

Gladiator Technical Specifications	
All-terrain Chassis	
Configuration	4WD, bi-steering, Rolling zero point turns
Dimensions	3'x3'x2'
Weight	25kg
Payload	10kg
Drivetrain	4 wheel drive. 2.5Nm per wheel Dual motors configuration per wheel
Power	NiMH battery packs
Max Speed	1.5m/s
Max Incline	20%
Construction	Aluminum, Steel, Nylon
Runtime	~2 hours (nominal)
Sensors and Control	
Positioning	GPS (< 2m positioning accuracy) IMU-3 axis Dead Reckoning
Obstacle Avoidance	Stereo Cameras (320x240) LIDAR SONAR
Landmine Detection	Metal Detector (EMI) Array Ground Penetration Radar
Computing	
Algorithms	Image Processing, Navigation, Positioning and Machine Learning
Low-level Control	Atmega32 Microprocessors
Primary Computer	Mini-ITX 1.5Ghz, 2GB RAM
Safety	
E-Stop	RF control Manual Override
X Factor	
Modularity	All mechanical systems are symmetric and self contained, thus allowing for easier replacements.