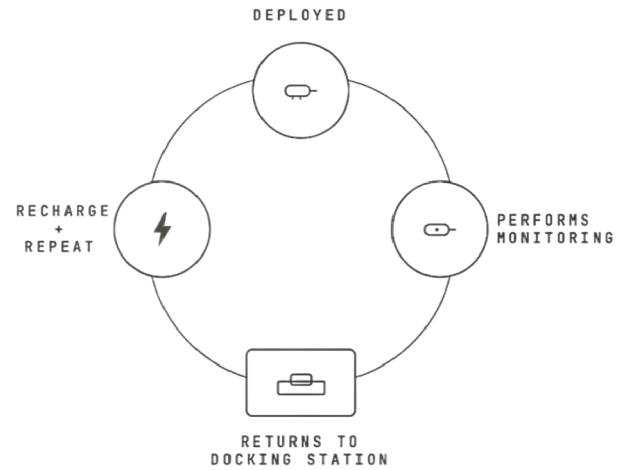


Status: TRL 4 — component/subsystem validation, pre-field deployment. MVP V1 built in-house (May 2026); MVP V2 in active development, en route to the commercially deployable TRITON V1.

SPECIFICATIONS

Depth rating	300 m rated (operating range typically ≤ 100 m)
Docking residency	6-month target between major service intervals
Per-mission endurance	<i>Pending</i>
Docking & recharge cycle time	<i>Pending</i>
Sensor, electronics & battery weight	~34 kg (excludes chassis, housings, and structure — total vehicle weight will be higher)
Total vehicle weight	<i>Pending</i>
Dimensions	<i>Pending</i>
Navigation sensors	IMU, DVL, motor encoders, GPS surface fix — sensor-fused pose estimation
Inspection sensors	Camera, multibeam echosounder, sub-bottom profiler, sound velocity profiler, USBL acoustic positioning, cathodic-protection probe, wall-proximity sensing
Onboard compute	Edge AI (mission management, obstacle classification, anomaly detection)
Communications	RF link to dock with autonomous fallback on signal loss

HOW IT WORKS



- 01 Deploy** — vehicle and seabed dock installed in a single vessel visit; no recurring surface support.
- 02 Patrol** — navigates pre-planned inspection routes with sensor-fused navigation and wall-proximity standoff.
- 03 Detect** — onboard edge AI flags and geotags anomalies from the inspection sensor stream in real time.
- 04 Return & recharge** — homes to dock via USBL, latches, recharges, and offloads mission data.
- 05 Repeat** — remains resident at the dock, targeting six months between major service intervals.

Traction: MVP V1 built in-house (May 2026); MVP V2 in development; invited to attend the Spring 2026 Draper University cohort; structured discovery underway across the offshore wind and O&G buying chain.