

BL S-MET

AUTONOMOUS ELECTRIC UNMANNED GROUND VEHICLE



BL S-MET (ELECTRIC UNMANNED GROUND VEHICLE)

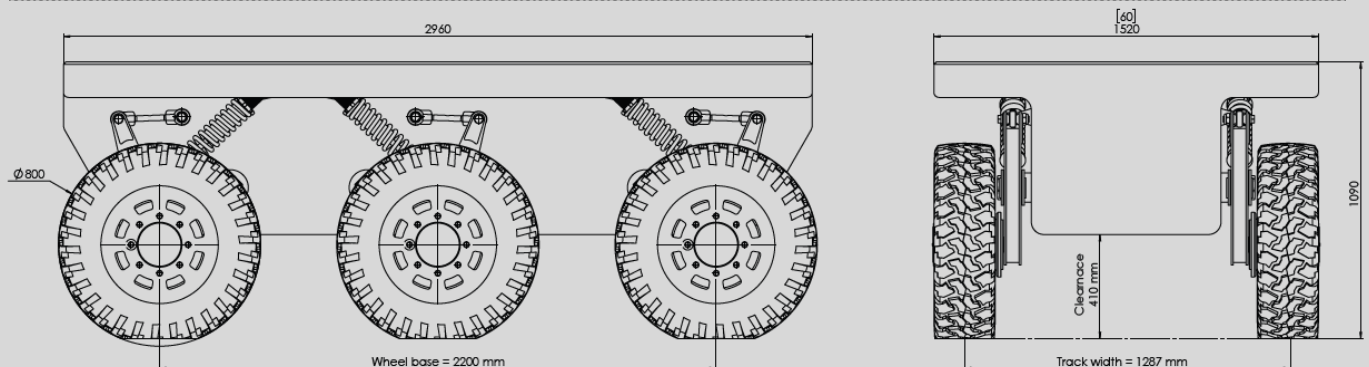
Product Specification -

The **BLRe** a medium-duty skid steered vehicle which incorporates 6x6 electrically driven wheels. The heavy-duty construction can be adapted to carry various kinds of equipment and payloads. The platform has superior unprecedented off-road mobility capabilities under full load capacity thanks to the patented suspension system. An internal combustion onboard generator acts as a range extender to the internal batteries.

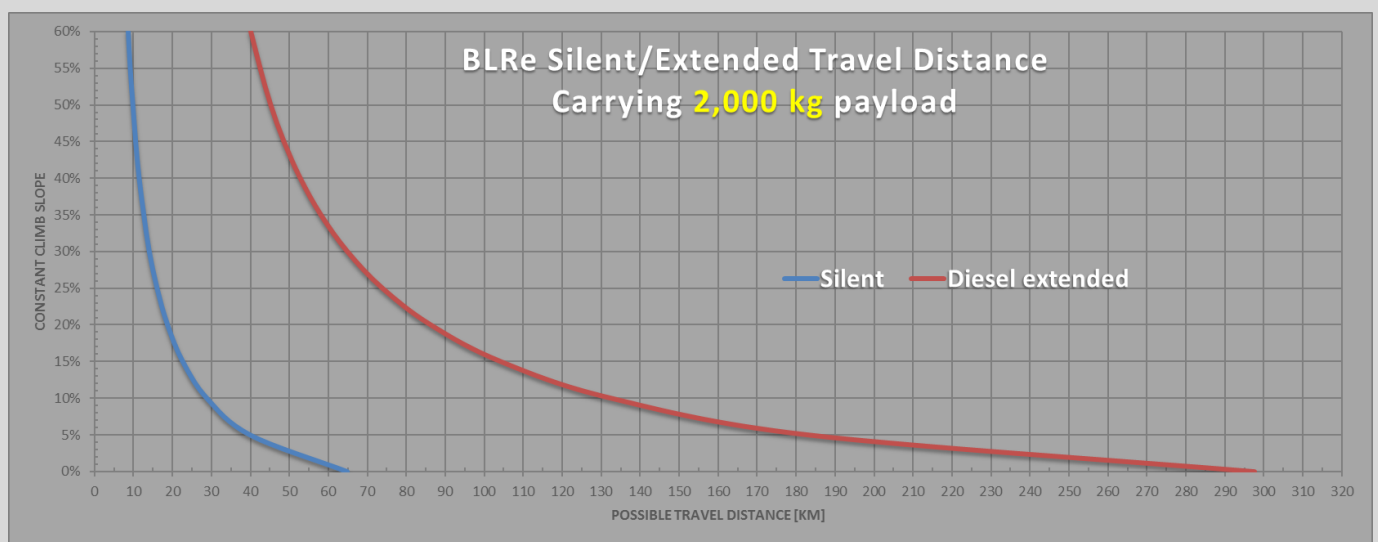
The **BLRe** offers superior modularity, and serviceability under any top mounted payload, allowing complete internal access from dedicated side/front hatches, with a fully extendable battery tray for individual pack service.

The platform is fully autonomy-ready, with complete low-level controls integrated into an easy to interface CAN-bus based API.

DIMENSIONS		MOBILITY	
Length	4,100 mm	Maximal speed	45 kph
Net maximal height	1,090 mm	Vertical scling height	600 mm
Width	1,820 mm	Front grade capability	70%
Wheel base	2,400 mm	Sideways slope capability	40%
Track width	1,560 mm	Water fording depth	700mm @ 10kph
Ground clearance	410 mm	Transmission	Single speed reduction
Tires	245/75R17	Braking on all 6 wheels	Service + Failsafe parking
CAPABILITIES		Suspension	6 independent coil-over suspension struts
Loaded weight	4,700 kg	MOTORS SPECIFICATIONS	
Unloaded weight	2,700 kg	Motor type	IPM
Maximal payload	2,000 kg	Output torque (wheel)	4,800 N-m
Energy capacity	100 Ah @ 540V	Reduction ratio	1:21
System peak power	135 kW	Rated output	25kW @ 6,000 RPM
ELECTIC CHARACTERISTICS		IP Rating	IP68
Drive system voltage level	540 VDC	Cooling system	Water cooled
Drive system maximal current leve	250 A	BATTERY INFORMATION	
Auxiliary equipment supply	24V @ 250A	Battery technology	LiFePO4 (336 cells)



Possible traveling distance –



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High level autonomous control option –

The BLRe comes with following high-level-control (HLC) autonomous kit option as a turn-key package:

Autonomous Navigation: Precise, autonomous day and night navigation across any terrain, ensuring dependable, unmanned operations even in the most challenging off-road environments.

Advanced Obstacle Detection: Equipped with state-of-the-art LiDAR, GPS, and machine learning algorithms, the autonomous kit excels at detecting and avoiding obstacles in real time, enhancing both safety and operational efficiency.

Teleoperation for Complex Missions: In dynamic or unmapped environments where full autonomy isn't viable, the autonomous kit offers teleoperation functionality, allowing remote operators to execute complex maneuvers and missions with precision.

Versatile Communication Solutions: The autonomous kit adapts to various connectivity conditions—whether utilizing LTE, RF, satellite, or operating autonomously through sensor-based navigation—ensuring uninterrupted mission control.

Mission Planning and Execution: Featuring advanced mission planning tools, the autonomous kit enables real-time adjustment and optimization of operations, enhancing vehicle performance across diverse tasks and terrains.

Fleet Management: The autonomous kit streamlines the management of multi-vehicle fleets, enabling synchronized and efficient operations across multiple autonomous vehicles in real time.

