

## Military Robotics



As technology blurs the line of how humans and machines interact, opportunities to put new robotic driven capabilities into the hands of the warfighter and hazardous duty personnel continue to emerge. Accurate, reliable, durable motion solutions in a compact form factor are critical for mission success.

### Kollmorgen Heritage

- Kollmorgen has been on the leading edge of precision robotics technology for decades with over 100,000 units fielded in high reliability systems.
- Kollmorgen has 70 years' experience in designing, manufacturing and delivering motion component products into Aerospace & Defense applications.

### Our Expertise

- Robots for: mine detection, disaster relief, remote weapon platforms, hazardous duty, bomb disposal, situational awareness
- Articulated joints, exo-skeletons, traction, weapon system and camera stabilization, cooling pumps, power generation
- Compact form, thermal optimized designs, accurate motion for high shock & vibration and extreme environments
- Durable, reliable designs for mission critical applications

### Deploy Your System on Time and on Target

- Weapons stations and gun turrets
- Missile guidance and precision-guided munitions
- Radar pedestals and tracking stations
- Unmanned ground, aerial and undersea vehicles
- Ground vehicles and sea systems
- Aircraft and spacecraft systems
- Camera gimbals
- IR countermeasure platforms
- Laser weapon platforms





### Solutions

- Catalog and optimized motor solutions employed, from frameless motor to fully integrated housed motors and actuators (motor, ballscrew, feedback, custom housing)
- Optimized motor designs for direct drive, strain wave geared, or zero backlash geared systems
- High torque/power to weight ratio, compact, rugged, precision accuracy
- Solutions optimized for performance, weight, durability, and affordability

### Rely on Kollmorgen

- With the widest range of standard and custom motion solutions, we collaborate with you to deploy rugged, battle-worthy systems engineered and built to meet your singular requirements
- The hundreds of thousands of fielded units in mission critical applications powered by Kollmorgen attest to the durability and reliability of our motion solutions
- Our global manufacturing and supply chain footprint assures you short lead times, efficient logistics, and reliability -- from prototype through full-scale production

### Kollmorgen Motion for Aerospace & Defense

- Direct drive servo motors – housed, frameless and cartridge
- Brush and brushless torque motors
- Standard and customized servo motors
- Stepper motors
- Servo and stepper drives
- Linear actuators
- Gearboxes
- Controls

### Let's Get Your Program Moving

Contact your Kollmorgen representative to discuss your application and how we can help you bring it to action with less cost, time and risk.

Learn more at [www.kollmorgen.com/militaryrobotics](http://www.kollmorgen.com/militaryrobotics)

