

Autonomous Street Defect Detection, Analysis and Reporting System (SDAR)

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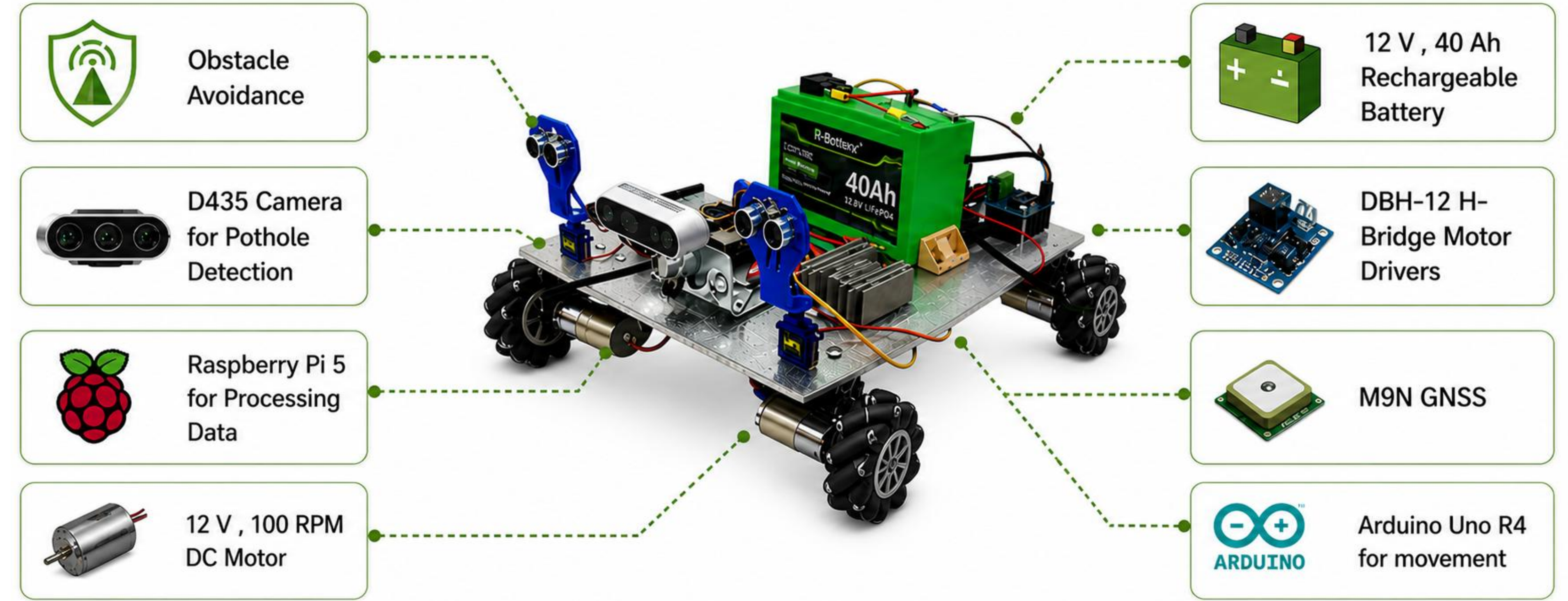


