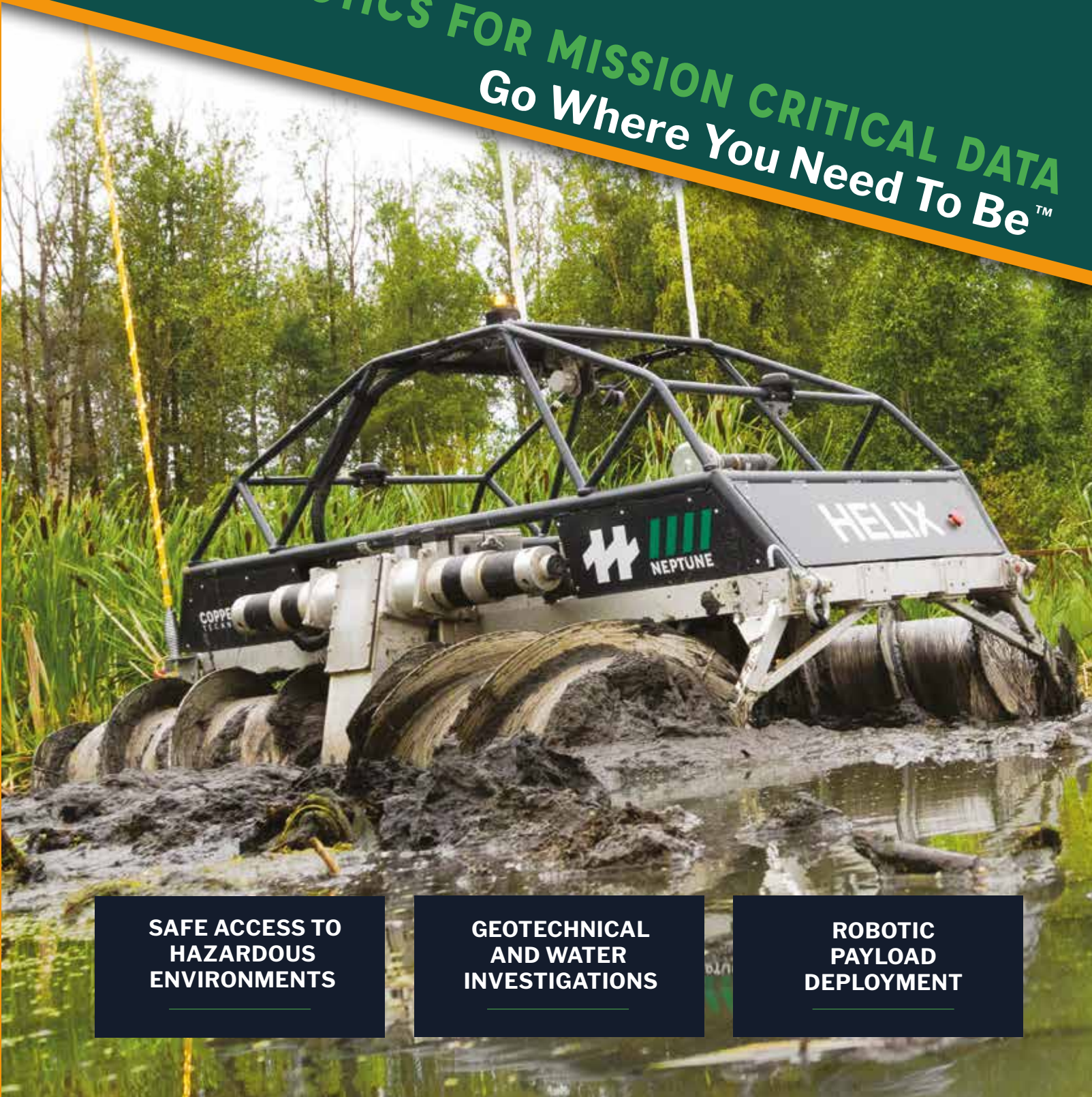


ROBOTICS FOR MISSION CRITICAL DATA

Go Where You Need To Be™



SAFE ACCESS TO
HAZARDOUS
ENVIRONMENTS

GEOTECHNICAL
AND WATER
INVESTIGATIONS

ROBOTIC
PAYLOAD
DEPLOYMENT

AMPHIBIOUS | AUTONOMOUS | SCREW-DRIVE PROPULSION



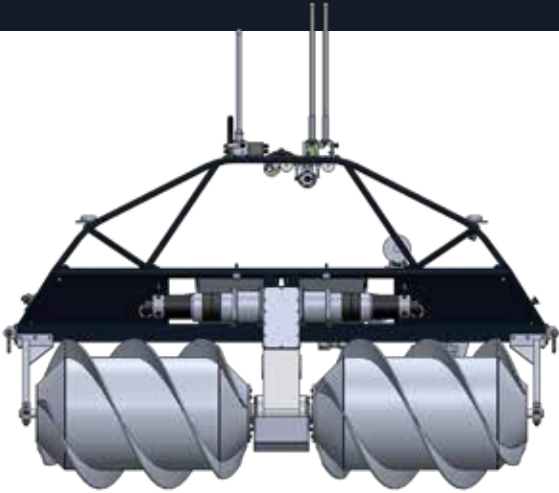
INTRODUCING **HELIX ROBOTS**

Copperstone has developed HELIX, a family of autonomous field robots to collect mission critical data in hazardous environments.

