

Optional Zero-Backlash Transducer (feedback) Gearbox

Optional System Output Position Transducer

Optional Brake

Rate Transducer

Motor Modules

In Line Motor-Gearhead Drive Assembly

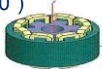
- Brushless Permanent Magnet Motors
- AC Induction Motors
- Stepper Motors
- Square Wave Driven AC Motors
- Damped Rotary Switches
- Housed Limited Angle Torquers
- Synchronous Motors

Eddy Current Dampers

- Rotary
- Linear
- In Line or Right Angle
- Damping "enable" option

New Products

- Long Stack Motors
- Frameless Motors (OD; 0.5" to 6.0")
- Motor Generators
- BPM Motor Controllers



Great North Technologies



CDA InterCorp LLC

Controllable Linear and Rotary BPM Motor Actuator Products

Reduction Gear Modules

Rotary:

- High Torque Planetary
- Right Angle Gearing
- Zero Backlash Gearing
- Precision Indexing Drive Gearing

Linear:

- Ball Screw Actuation
- ACME Lead Screw Actuation
- In-line, Right-angle or U-drive

Brake Modules

- DC Friction Brakes
- Permanent Magnet Detent Brakes
- DC Magnetic Induction Brakes

Rotary Transducer Modules

Position Transducers

Brushless Revolvers:

- Single Speed
- Multiple Speed
- Tandem or Cluster redundant
- With or without Gearing
- On Axis Resolvers

RVT & RVDT:

- Tandem or Cluster Redundancy
- With or without Gearing
- On Axis RVDT

Environment Capabilities

- **-80° C to +225° C** - Wet Lube
- 3° Kelvin - Dry Lube
- 290° C Intermittent

Velocity Transducers

AC Tachometers:

- Damping Tachometers
- Rate Tachometers

Acceleration Transducers

- Brushless DC Rotary Accelerometers
- DC Excited Rotary Accelerometers

Permanent Magnet Alternators

- Single Speed
- Multiple Speed
- With or without Gearing

Construction Standards

- **MIL-STD-810** Qualified
- Class **H225** Insulation Rating
- ISO-9001:2008 Quality Systems

CDA InterCorp LLC can combine these **standard modules** into multi-function **integrated actuators** and assemblies. Call **Great North Technologies Inc.** directly for application engineering assistance or to request a complete set of engineering reference data brochures. Contact Craig Belanger at 514-620-3724 or send us an email at craig@greatnorthtech.com



Scotland Electronics International Limited

Motion Solution Consultants - Design, Test & Manufacturing Specialists



Scotland Electronics International Limited provides consultancy services for customers requiring support with the development of their Motion System Applications, using engineering consultants with multiple program and applications experience to reduce their risks on cost and time for meeting custom requirements.

Experienced in a wide range of applications, developed over the 100 + programs spanning 20 years of specializing in this Military and Harsh Environment area for applications such as Radar Control, POD servo systems, Vehicle systems, Pump Drives, Positioning Systems and Down-hole Tool Systems.

BPM Motor Drive Products

Motor Type	Commutation	Application
Stepper	2 Phase Bipolar & Unipolar	Deployment and Position Systems
	3 Phase Trapezoidal	Precision Servo Applications
Brushless Permanent Magnet	3 phase Sinewave	Smooth Torque Applications
	2 phase Sinewave	
	Sensorless	Constant Rotation Applications