AUTONOMOUS VEHICLES

Autonomous Bus (40-seater)
- Precise positioning with satellite-based differential GPS system
- Close-to-long distance detection provides all-round sensing of the surroundings, under most weather conditions
- Safe and smooth driving on public roads with the help of visual recognition of traffic lights and signs
- Bus approaches a bus stop in fully automated mode
- Doors open and close automatically at bus stops

Autonomous Mini-Bus (20-seater)
- Responds to passengers’ real-time demand, and accommodates non-routine pick-ups and drop-offs during off-peak hours.
- Can be summoned through MaaS (Mobility-as-a-Service) app, which uses algorithm to calculate the best route to reach the passenger
- Navigates on its own in urbanised areas with or without the aid of GPS
- Senses and recognises its surroundings and avoids obstacles such as vehicles and pedestrians

Navya ARMA Autonomous Shuttle (11-seater)
- 100% electric-powered
- Operates up to 5 hours with full passenger load and air-conditioning
- Dedicated safety LiDARS for obstacle detection
- Cutting-edge multi-sensor technology provides precise localisation, perception and navigation
- Sensor fusion technology detects changes to the surroundings up to within a few centimetres
- Fleet management by Robotics Management System is provided in real-time to cater for mobility-on-demand service

ST Kinetics is the land systems arm of ST Engineering, an integrated engineering group with 50 years of engineering expertise. Driven by a passion for innovation, we work with partners and customers to deliver customised land systems and security solutions that meet the stringent operational requirements of defence, homeland security and commercial customers. The key developer of autonomous vehicles in Singapore, ST Kinetics is the one-stop robotics solutions provider you can depend on for large-scale automation solutions and robotics systems to meet the challenging demands of both public and private sectors.

For more information on our Robotics Solutions, please contact:
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THE FUTURE IS AUTONOMOUS
Empowering you in transportation, logistics, healthcare, hospitality and defence
AUTONOMOUS MOBILE ROBOTS

TUG T3 (Logistics & Manufacturing)
- Automates the transport of materials & supplies in logistics & manufacturing environments
- Unlike traditional AGV systems, it requires no infrastructure for navigation
- 24x7 improved productivity
- Full omnidirectional motion capability
- Can travel on irregular concrete floors
- Auto docks and auto charges
- Automatic drop-off and pick-up
- Multiple dispatch modes
  - Scheduled/Touchscreen ad-hoc
  - Multi-stop ‘milk runs’/Handheld ad-hoc requests
- Can ride lifts independently

TUG T2.5 (Hospitality)
- Efficiently delivers food & linen and removes trash & waste
- Enhanced guest experience & safety
- Worker safety & employee satisfaction
- 24x7 improved productivity
- Auto docks and auto charges
- Can ride lifts independently

TUG T2Rx (Healthcare)
- Efficiently delivers medication, lab specimens and food
- Enhanced patient experience & safety
- 24x7 improved productivity
- Secure (Biometric/RFID/PIN)
- Auto docks and auto charges
- Multiple dispatch modes
  - Scheduled/Touchscreen ad-hoc
  - Multi-stop ‘milk runs’/Handheld ad-hoc requests
- Can ride lifts independently

OUTDOOR ROBOTICS

Automated Baggage Tractor
- Unmanned tractor that reduces manpower for baggage-handling operations
- Optimises resource management through Robotics Fleet Management System
- Precise navigation for both indoor and outdoor environment
- Robust all-weather collision avoidance in mixed traffic conditions
- Fail-safe redundancy with Independent Emergency Stop (IES)
- Scalable Robotics Fleet Management System for route planning and status monitoring
- Intuitive Mobile App interface

Jaeger 6 Unmanned Ground Vehicle
- Two operation modes (Tele-operation/Semi-autonomous)
- Addresses manpower shortage
- Obstacle detection and avoidance
- 6x6 skid steering allows excellent mobility on challenging terrains
- Silent operation with electric drive propulsion
- Modular payload capable
- Easy to operate and maintain

PROBOT® (Professional Robot)
- Unique logistic platform designed for both indoor and outdoor use
- Able to carry heavy payloads while maintaining high speeds and sound manoeuvrability over various obstacles
- Enables a single operator to control several unmanned systems under any lighting conditions
- Can be used as logistic carrier or for medical evacuation
- Can be adapted for different missions with payloads up to 750kg
- Ease of operation using remote control, tele-operated and follow-me mode