

We Can Help Make Your Robot Mobile!

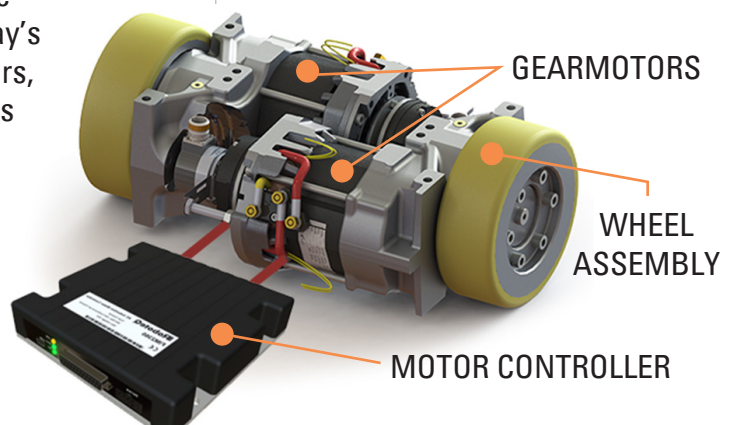
For travel and maneuverability, mobile robots usually require two motors and two controllers, but we have a better solution – a single controller for two motors. For a simple, safe and easy to integrate approach, specify the dual channel controller.

Improve Safety and Efficiency in your Facility

Reducing material damage and safety issues, mobile robots are driving efficiency and productivity in today's facilities. With their ability to move around shop floors, Automated Guided Vehicles (AGVs) and Autonomous Mobile Robots (AMRs) are replacing many bigger, manually operated vehicles. Compact in size, AGVs transport packages, materials, load and unload machinery and do the repetitive tasks that can cause injury.

Applications

- AGVs
- Small Electric Vehicles
- Terrestrial and Underwater Robotic Vehicles
- Hazardous Material Handling Robots
- Balancing Robots



AGV Kits (2) Motor / Gearbox / Wheels + Dual Channel Motor Controller + Drive Control Cable	Voltage (Vdc)	Max. Robot Weight per Set (kg)	With Brake	With Ethernet	Motor / Gearbox / Wheel Assembly (1)	Controller
NR3-AGV060B01	24 or 48	500			NR3-060LDB300ROB	NR4-FBL2360T
NR3-AGV060B02	24 or 48	500	●		NR3-060LDB30XROB	NR4-FBL2360T
NR3-AGV089A01	24	1000			NR3-089LDA300ROB	NR4-FBL2360T
NR3-AGV089A01-E	24	1000		●	NR3-089LDA300ROB	NR4-FBL2360TE
NR3-AGV089A02	24	1000	●		NR3-089LDA30XROB	NR4-FBL2360T
NR3-AGV089A02-E	24	1000	●	●	NR3-089LDA30XROB	NR4-FBL2360TE
NR3-AGV089A03	48	1000			NR3-089LDA150ROB	NR4-FBL2360T
NR3-AGV089A03-E	48	1000		●	NR3-089LDA150ROB	NR4-FBL2360TE
NR3-AGV089A04	48	1000	●		NR3-089LDA15XROB	NR4-FBL2360T
NR3-AGV089A04-E	48	1000	●	●	NR3-089LDA15XROB	NR4-FBL2360TE
NR3-AGV142A01-F	24	2000			NR3-142LDA200ROB	NR4-GBL2660
NR3-AGV142A01-G	24	2000		●	NR3-142LDA200ROB	NR4-GBL2660E
NR3-AGV142A02-F	24	2000	●		NR3-142LDA20XROB	NR4-GBL2660
NR3-AGV142A02-G	24	2000	●	●	NR3-142LDA20XROB	NR4-GBL2660E
NR3-AGV142A03-F	48	2000			NR3-142LDA200ROB	NR4-GBL2660
NR3-AGV142A03-G	48	2000		●	NR3-142LDA200ROB	NR4-GBL2660E
NR3-AGV142A04-F	48	2000	●		NR3-142LDA20XROB	NR4-GBL2660
NR3-AGV142A04-G	48	2000	●	●	NR3-142LDA20XROB	NR4-GBL2660E

