

## **DCE X-Series Uncrewed Ground Vehicles**

DCE's X-series UGVs are designed as cost-effective, ruggedised platforms for use across sectors including defence & security, agriculture, nuclear decommissioning, and civil projects.

The X-series use DCE's Marionette™ robotic architecture, a modular toolkit which can be used to add teleoperation, follow-me/avoid-me capabilities, autonomy, and open interfaces for rapid integration with external systems and payloads. True plug-and-play payload changes can also be enabled via DCE's innovative Generic Vehicle Architecture (GVA) compliant payload interface.

Marionette has also been deployed on vehicles including Ford's Ranger 4x4, the AVT Proteus UGV, the HIPPO HAWC UGV, FV510 Warrior and the RMMV HX60 tactical truck.



Marionette™ control unit



DCE's X3 UGV

## **Recent Projects and Applications**

- All-terrain carrier for a battle-field medical telepresence system.
- Amphibious platform for subterrenean infrastructure mapping.
- Marsupial UGV deployed from 'mothership' UGV for CBRN reconnaissance.
- ISR capability for European human-machine teaming experimentation via a Nato-GVA compliant Human-Machine Interface.





## **SPECIFICATION**

- Dimensions: 1310x860x470mm LxWxH)
- Turning circle: 1535mm
- Speed: up to 20kph (flat ground, no load) depending on variant
- Environmental: -400C to +85 OC (-20 OC to +850C with standad battery pack)
- Typical weightL 300kg (option dependent)
- Ground clearance: 80-150mm
- Typical mission duration >24 hr silent watch
- Power: 6.75kWh LiFEPO4 (upgradeable)
- Slope/stair climbing: 45 degrees
- Kerb climbing: >0.2m
- Radio compatible with all major military radio suppliers
- Radio range: up to 5km line-of-sight (COFDM MESH radio)

## **BASE PLATFORM**

- Robust chassis with configurable top deck
- Pressure-washable (IP67) as standard, amphibious variant available.
- User-specifiable power pack (high capacity LiFePO4 as standard)
- Wireless hand controller options with joystick control (433/868/915Mhz local radio)
- Plug-and-play compatibility with long range data, video and audio radios (up to AES256 encryption)
- Log ground pressure (typcical 980kg/m2 or 1.4PSI at 300kg)
- Over 3 tonne towing capability (>3kN pull)
- · Pitch and roll sensing and reporting
- Vehicle diagnostics capacity
- Optional Follow-Me capability
- Open interfaces for payload and autonomy integration
- Capable of being stow