Problem Statement

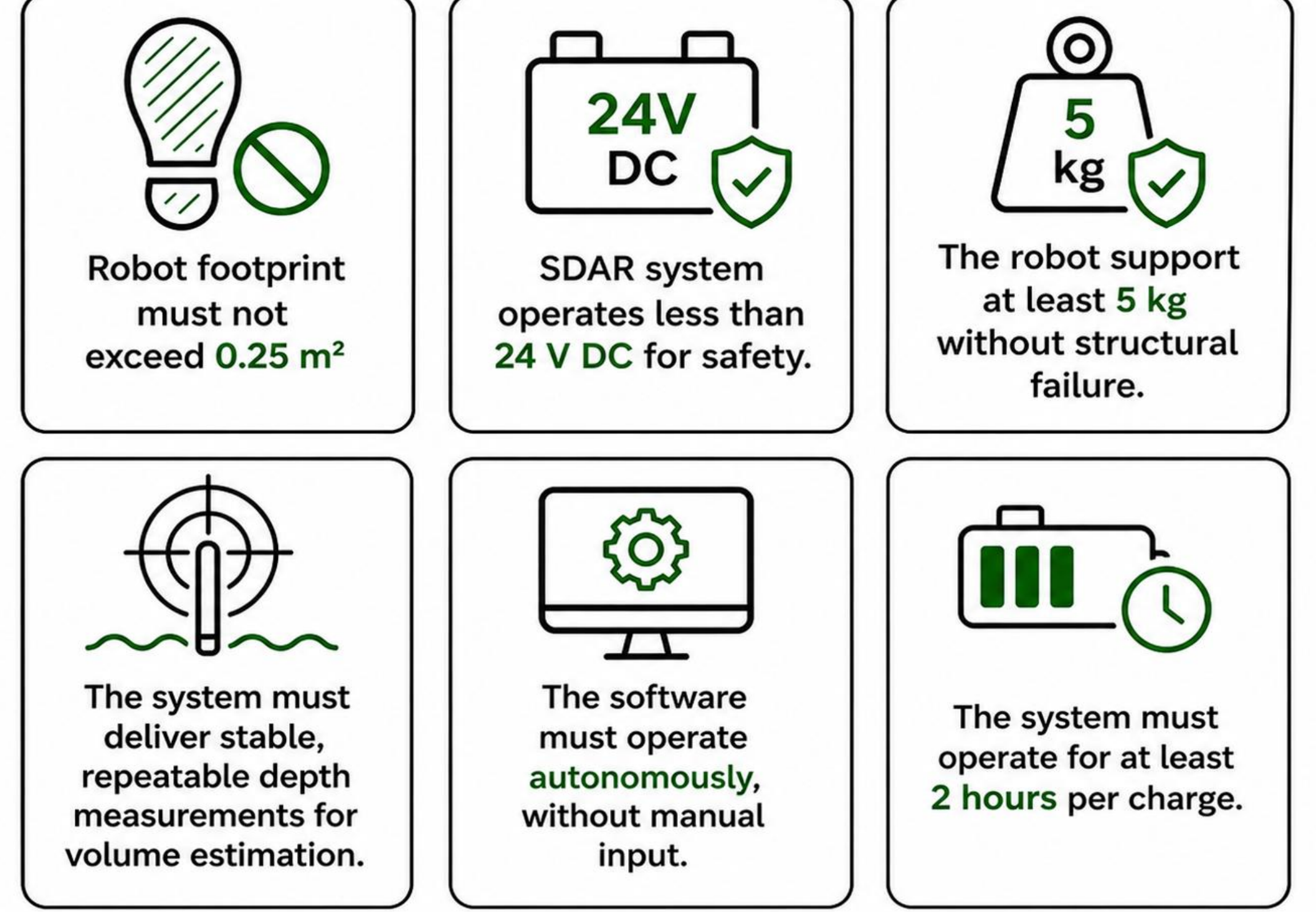


These challenges drive the need for SDAR: an intelligent, real-time solution for efficient road inspection.

