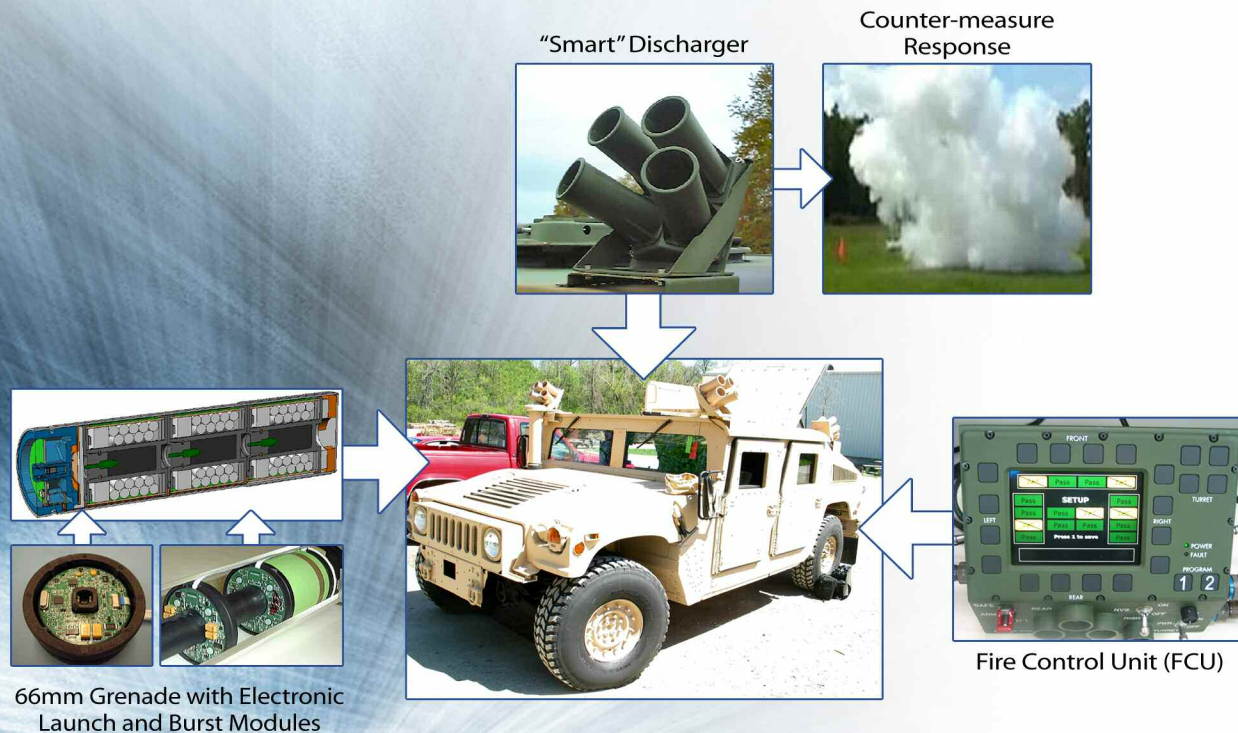


NON-LETHAL and OBSCURATION GRENADE COUNTER-MEASURE SYSTEM



APPLICATIONS:

- Low-cost alternative to active protection systems (APS) for combat support and combat services support vehicles. Convoy protection.
- Obscuration and non-lethal effects complement to APS.
- Upgrade 66mm grenade countermeasures system on current combat vehicles

NEW CAPABILITIES:

- Tailorable Effect – mix different types of grenades in the same dischargers and choose which one(s) function
- Programmable Distance – adjust distance grenade functions
- Tailored Response – capable of receiving inputs from Threat Detection System and offering a threat-specific response
- Improved Reliability – built-in test feature constantly polls grenade status and reports problems
- Improved Safety – electronic fire control prevents mishaps during loading
- Increased Effectiveness – electronic versions of M98 (Flashbang) and M99 (Stin ball) are stronger (more noise and greater ball velocity)

GENERAL DYNAMICS

Ordnance and Tactical Systems

12644 Research Parkway, Orlando, FL 32826 Phone: 407-281-1948 Fax: 407-275-1630 www.gd-ots.com

Approved for public release 8/31/06; distribution is unlimited.

SYSTEM SPECIFICATIONS

Vehicle Interface Requirements:	Provided as a modular kit adaptable to any platform. The system is designed to work on military vehicles, based on the Light Vehicle Obscuration Smoke System (LVOSS) Up-Armored HMMWW (M1114)
Power input (Volts, amps)	24Vdc per MIL-STD-1275B, 58W nominal (142W when heaters are running)
Power connection	Direct connection to the battery or vehicle power distribution block.
Weights:	Fire Control Unit (FCU): 10 lbs (does not include mounting bracket) M7X Discharger: 5.5 lbs each
Grenade Type Compatibility:	M90/M90E1 NL Visual, Near-IR Screening M98/M98E1 NL Distraction/Stun M99/M99E1 NL Blunt Trauma L8A3 Visual Screening (Red Phosphorus) M76 IR Screening (Brass Flake) M81 IR/Radar (Brass Flake, Graphite Fiber) M82 Visual Training (TiO2) L96A1 Anti-Riot Grenade (CS) L97A1 Anti-Riot Grenade, Training
Discharger Types / Number:	M7, M7X, future articulated discharger
Number of Dischargers:	Number: 5 for LVOSS. Up to 16 dischargers controlled via data bus (CAN protocol)
Display	Daylight and NVG, Red Light Viewing compatible
Programmable Fuzing	Programmable Time Delay: 0.1s to 9.0s BIT Self Test Grenade Type ID Grenade selection, enable/disable Discharger lockout-enable/disable Discharger status test
Environmental Conditions	
Low Temperature Operation: -46°C (-50°F), Per MIL-STD-810F	
High Temperature Operation: 71°C (160°F), Per MIL-STD-810F	
Vibration and Shock per (MIL-STD-810F), method 514.5 Annex A, Paragraph 2.3.9, Category 20 – Ground Vehicles-ground mobile using HMMWW profile	
Blowing Sand and Dust per MIL-STD-810F, Method 510	
Power Susceptible Compatibility-CS101,114-116 per MIL-STD-461E	
Radiated Emissions-RE102 per MIL-STD-461E	
Radiated Emissions Susceptible Compatibility-RS103 per MIL-STD-461E	
Hazards of Electromagnetic Radiation to Ordnance (HERO) per MIL-STD-464, section 5.8.3	
Power Emissions-CE102 per MIL-STD-461E	

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