applications

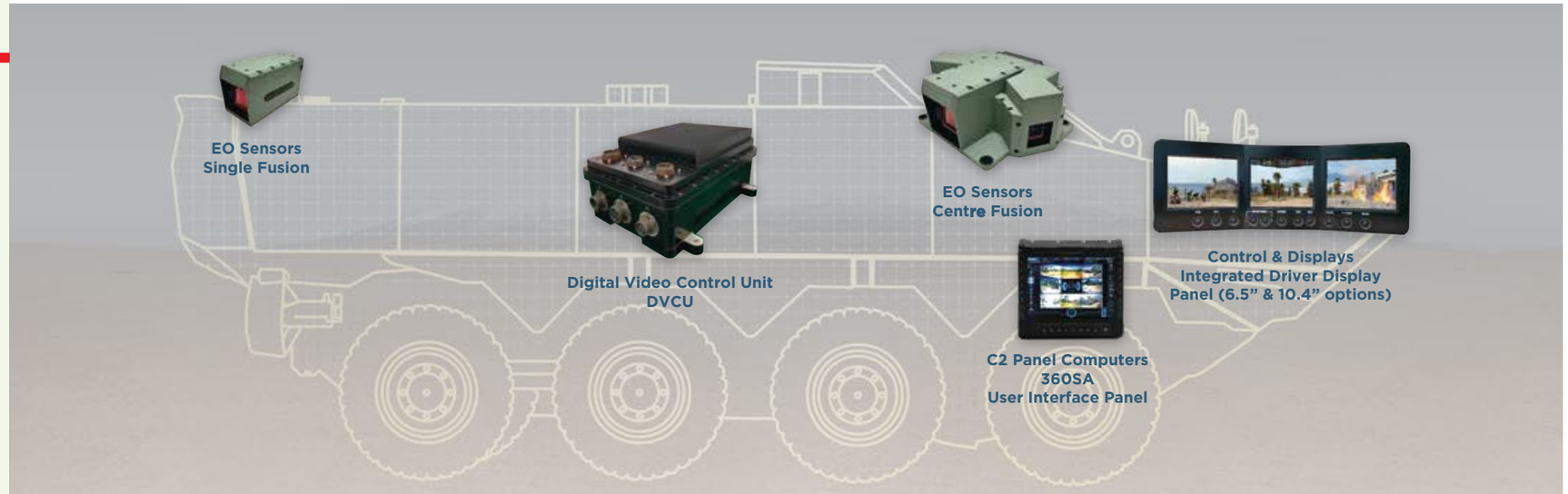
- All-round surveillance system
- Closed-hatch driving
- Driver visibility enhancement
- Suitable for different terrains

Key Features

- Ultra-low glass-to-glass latency for driver display
- Real-time IP video access for enhanced situational awareness
- Intuitive controls with CAN bus inputs from driver interfaces on vehicle

Services

- System conceptualisation and design
- Manufacturing and procurement
- System integration
- Warranty and maintenance

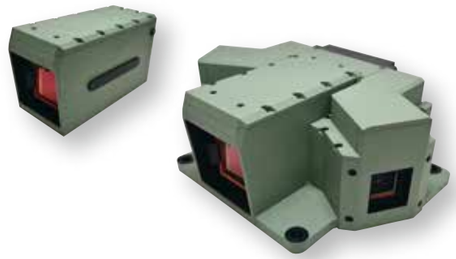


Modular design for different vehicle and mission needs

Fusion Cameras

The Fusion Driver Sight is a suite of ruggedised MIL-SPEC cameras designed to operate in the harshest conditions for tracked or wheeled armoured vehicles. It boosts survivability by improving visibility in sandy, smoky or foggy conditions.

The Fusion Camera houses an uncooled VOx Microbolometer thermal sensor that is fused with a day-camera based on state-of-the-art optics design to provide real-time fusion. The 3-in-1 Fusion Camera provides a seamlessly stitched wide-angle view in a compact form-factor that reduces blind spots with an increased field-of-view.



Digital Video Control Unit (DVCU)

The DVCU is a video processing system designed to provide real-time video images from cameras to the display monitor with minimal video latency. It distributes various camera input videos to be viewed on multiple displays, including the C2 Panel Computers.

The ruggedised enclosure unit has multi-channel video (CVBS/SDI) receivers with multiple video outputs.

Each display video is selectable using control interfaces like RS422, GigE Vision Control and Discrete I/O.

Integrated Driver Display Panel (IDDP)

The IDDP improves driver vision and enables safe manoeuvring of the vehicle.

Vehicle dashboard symbols displayed on the screen provides drivers with vehicle status information while keeping their eyes on the road. Markers on the screen allow drivers to navigate safely around obstacles near the vehicle.

Cameras mounted on various positions reduce vehicle blind spots. Views on the screen can be easily selected based on the vehicle's (forward or reverse) gear shift or changed manually.

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