Design and Prototype

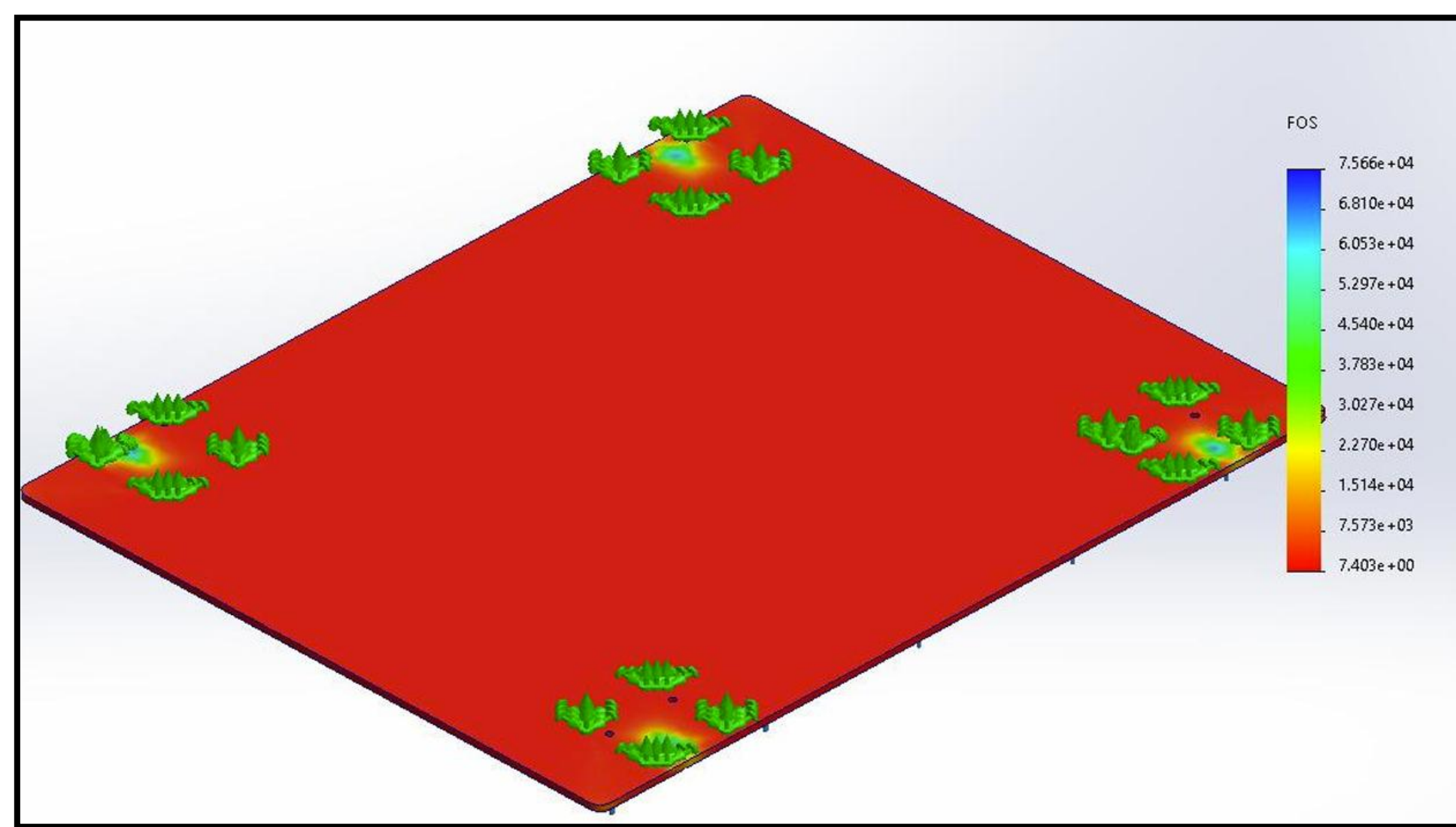
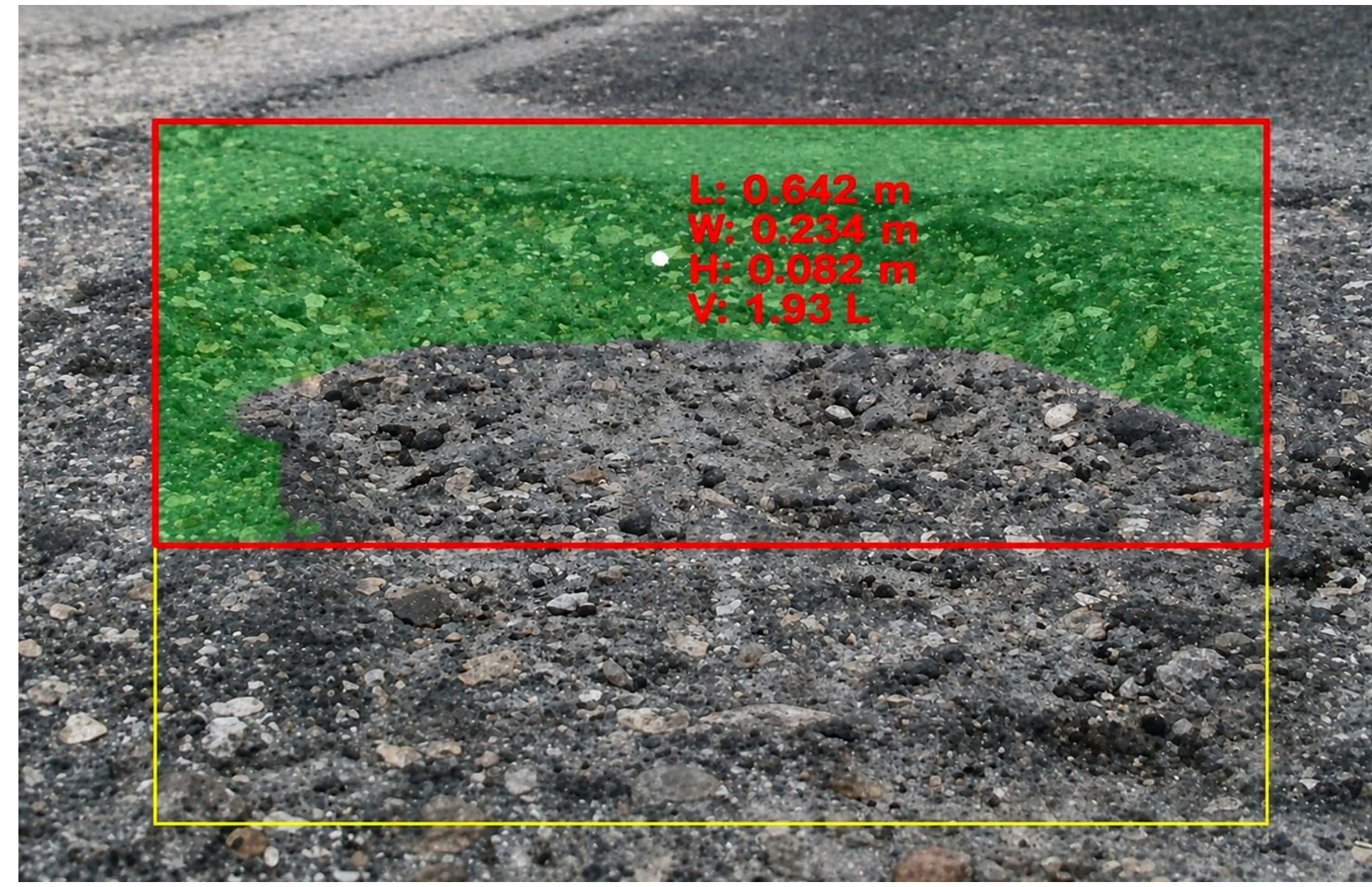


