Q: Which Hutchinson products should I consider for Military Ground Vehicle Electronics?

A: Hutchinson offers a wide selection of standard isolators that can be used for electronics in military ground vehicles. The products most commonly applied include:

- **Cupmount Series**
- **T-Mount Series**
- **5200 Low Profile Series**
- **TTA Series**
- **TTB Series**
- **Cablemount Series**

All of the isolators listed above have a successful history of being used for protecting electronics in military ground vehicles, providing isolation from vehicle vibration while surviving rugged off-road environments.

Common features in these product series that make them particularly suitable for military vehicle applications include:

- **Robust designs with resilient elements loaded in compression for good load handling.**

- **Progressive stiffening characteristics.**
  - Low stiffness under small deflections for effective isolation performance.
  - Increasing stiffness, snubbing, and/or positive stops at higher deflections to control electronics motion.
- Captive design configurations provide failsafe retention of electronics. Some have inherent failsafe features, while others are made failsafe with add-on restraining straps.

- Various axial-to-radial stiffness ratios available to meet specific isolation requirements.

- Natural frequencies are tailored in the 25-35 Hz range to avoid coupling with suspension resonances.

- Some parts have high deflection capability for improved shock attenuation.

- Broad range of static load carrying capacity with rated loads from 1 lb up to 1500 lbs per isolator.

- Silicone elastomer options available for high damping and/or to provide the most stable performance over the temperature ranges typical of military vehicle isolator applications.

- Can be integrated with quick release trays and racking systems

In addition to our standard products, Hutchinson can customize or develop a solution to meet the demanding requirements of your application. Engineering, design, and development of vibration isolation systems and rubber-to-metal isolators is our strength and we have a proven track record of delivering solutions to the most challenging problems.

Examples of Custom Designed Vehicle Electronics Isolators from Hutchinson

Types of Equipment Using Hutchinson Electronics Isolators in Military Ground Vehicles

- **On-board Equipment:**
  - Indicators
  - Controls
  - Mechanical, electrical, hydraulic and pneumatic operating components
  - Communication equipment
  - Fire control equipment
  - Navigation equipment
  - Sensors
  - Engine Control Units (ECU)
  - Inertial Measurement Units (IMU)
  - Chemical Detectors
  - Displays

- **Vehicles:**
  - Tanks
  - Trucks
  - Personal Carriers
  - Mobile Rocket Launchers
  - Self-Propelled Howitzers
  - Re-supply Vehicles
  - Tactical Vehicles
  - HMMWV
  - JLTV
  - FMTV