



GROUND · CS-210

THE MULE FOR THE WORST GROUND IN THE COUNTRY

Tracked. Battery-electric. 150 kg over muskeg — with nothing to jam.

LOGISTICS · RESUPPLY · CASUALTY CARRY · SENSOR RECON

PATENT PENDING

EXPORT-CONTROLLED — INTERNATIONAL TRANSFER SUBJECT TO CANADIAN GOVERNMENT PERMITS

CARRIER FOR CARGO, SENSORS AND TOOLS — NEVER A STRIKE PLATFORM

150 KG PAYLOAD ALLOCATION	~8.2 KPA NOMINAL GROUND PRESSURE — LIGHTER THAN A WALKING ADULT	~150 KM RANGE — FIRM GROUND, 20 °C	0 RADIO OR GPS LINKS IN ANY GUIDANCE TIER
---	---	--	---

OVERVIEW

A SOFT-GROUND MULE. THE ANCHOR OF THE GROUND FAMILY.

Part of the 6-system Ground line — shares its envelope and doctrine with Moose, Wolf, Lynx.

150 KG PAYLOAD ALLOCATION	~8.2 KPA NOMINAL GROUND PRESSURE — LIGHTER THAN A WALKING ADULT	~150 KM RANGE — FIRM GROUND, 20 °C	0 RADIO OR GPS LINKS IN ANY GUIDANCE TIER
---	---	--	---

Grizzly CS-210 is a tracked, battery-electric uncrewed carrier for bad ground — muskeg, snowpack, slope and slash — where wheels sink and trucks turn back. It moves the load so a person doesn't have to.

It is the anchor of the six-platform ground family: one chassis logic — twin electric track drives, a welded frame, a low-slung heated battery bay — under one controlled payload deck that accepts six swappable, strictly non-kinetic mission modules: cargo, casualty, ISR, relay, launcher carriage and utility. A new module is a tooling change, not a vehicle redesign.

The heritage is real. Canadian Shield's parent group has spent three decades designing, building and operating heavy mobile rigs to 1,000,000 lb, and the Grizzly's drive architecture descends from the group's own tracked-chassis line — one machine built in 2017 and still working in the field nine years on. The Grizzly is not a clean sheet; it is a lineage.

THE CLAIM

MOVE THE LOAD. NOT THE SOLDIER.

Every resupply run a machine makes over bad ground is a run a person didn't. The Grizzly's job is the unglamorous one — cargo forward, casualties back, sensors out — done quietly, electrically, and without a single emission for anyone to find or jam.

