When You’d Rather Not Send Anyone. Oshkosh Defense® TerraMax™ Unmanned Ground Vehicle Technology.

The Oshkosh Defense® TerraMax™ UGV advances perception, localization and motion planning to increase performance in autonomous missions.

A multi-sensor system combines with novel registration techniques to provide accurate positioning estimates without needing to rely on continuous tracking through a lead vehicle or GPS signals.

Designed as a kit for use on any tactical wheeled vehicle, the Oshkosh TerraMax UGV is capable of supervised autonomous navigation in either a lead or follow role. The autonomous system completes predetermined convoy missions fully autonomously in any position in the column, and can also be commanded on the fly to semi-autonomously follow the same roads as a lead vehicle. The system supports remote control and tele-operation, and will allow an operator to utilize these modes for recovery if components of the autonomy system have been rendered inoperable.

Since each vehicle is capable of navigation to the objective independently, the Oshkosh TerraMax UGV not only facilitates tight convoy formation, but also enables the composition of the convoy to change as demanded by traffic conditions, road blockages or other obstructive situations.

The Oshkosh TerraMax UGV utilizes highly capable and reliable hardware that is tightly integrated onto the vehicle. This minimizes system vulnerability and enables Advanced Driver Assist Systems such as Electronic Stability Control, Collision Mitigation Braking and Adaptive Cruise Control for safer, more adaptive, controlled vehicle operation.
Capable of supervised autonomous navigation in either a lead or follow role
Modular system can be integrated onto any military vehicle
Tightly integrated “x-by-wire” brakes, steering, engine and transmission enable Advanced Driver Assist Systems
Robust, multi-modal sensor suite consisting of LIDAR, radar and multispectral vision
Advanced machine learning techniques applied to perception and motion planning
Operation in GPS denied environments

User-friendly Operator Control Unit (OCU) allows operators to create and load route information and observe and manage internal operations and autonomous systems status over tactical data links:
- Displays only immediately necessary information
- Facilitates swift input to maintain convoy tempo
- Requires only infrequent monitoring by operator
- Allows a single operator to control multiple UGVs
- Ruggedized tele-operation controller
- Easy to learn interface is immediately familiar to today’s users

Oshkosh Corporation
2307 Oregon Street, P.O. Box 2566 • Oshkosh, WI, USA 54903-2566
ph 1.920.235.9150 • fax 1.920.233.9506
Washington, DC Office
1300 North 17th Street, Suite 1040 • Arlington, VA, USA 22209
ph 1.703.525.8400 • fax 1.703.525.8408

©2012 OSHKOSH CORPORATION Oshkosh and the Oshkosh logo are registered trademarks and TerraMax is a trademark of Oshkosh Corporation, Oshkosh, WI, USA. All other trademarks are property of their respective owners.