



ElectroCraft[®]

powering innovation[™]



Drivetrain Solutions for Mobile Robotics



ElectroCraft is a global provider of dependable, application-engineered fractional-horsepower motor and motion solutions. Our products are found in thousands of applications within industrial, commercial, and consumer product markets. And while ElectroCraft provides a broad lineup of standard products with configurable options, we have built our brand on custom OEM solutions that meet the precise performance, cost and quality that our customers require.

ElectroCraft is headquartered in the United States, with engineering, manufacturing and sales locations throughout North America, Europe and Asia, giving us the ability to provide the right solution, cost effectively to our global customer base.

Our vision is to be the most trusted, valued and responsive motion system partner to our OEM customers, suppliers and employees.

We offer a wide range of product technologies to create unique solutions for OEMs, including AC, PMDC, BLDC and Stepper motors, plus gear reduction solutions, linear and rotary actuators, and drive electronics.

We have many configurable, off-the-shelf products to satisfy most applications, but some of our OEM customers require some level of product customization. Our ability to provide customized solutions, especially for embedded applications, can add a lot of value in terms of cost effectiveness, ease of integration, overall system performance and time to market.

Our mission is to provide a design experience that results in motor and motion systems that deliver superior reliability and performance at the lowest possible cost.



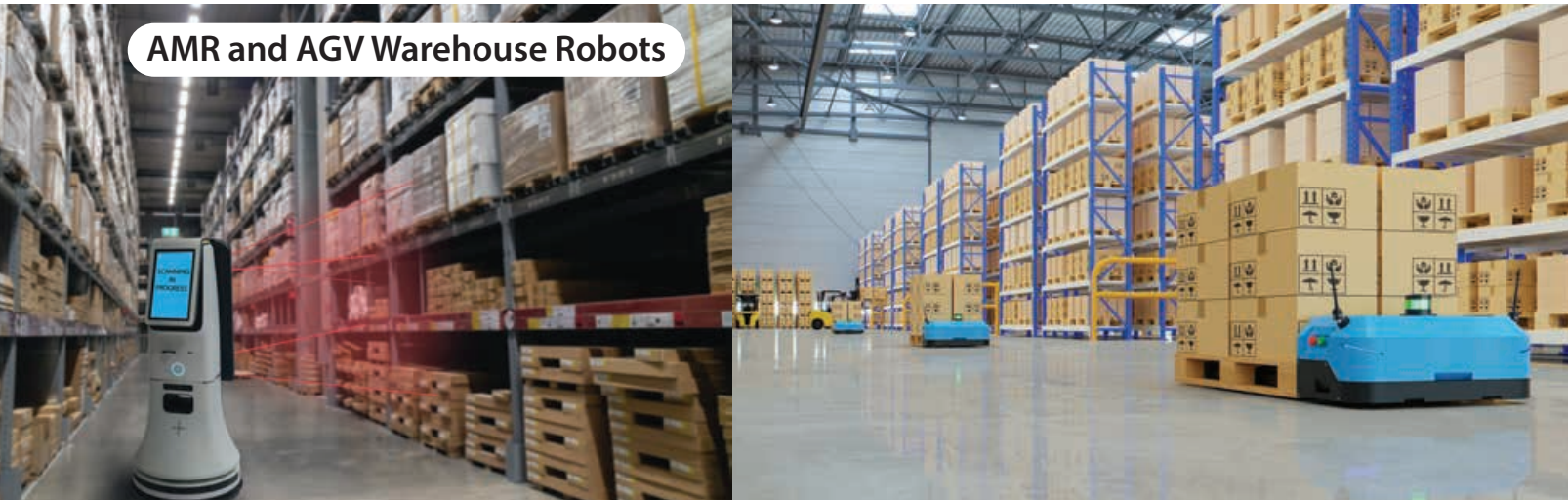
Application Overview: Mobile Robots and Electric Motor Drivetrain Solutions

The implementation of robotic systems continues to expand for a wide range of applications across numerous markets. Either fully autonomous or remotely controlled, these mobile robots utilize battery powered, motorized drivetrains for propulsion. ElectroCraft continues to be an innovative leader in providing rugged, reliable, high-performance solutions for practically any type of mobile application.

ElectroCraft also happens to be a world leader in the design and manufacturing of electric motor drivetrain solutions with over one million ElectroCraft systems in service worldwide. Renowned for their smooth, controlled power delivery with high starting torque, ElectroCraft drivetrain solutions provide excellent performance, even for rough-terrain and curb-climbing.

Offering a variety of motors, drives and gearing options, from configurable to fully-customizable, ElectroCraft has a solution to satisfy your specific application requirements.

AMR and AGV Warehouse Robots



Medical Robots



Surgical Robots



Agriculture Robots



Inspection Robots



Last Mile Delivery Robots





ElectroCraft MobilePower™ MPW Series Wheel Drives

ElectroCraft MobilePower™ MPW series wheel drives feature an integrated design that provides increased performance, efficiency, and reliability at an affordable price compared to traditional motor/gearbox/wheel combinations. The MPW incorporates a high torque density brushless DC motor with a heavy-duty planetary gearbox mounted inside the hub of an aluminum wheel with polyurethane tread. Available in two motor frame sizes with a variety of configurations, including winding voltage, gear ratio, wheel size, encoder feedback and electromagnetic brake options.

Peak torque up to 35 Nm. Continuous torque up to 20 Nm.



ElectroCraft MobilePower™ Right-Angle Gearmotors

ElectroCraft MobilePower™ gearmotors incorporate a powerful 4-pole PMDC or Brushless DC motor with a heavy-duty 2-stage right-angle worm/spur gearbox, optical encoder feedback and electromagnetic holding brake.

Peak torque up to 153 Nm. Continuous torque up to 77 Nm



ElectroCraft RapidPower™ Xtreme Series, Brushless DC Motors and Gearmotors

The RPX is a powerful and highly dynamic small-frame brushless DC motor. With an advanced multi-pole, encapsulated core design, this compact motor series offers extremely high torque density at a very affordable price, allowing for equipment downsizing and greater performance in a smaller footprint.

The RPX series is available in five frame sizes (16mm, 22mm, 32mm, 40mm, 52mm) each with 12, 24 or 48 VDC windings, with hall sensors or optional encoder feedback.

This versatile motor series is powerful, durable, energy efficient and has a sleek form factor; ideal for embedded applications. By adding a planetary gearbox, the LRPX offers even greater torque output within the same small frame size of the RPX motors.

The result is a small form factor brushless DC gear motor that can produce incredibly high torque at low speeds.

Available in single-stage ratios from 3:1 up to four stage ratios near 1000:1, the LRPX can produce amazing levels of torque, up to 22.5 Nm in a 40mm diameter frame, as an example.



ElectroCraft CompletePower™ Plus Universal Drive

Utilizing state-of-the-art digital drive technology combined with an intuitive and highly configurable user interface, the Universal Drive is ideal for robotic applications, capable of providing speed, torque or position control via discrete I/O or built-in CAN bus communications.

Peak current up to 100A. Continuous current up to 40A.



ElectroCraft Pro Series

For more advanced motion control capability, ElectroCraft's PRO-Series offers much of same capabilities as the Universal Drive, plus a built-in programmable motion controller with CANopen communication or EtherCAT network.





Global Locations



For OEM Customers who are unsatisfied with having to design around inflexible off-the-shelf products, our technical knowledge and customizable product families provide for a design experience which results in motor and motion systems that provide superior reliability and performance at the lowest possible cost.

From Configurable to Fully Customizable Motor and Motion Control Solutions



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Your Genius. Our Drive.