

CBRN Mini Unmanned Ground Vehicle (CBRN Mini-UGV) VRDE, Ahmednagar

The CBRN Mini-UGV has been designed at Vehicles Research & Development Establishment ,Ahmednagar, a premier laboratory under Defence R&D Organisation. UGVs being unmanned/ tele-operated vehicles have upper edge over conventional manned NBC recce vehicles, specifically, in terms of personnel safety for the Armed Forces for confined area mission & dismounted recce operation.

This Mini-UGV is tracked platform with four flippers designed to traverse through confined areas. This feature facilitates dismounted recce operation. This Mini-UGV has stair climbing, water fording and ditch crossing capabilities. The purpose to facilitate CBRN detection , digital marking of contaminated zones and soil/liquid sample collection using Robotic arm, without risk of exposing personnel. The day/night vision system facilitates surround view of UGV and relevant zones. The handheld operator control unit facilitates tele-operation of driving & payload operations using wireless communication link .



Operator Control Unit



CBRN Mini-UGV

Salient Features :

1. Tracked platform with four flippers
2. Max speed : 6 km/hr
3. Stairs climbing - Step Height : 18 cm, Depth : 25 cm
4. Ditch crossing : 50 cm
5. Water Fording : 20 cm with hard bottom
6. Day and Night Vision system
7. GPS/INS based integrated Navigation system
8. Wireless communication link Range : up to 500 m Near LoS and 1 km LoS
9. Obstacle Detection & Warning system
10. Endurance : 2 hours
11. Detection of CBRN contamination and Remote Monitoring
12. Digital marking of CBRN hazardous areas based on navigation data
13. Robotic Arm for Soil/liquid sample collection
14. Modular Hand held / vehicle mounted Operator Control unit
15. Rugged & IP 66 protection