Benefits
- Dramatically improved crew force protection and vehicle survivability
- 360-degree protection
- Early threat detection
- Engagement at maximum standoff ranges
- Reduced collateral damage
- Increased threat detection, recognition and identification
- Increased tactical situational awareness
- Collaborative sensing and engagement “slew to cue” with on- and off-board sensors and radars
- Precision targeting and precision effects
- Designed for tracked and wheeled combat vehicles

Raytheon's BattleGuard system integrates high-performance electro-optical, infrared and visible sensors with a weapon, both mounted on a common axis of rotation and driven independently. With this concept, the commander's sight performs one mission function while the commander's independent weapon is in a stored, ready, or active gun-following mode with the sensor.

The BattleGuard weapon station was designed to reutilize existing, battle-proven commander sights currently rated at technology readiness level (TRL) 9. The baseline sensor for the system is the A3 Bradley commander's independent viewer (CIV), which provides a total above-armor system.

The BattleGuard system provides an integrated high-performance 360-degree weapon station and sensor with a 2nd Gen FLIR or a 3rd Gen high-definition/two-color FLIR, color day TV and laser functions.

The BattleGuard system provides an integrated high-performance 360-degree weapon station and sensor with a 2nd Generation (LWIR) forward looking infrared (FLIR) or a 3rd Generation high-definition/two-color (MWIR/LWIR) FLIR with color day television and laser functions.

In the BattleGuard configuration, the CIV also provides multitarget tracking and an eyesafe laser range finder. Additional laser function options include precision laser target designation, visible and infrared laser pointing, and a multiple integrated laser engagement system (MILES).

The BattleGuard system provides unobstructed 360-degree coverage and enables the trained observer or operator to detect, classify, recognize, identify and locate both stationary and moving targets while under armor, in battlefield conditions and obscuration with a stationary or moving platform. In addition, this system supports the capability to simultaneously engage two targets at a maximum of 180 degrees apart with both the platform primary weapon and the BattleGuard.

Raytheon's BattleGuard system is designed to maintain boresight and minimize line of sight jitter to maintain a high probability of hit for any mounted weapon.
System Modularity

The BattleGuard system is designed with flexibility that supports a variety of machine guns including the M230LF, M134, MK 47, M249, M240, M2 and MK 19. It also supports the addition of hard- or soft-launch missiles such as the TOW, Javelin, Griffin and Stinger as well as non-lethal weapons. Designed with modular flexibility and adaptability, the system allows for the integration of future weapon systems as well as independently gimbaled high-performance sensors.

System Commonality

The BattleGuard system is designed to be a common system on all wheeled and tracked combat vehicles. Its structure and subsystems are able to meet the severe shock and vibration environments of all current heavy combat platforms.