

I-MILES CVS

INSTRUMENTABLE- MULTIPLE INTEGRATED LASER ENGAGEMENT SYSTEM COMBAT VEHICLE SYSTEM (I-MILES CVS)

Cubic's combat vehicle system instruments tactical and combat vehicles enabling force on force engagement training. This advanced wireless vehicle solution for simulation training comprises a Tactical Vehicle System (TVS) overlaid with a shooter kit. The CVS is interoperable with MILES, infantry weapons and Anti-Armour Weapon Simulation Systems (AAWSS), for seamless integration into a Combat Training Center.

This system receives threat events communicated via laser (direct fire weapons), short range radio (exploders) and player unit radio (simulated area effects, geometric pairing). A sustained hit results in damage assessment, hit indication and crew notification.

Cubic's CVS instruments platforms ranging from civilian, tactical and combat vehicles to buildings, fortified areas, etc.

BENEFITS

- Wireless laser detectors, minimizing cables
- Battery powered and/or augmented from vehicle power
- Generic instrumented configured per platform (vehicle, building)
- Situational interface to Crew (intercom, menu display)
- Qualified to MIL-STDs



OVERVIEW

The CVS is a wireless laser-engagement instrumentation system, deployable across a range of combat vehicle platforms (e.g., Infantry Fighting Vehicle, Main Battle Tank, soft-skin) and structures (e.g. building, fortified area, etc.). The CVS solution simulates the use of vehicle-mounted weaponry in the battlefield.

MAJOR COMPONENTS

- Display Module (DM)
 - Visual and audio (sound effects)
 - Wireless
- IPOD
 - Controller functions
 - Graphical step-by-step installation wizard
- Vehicle Kill Controller (VKC)
 - Main system coordinator
 - Performs casualty assessment using internal, configurable Probability of Kill data based on ammunition and vehicle vulnerability
 - Can record all events for playback during AAR
 - Provides data communications interface for Player Unit instrumentation to support real-time monitoring and control
 - Externally powered with internal backup battery for 100+ hours operation

- Vehicle Kill Mast (VKM)
 - 1,800 meter visibility
 - 360-degree field of view
- Small Arms Transmitter (SAT)
 - PMT-90 compliant
 - Disabled when system is catastrophically or firepower killed
 - Wireless
 - Single, user-replaceable ½ AA battery provides 600+ hours operation
- Vehicle Detector Module (VDM)
 - PMT-90 compliant laser decode
 - Wireless
 - > 120 degree Field of View
 - Single, user-replaceable L91 AA battery provides 900+ hours operation
- Serial Module RF Interface (SMRFI)
 - Provides RF communication inside and outside the vehicle
 - No cable entry point required
 - Extends coverage to wireless detectors
- Main Gun Assembly (MGA)
 - Universal fixture mounted to Remote Weapon Station, Canon and Main Gun, providing weapon effect simulation
- Vehicle Interface Module (VIM)
 - Links the simulation instrumentation to the vehicle's fire control system
- Zigbee End Device (ZED)
 - Provide an RF link from interior to exterior from VIM to MGA, minimizing cables about the vehicle



Wireless Vehicle System



Combat Vehicle System



Main Gun Assembly



Vehicle Interface Module