Constraints

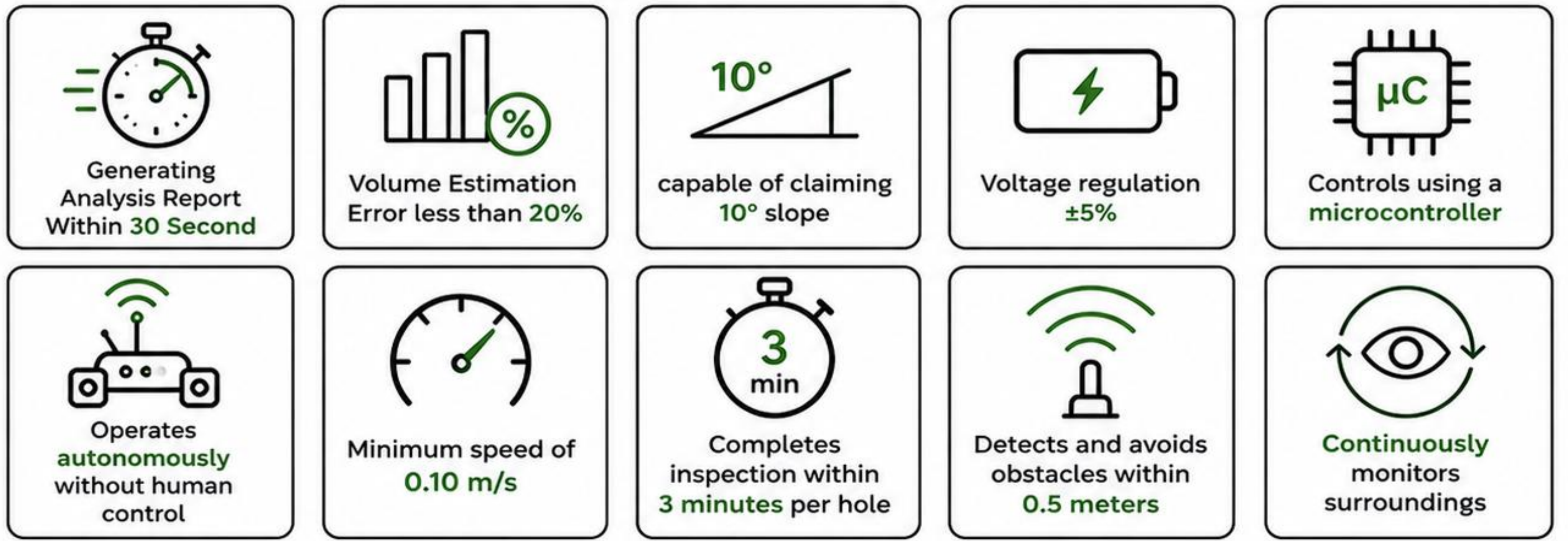


Tests, Validations and Results

POTHOLE DETECTION REPORT	
Frame ID	: 348
Timestamp	: 2026-04-21T11:24:33.946427
GPS Latitude	: 26.312533666666667
GPS Longitude	: 50.146445
GPS Source	: live_fix
Severity	: MODERATE
Length	: 0.6424 m
Width	: 0.2336 m
Depth	: 0.0823 m
Footprint Area	: 0.14784 m ²
Volume	: 0.012176 m ³
Volume	: 12.176 L



Specifications



Conclusion

SDAR meets all specifications, achieving 0.39 m/s mobility with payload support, while operating autonomously with accurate detection, stable power, and georeferenced positioning.

Scan for More!