Copperstone has modernized the screw-drive vehicle and adapted it to work as a robotic platform specifically for environmental monitoring and hazardous site investigations. The patented screw-drives are pontoons that enable flotation, with a helical grouser acting as a propeller when spun at high speed in water. At low speeds, the vehicle can crawl through soft mud deposits, or roll on hard ground. HELIX has many advantages over other modes of propulsion and is perfectly suited to the variety of terrain and seasonal conditions encountered at industrial sites.

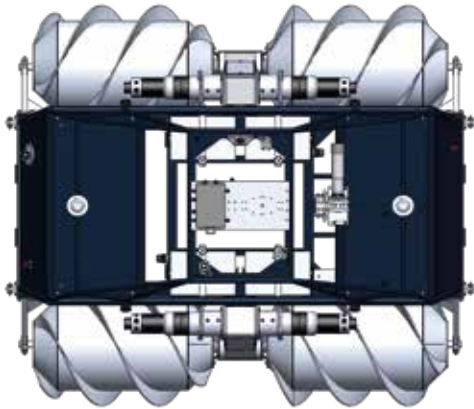


**REMOTE AND AUTONOMOUS
OPERATIONS KEEP PEOPLE SAFE**



**MULTI-FUNCTIONAL WITH A
VARIETY OF PAYLOADS TO SUIT
INDUSTRY NEEDS**

**HELIX ROBOTS ARE DESIGNED TO
BE RUGGED AND RELIABLE**



**PATENTED PROPULSION SYSTEM
ENABLES ALL-TERRAIN,
AMPHIBIOUS ACCESS**



ONE PLATFORM. UNLIMITED POSSIBILITIES.

BATHYMETRY • WATER SAMPLING • IN SITU WATER CHARACTERIZATION • GROUND PENETRATING RADAR • CPTU
DIGITAL CONE PENETROMETER • VANE SHEAR • BEACH INVESTIGATIONS • TAILINGS SAMPLING • SEDIMENT
SAMPLING • EQUIPMENT RESCUE • GEOPHYSICAL INVESTIGATIONS • UNDERWATER IMAGING • ICE ASSESSMENTS

OUR HELIX ROBOT

HELIX NEPTUNE

- Length 93 in / 2.4 m
- Width 82 in / 2.1 m
- Height 55 in / 1.4 m
- Antenna Height 78 in / 2.0 m
- Base weight 875 lbs / 397 kg
- Payload Capacity 200 lbs / 91 kg
- Standard 9.2 kWh LiPo battery capacity with a second set for continuous operation
- Top speed on water 2 kts
- Top speed on ground 9 mph / 14.5 kmph
- Range 4 hours/9km on water, 12.5 mi / 20 km
- Trimble dual antenna inertial navigation system, +/- 0.1 deg heading.
GNSS position: 2 m standalone, 2.5 cm with RTX, 1 cm with RTK



FEATURES

- Autonomous waypoint navigation and survey path planning
- Industrial handheld remote control with E-Stop
- Computer controlled ground station with live streaming video, data and mapping
- Remote control range LOS up to 0.6 mi / 1 km
- Remote control frequency, 900 MHz or 2.4 GHz
- Data Telemetry Range LOS up to 3.7 mi / 6 km
- Wifi and onboard video range LOS up to 1.2 mi / 2 km
- Range may be increased with licensed radio hardware
- Satellite and cellular control options for BLOS



**INTEGRATED SOLUTIONS
AND CUSTOMIZABLE
PAYLOADS**



**LOW LABOUR COSTS -
FEWER PERSONEL
ONSITE**



**GLOBAL
SHIPPING**

PURCHASING PROCESS

Discovery
Meeting

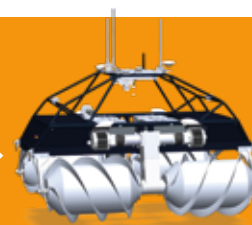
Share
Materials

Customized
Options

Quote &
Deposit

Build
Neptune

Shipping &
Training



KEY FEATURES

- ALL TERRAIN AMPHIBIOUS
- ELECTRIC DRIVE AND BATTERY POWERED
- GEOTECHNICAL OR WATER SURVEY PAYLOADS
- LONG RANGE RADIO, REMOTE AND AUTONOMOUS
- ALL SEASON, ALL WEATHER CAPABLE
- AVAILABLE GLOBALLY



**AWARD WINNING ENGINEERING TEAM,
REVOLUTIONIZING MULTIPLE INDUSTRIES
WITH CUTTING-EDGE TECHNOLOGY AND
INNOVATIVE SOLUTIONS**

**INDUSTRY-LEADING ROBOTIC
SERVICES FOR HAZARDOUS SITE
INVESTIGATIONS AND WATER
SURVEYS**

ABOUT COPPERSTONE TECHNOLOGIES



We're a Canadian-based robotics firm specializing in the design, production, and operation of HELIX, an industrial autonomous amphibious robot developed for environmental monitoring. Copperstone is developing innovative tools and exploratory methods to tackle Earth's most challenging environments. HELIX offers unparalleled autonomy, remote sensing, reliability, and versatility, opening up new possibilities for mining, construction, search and rescue, military applications, agriculture, environmental monitoring and research, disaster response and more.

CONTACT US



1-877-443-5253



Edmonton, Alberta, Canada



sales@copperstonetech.com