Accessories available

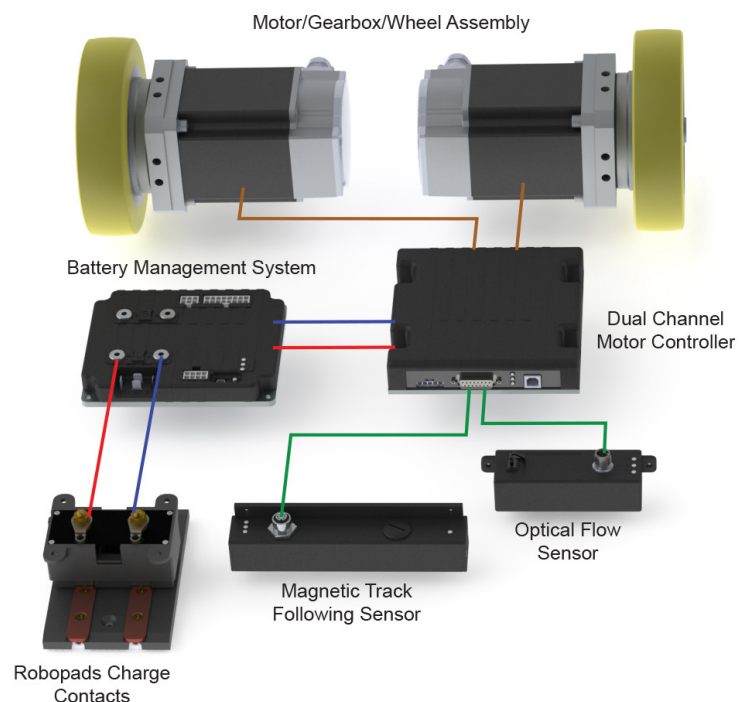
- ✓ Battery Management System
- ✓ Optical Flow Sensor
- ✓ Magnetic Track Following Sensor
- ✓ Robopads Charge Contacts

Engineered Motion Solutions by SDP/SI

SDP/SI is a leading manufacturer of precision gears and superior mechanical components for robotics and automation applications. With over 70 years of experience we provide problem solving solutions – from gearing and actuation to motors, drives, and controls. With over 87,000 standard component options and custom capabilities we look forward to meeting your motion needs.

Let's Set Your Project into Motion

Contact SDP/SI to discuss your application and how we can help set your ideas into motion!



Let's Get Started on Your AGV!

Designed to work together, pre-configured and tuned dual channel motor controllers with gearmotors, wheel assemblies, and cables, kits are offered by SDP/SI.

✓ 2 x Wheel Brushless Gearmotors for 3 Payload Configurations

Featured Specifications	500 kg Payload (per set)	1000kg Payload (per set)	2000 kg Payload (per set)
Motor Frame Size	60mm	89mm	142mm
Motor Voltage	24 or 48 Vdc	24 or 48 Vdc	24 or 48 Vdc
Motor Encoder	1024 Incremental	4096 Incremental	4096 Incremental
Gearbox Ratio	9:1	9:1	9:1
Gearbox Efficiency	≥ 95%	≥ 95%	≥ 95%
Gearbox Backlash	≤ 7 arc / min.	≤ 7 arc / min.	≤ 7 arc / min.
Max. Robot Speed	2.7 @ 24 V or 5.4 @ 48 V m/s	6 m/s	6 m/s
Torque at Wheel	11.52 Nm	29 Nm	83 Nm
Wheel Diameter	156 mm	156 mm	156 mm
Wheel Material	Polyester based polyurethane	Polyester based polyurethane	Polyester based polyurethane
Assembly Weight	15 kg	8.1 kg without brake 8.7 kg with brake	15.0 kg without brake 17.2 kg with brake
Brake Option	Yes	Yes	Yes

✓ 1 x Dual 60A Channel Controller

- USB, Serial, 0-5V Analog, or Pulse (RC radio) command modes
- One RS232 serial port
- CAN bus interface up to 1Mbit/switch multiple protocol support
- RS485
- Optional Ethernet interface
- Trapezoidal commutation and sinusoidal mode with field oriented control
- Programming support
- Conduction cooling plate

✓ 1 x Drive Control Cable