HOW IT WORKS

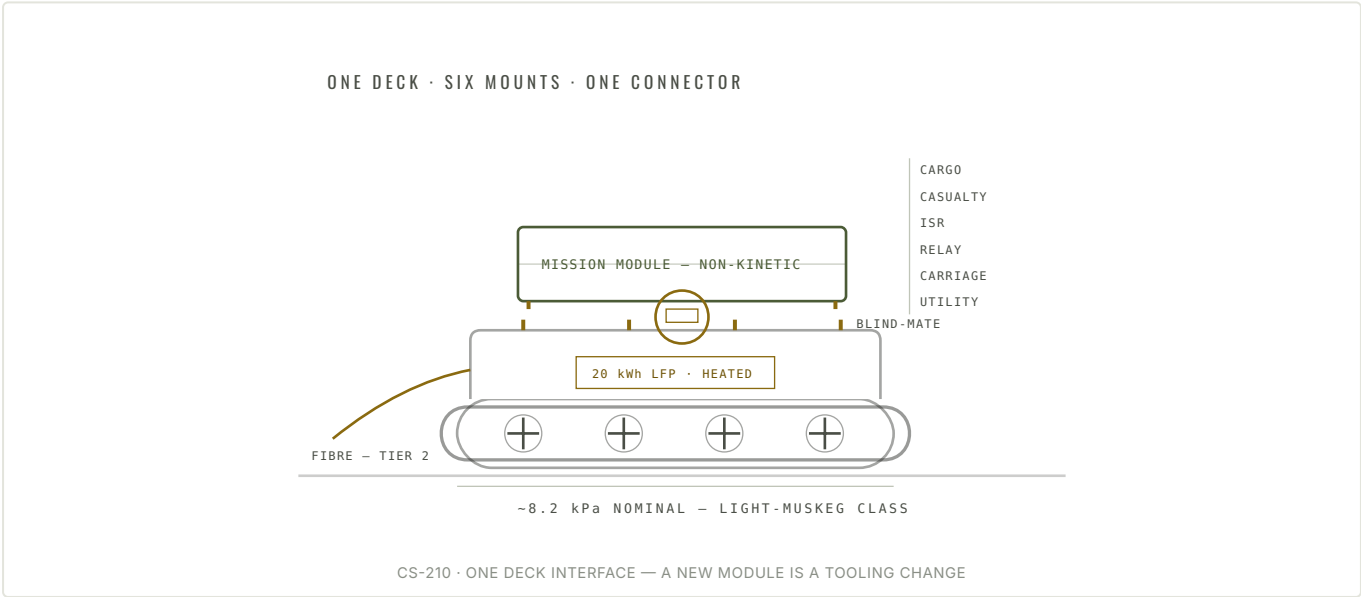
MECHANISM

A TRACKED CHASSIS UNDER A CONTROLLED DECK

Twin electric track drives steer by differential speed — no steering linkage, torque from zero, turn-in-place. Above them, one payload deck takes every mission module on the same six mounts and one blind-mate connector.

The track footprint is the design's first number: a wide, long contact patch spreads the vehicle's weight to a nominal ~8.2 kPa — light-muskeg class, a fraction of a standing person's footprint — so the ground that swallows a truck carries the mule. Electric drive is why it can sit dark: silent watch and a low thermal signature are design outcomes, not add-ons.

Guidance runs the fleet's three no-radio ground tiers: preset waypoint, fibre-tethered teleop with a human in the loop, and autonomous SLAM. The safety chain is independent of the autonomy stack — hardwired e-stops, a wired stop over the fibre, and a loss-of-link rule a ground vehicle can honour absolutely: stop, hold, wait. Never "return home" through unswept ground.



SPECIFICATIONS

CAPABILITIES & SPECIFICATIONS

GRIZZLY CS-210	
DIMENSIONS & MASS	
Gross vehicle mass	500 kg
Payload allocation	150 kg
Track contact (per side)	1.2 m × 0.25 m
Configuration	Tracked skid-steer · twin electric track drives
PERFORMANCE & MOBILITY	
Mixed-terrain cruise	2.5 m/s (9 km/h)
Nominal ground pressure	≈8.2 kPa (~1.2 psi) — light-muskeg class
Gradeability — loose soil	~25° (~46%) — soil-limited, not power-limited
Range — firm ground, 20 °C	~150 km
Range — firm ground, -30 °C	~90 km
Range — mixed soft soil, 20 °C	~76 km
Range — deep snow / muskeg, 20 °C	~39 km
DRIVE & POWER	
Drive architecture	Twin electric track drives — differential steer, torque from zero, turn-in-place
Drive power (per side)	~2 kW continuous · ~5 kW-class peak
Energy storage	20 kWh LFP, heated (~130 kg)
GUIDANCE & CONTROL	
Guidance tiers	Preset waypoint · fibre-tethered teleop · autonomous SLAM
Emissions	None — no radio, no GNSS, in any tier
Loss-of-link rule	Stop, hold, wait — never “return home” through unswept ground
Safety chain	Hardwired e-stops · wired stop over the fibre — independent of the autonomy stack
PAYLOAD & MODULES	
Mission modules	6 swappable — cargo, casualty, ISR, relay, launcher carriage, utility — all non-kinetic
Deck interface	One controlled deck · six mounts · one blind-mate connector
Launcher-carriage module	Carriage only — never a strike platform
MATERIALS & ENVIRONMENT	
Bodywork	Moulded GF-nylon over a welded steel frame — dies cut in the owned 5-axis shop
Recycled content	rPET, confined to non-structural covers
Design environment	Muskeg · snow · freeze-thaw · gumbo · to -40 °C
Deployment	Self-deploys on tracks · arrives by road, rail or sling
COMPLIANCE	
Patent status	Patent pending
Export control	Export-controlled — international transfer subject to Canadian government permits; export posture is counsel-first
Classification	Carrier for cargo, sensors and tools — never a strike platform
Energetic material	None — no warhead, fuze or energetic material in any module or variant

EVERY RANGE FIGURE STATES ITS GROUND CLASS AND SEASON, AND THE GRADEABILITY FIGURE STATES ITS SURFACE — A MOBILITY CLAIM WITHOUT ITS GROUND IS NOT ONE OF OURS.

