

See-Through Armor (STA)

360-degree real-time situational awareness under closed hatches



Elbit Systems' See-Through Armor (STA) creates a new level of situational awareness and operational efficiency under closed hatches. Utilizing a set of high-resolution day and night cameras, the STA provides a full view of the battlefield, without compromising crew safety.

Using powerful image processing tools, Elbit Systems' STA presents a detailed and seamless 360-degree panoramic view. The STA is also fully integrated with battle management systems, warning systems and fire control systems. Tactical information feed from all of these systems are presented on the display, integrated with the 360-degree view. The vehicle's fire control and warning systems can also be operated based on threats acquired by the STA. In order to enhance the crew's situational awareness, the STA simultaneously displays both the 360-degree panoramic image as well as an enlarged region of interest.

Featuring a highly intuitive user interface as well as a low silhouette installation, the STA is adaptable to a wide range of armored fighting vehicles and main battle tanks.

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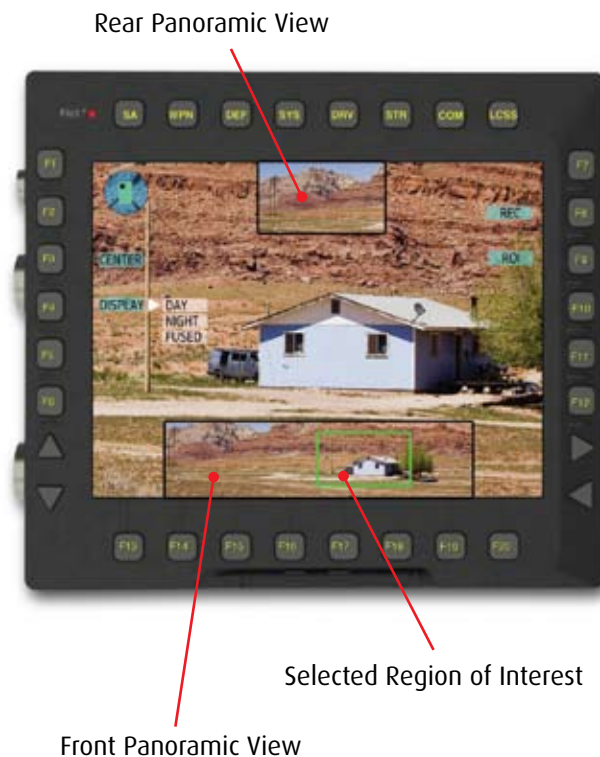
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Key Features

- Continuous and seamless 360-degree real-time panoramic view under closed hatches
- Electronically joined imagery through advanced image processing and powerful algorithms
- Day and night vision cameras with zoom-in capabilities
- Low silhouette design, adaptable to a broad range of fighting vehicles

Key Benefits

- **Improved situational awareness** – Real-time, omni-directional vision accurately locates both friendly and hostile forces under closed hatches
- **Increased operational efficiency** – User-friendly interface provides panoramic observation, enabling the operator to quickly zoom in on regions of interest
- **Rapid sensor-to-shooter cycle closure** – Fully integrated with external systems tactical data displayed together with 360-degree view, operation of fire control and warning systems are executed via STA
- **Advanced imagery display** – Split display simultaneously provides the operator with a panoramic view and zoom-in capabilities



Technical Specifications

- Azimuth coverage: Continuous 360° azimuth coverage
- Elevation coverage: -20° to +30° in elevation (configurable)
- Number of supported sensors: Day: 4-12 Night: 4-12
- Day sensor: GiGe cameras: (640H x 480V) or (782H x 582V) or (720H x 1280V)
- Night sensor: Uncooled bolometric FLIR (LWIR): 384H x 288V or 640H x 480V
- Frame rate: Day: 25 fps (typical), 100 fps (maximum) Night: 25 fps
- Frame delay: Day: Maximum 2 frames (@ 25 fps) Night: Maximum 2 frames (@ 25 fps)
- Number of independent displays: 3 (two are controllable by crew console)

Detection ranges	Human (1.7m x 0.5m)	Vehicle (2.3m x 2.3m)
Day (782H x 582V)	>200m	>300m
Night (640H x 480V)	>150m	>250m