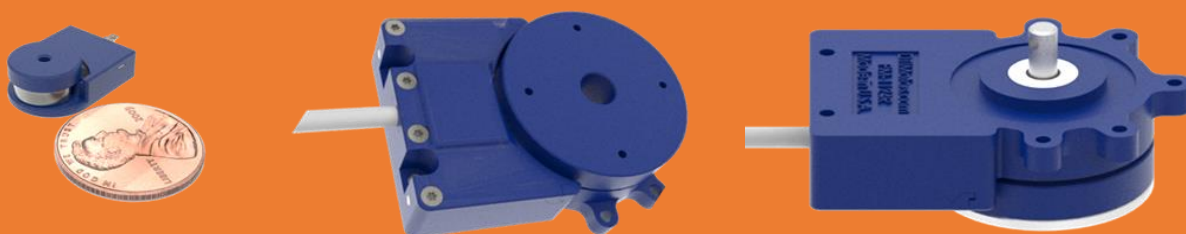


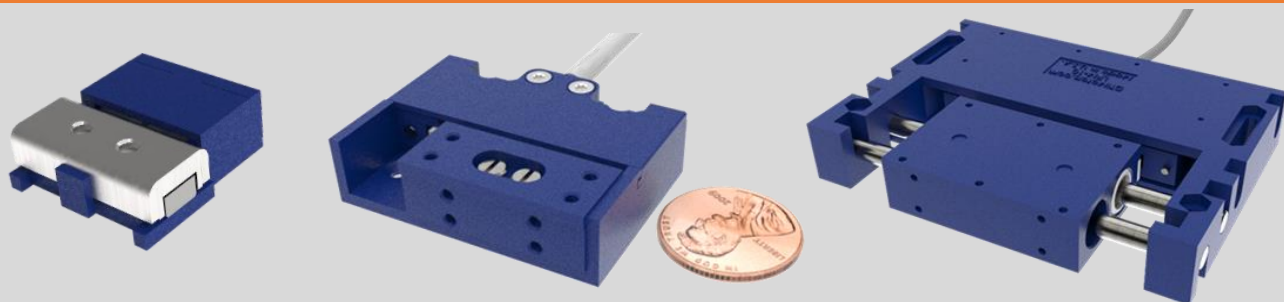


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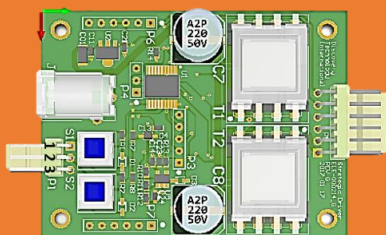
Discovery Technology International, Inc. ("DTI") is an advanced designer and manufacturer of precise motion and control technologies utilizing proprietary standing wave piezoelectric devices to create motors, actuators and related control electronics and software. Our technology replaces historic motors and actuators where precision, fast response, energy efficiency, lightweight, power density and affordability for OEM applications are important considerations for product designers and engineers in all industries.



Rotary Piezomotors



Linear Piezomotors



Open or closed loop control with encoder

Control of piezo motor motion is straightforward and achieved using DTI's electronic driver PCB, or by incorporation of DTI's driver circuit into customer's own p.c.b. under license. Using DTI's driver board, motion is triggered via external signal source applied through three pins located on the driver board. Control is achieved by a train of electrical pulses supplied by a digitally controlled AC voltage source directly to the piezoelement. Motor speed is altered by varying either the repetition rate of the pulses or duration of each individual pulse (i.e. PWM). Modulation of the excitation voltage source enables the piezomotor to move side to side either continuously or in a precise stepping mode. The driver board also includes two buttons for manual control. Motor performance parameters can be adjusted with different firmware versions.

<div> <div>RAS###AP3HA Series</div>  </div>	Max Torque	>2.5mN.m	<div> <div>RAS###038HA Series</div>  </div>	Max Torque	>30mN.m
	Max Speed	900rpm		Max Speed	100rpm
	Min. Step	<100 µrads		Min. Step	<50 µrads
	Response	10-15 µsec		Response	20-30 µsec
	Temperature	-20 to +80C		Temperature	-20 to +80C
	Driver volts	5VDC		Driver volts	12VDC
	Current	50-300mA		Current	100-350mA
	Weight	4g		Weight	68g
	Size (mm)	13x18x7		Size (mm)	66x52x20
	Encoder version			Encoder version	
				Speed (rpm)	0.01 to 100
				Min. Step	<50 µrads
<div> <div>RAS###038SA Series</div>  </div>	Max Torque	>30mN.m	<div> <div>LAS20C010LA Series</div>  </div>	Force	>0.2N
	Max Speed	100rpm		Max Speed	0.2m/s
	Min. Step	<10 arc sec		Min. Step	0.04 µm
	Response	20-30 µsec		Response	10-15 µsec
	Temperature	-20 to +80C		Stroke	10mm
	Driver volts	12VDC		Temperature	-20 to +80C
	Current	100-350mA		Driver volts	5VDC
	Weight	77g		Current	100-300mA
	Size (mm)	66x52x20		Weight	15g
	Encoder version			Size(mm)	16x15x6
<div> <div>LAS004010LA Series</div>  </div>	Force	>4N	<div> <div>LAS004015SA Series</div>  </div>	Force	>4N
	Max Speed	0.2m/s		Max Speed	0.2m/s
	Min. Step	0.1 µm		Min. Step	0.1 µm
	Response	20-30 µsec		Response	20-30 µsec
	Stroke	10mm		Stroke	15mm
	Temperature	-20 to +80C		Temperature	-20 to +80C
	Driver volts	12VDC		Driver volts	12VDC
	Current	100-350mA		Current	100-350mA
	Weight	22g		Weight	45g
	Size(mm)	40x28x11		Size(mm)	60x47x15
	Encoder version			Encoder version	
				Speed (mm/s)	0.014 to 140
				Min. Step	2.6 µm
<div> <div>LAS010030SA Series</div>  </div>	Force	>10N	<div> <div>MBS010 Series</div>  </div>		
	Max Speed	0.2m/s			
	Min. Step	0.1 µm			
	Response	30-50µsec			
	Stroke	30mm			
	Temperature	-20 to +80C			
	Driver volts	12VDC			
	Max Current	1600mA			
	Weight	190g			
	Size(mm)	106x18x77			
	Encoder version				
				Force	>10N
				Max Speed	0.2m/s
				Min. Step	0.1 µm
				Response	20-30 µsec
				Stroke	to 100cm
				New Product In Development	