THE TRADES, STATED

NO RADIO. NO GPS. NOTHING TO JAM ON THE GROUND EITHER.

The fleet's thesis is that the link is the vulnerability — so the Grizzly carries none. Preset routes emit nothing. The fibre tether cannot be jammed because there is no spectrum in the loop. SLAM senses passively and calls home never.

The manufacturing thesis rides along: moulded GF-nylon bodywork over a welded steel frame, on dies cut in the owned 5-axis shop — with recycled rPET honestly confined to non-structural covers. Cheap enough to buy in numbers, simple enough to fix in the field, and made in Canada on the group's own tooling. And the family rule stands wherever the Grizzly is sold: it is a carrier for cargo, sensors and tools — never a strike platform.

FAMILY CONTEXT

SIX PLATFORMS. ONE CHASSIS LOGIC.

Grizzly anchors CS-210 through CS-260: Moose hauls bulk, Wolf coordinates in numbers, Lynx scouts ahead, Beaver works the ground, Wolverine carries the access tools. The anchor's deck standard, console and safety chain are engineering the family buys once — that is why it comes first.

DEPLOYMENT

A RESUPPLY LEG, WALKED THROUGH.

One resupply leg, walked end to end — illustrative of how the mule is used, not a mission record.

01 · ARRIVAL

BY SURFACE, ON ITS OWN TRACKS

The Grizzly self-deploys on tracks, or arrives by road, rail or sling. At the depot a cargo module lands on the six deck mounts and the blind-mate connector; the route is loaded, or the fibre spool is seated for a tethered leg. No link check — there is no link.

02 · WORK

THE LEG OVER THE MUSKEG

The mule runs the surveyed leg at a steady 9 km/h cruise — waypoints alone, or a human on the fibre for the judgment calls. Uncertain ground? It stops and holds. At the far end it drops cargo, takes on the return load — stretcher, samples, spent packs — and turns around.

03 · RECOVER

BACK, SWAPPED, OUT AGAIN

Home at the depot: the module swaps for the next job, the pack charges or exchanges, the fibre respools. If a leg ever ends early, the vehicle is exactly where it stopped — holding, silent, waiting for a person. Recovery is a tow point, not a search.

THE FAMILY

RELATED SYSTEMS

CS-220 · BULK

MOOSE

Hauls bulk.

CS-230 · NUMBERS

WOLF

Coordinates in numbers.

CS-240 · SCOUT

LYNX

Scouts ahead.

CS-250 · GROUNDWORK

BEAVER

Works the ground.

CS-260 · ACCESS

WOLVERINE

Carries the access tools.

Grizzly CS-210 · patent pending · export-controlled — international transfer requires Canadian government permits; export posture is counsel-first. A ground carrier for cargo, sensors and tools — never a strike platform. No warhead, fuze or energetic material in any module or variant; the launcher-carriage module is carriage only. No radio and no GPS in any guidance tier.



THE MULE FOR THE WORST GROUND IN THE COUNTRY

GRIZZLY · GROUND · CS-210

Six platforms. One chassis logic.

01

REQUEST A TECHNICAL EXCHANGE

A working session with engineering, not sales — bring your engagement problem, we bring the mechanism.

02

REQUEST THE GROUND FAMILY DATA PACK

Drawings, tolerances and test basis for Grizzly and its siblings, gated behind export screening.

03

DISCUSS A TRIAL QUANTITY

Tell us end-user, jurisdiction, quantity band and timeline — we respond against your program, not a price list.

SALES

sales@cdnshield.ca

GENERAL

info@cdnshield.ca

WEB

cdnshield.ca

Direct lines, named points of contact and facility details are shared with qualified programs following screening — not withheld, sequenced.

Canadian Shield is a defence and industrial drone company, backed by SIG: four-domain uncrewed systems built for jammed, GPS-denied environments — no-radio by design, manufactured for cost and salvo depth.

Grizzly CS-210

Grizzly CS-210 · patent pending · export-controlled — international transfer requires Canadian government permits; export posture is counsel-first. A ground carrier for cargo, sensors and tools — never a strike platform. No warhead, fuze or energetic material in any module or variant; the launcher-carriage module is carriage only. No radio and no GPS in any guidance tier.

Product specification R1.0 · 2026-08-15 · © Canadian Shield, a division of SIG (Sustainable Infrastructure Group).