

# CurraX

## INCORPORATES SIEMENS SIMATIC S7 CONTROLLER SYSTEMS

Mechanics, electrics, automation — CurraX is reinforcing its role and expanding its drive portfolio with IDS Digital. Besides a wide range of proven components and individualized engineering solutions, the Hamburg-based drive specialist is now also offering Totally Integrated Automation. CEO Daniel Assmann explains: "On our way to Industry 4.0 with cloud-based engineering, we have taken the next step and incorporated the Siemens Simatic S7 controller systems. As a result, we are able to offer our customers a bundled-up range of services on their way to the digital factory."

The Simatic S7 product line has been conceived for maximum flexibility in configuring sophisticated machines. Controller solutions can be organized individually by applying the principle of building blocks so as to meet specific requirements optimally. Since it is scalable, solutions can be customized to actual requirements extremely flexibly and economically. Moreover, maximum protection for investments is ensured thanks

to strict upward compatibility.

The main focus of CurraX are the Simatic Advanced Controllers. They help automatize the complete range production plants as well as applications yielding the best of performance, flexibility and interconnectivity. The advanced controllers are used in the automation of total production and applications for medium-sized and high-end machines. A variety of CPU models are available in several classes of performance in the product group of what the customer prefers.

For the controller systems, CurraX will also provide in future the compatible operating and supervision systems Simatic HMI. Individual components can be perfectly integrated with the automation by consistently using open, standardized interfaces in hardware and software systems. They are suitable for panel-based as well as for PC-based single and multi-station solutions. From the simple push-button operation through mobile and stationary operating devices to the all-rounder for de-

manding applications, they always offer the optimal solution that is robust, compact and has versatile options of connectivity. They also offer value addition thanks to brilliant displays and secure and ergonomic operation.

"Our holistic approach is based on the vision of the Digital Enterprise," said Assmann. "In the future, we can guide our customers' production completely through CurraX: products, software and cloud-applications from a single source. They will benefit from our comprehensive offer that is tailored to various industrial segments and their needs. Bearing in mind the networked production methodology of tomorrow, we would like to emphasize the clarion call "Internet of Things" for CurraX. A mass of data becomes information that is evaluated and used for individual and intelligent solutions."

### For more information:

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[www.currax.net](http://www.currax.net)





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## Yaskawa Direct Drive Servo

OPENS DOOR TO BACKLASH-FREE AUTOMATION APPLICATIONS

The Drives and Motion Division of Yaskawa America, Inc. has introduced a direct drive servomotor that packs a new level of performance into a more compact size than anything offered before.

The new Yaskawa SGM7F line of direct drive servomotors delivers from 4 to 35 Nm of torque in a device as small as 2.1" high and 5.3" in diameter (53 x 135 mm). This size advantage makes it possible to apply the mechanical benefits of a direct coupling between a servomotor and a load in tighter spaces than ever before. Machine designers can use SGM7F to make automated machinery more compact, freeing up valuable space on crowded plant floors.

The chief advantage of direct drive products is the ability to attach a load directly to the servomotor, allowing a full range of motion control without the need for a shaft coupling or gearhead. SGM7F also offers a superior level of torsional stiffness and virtually

eliminates mechanical backlash. This yields an output that minimizes damage to components and maximizes positioning accuracy and repeatability.

The SGM7F also offers a host of other advantages, including: an open core design that adapts easily to shaft mounting and allows wiring to pass through easily, 24-bit encoding for exceptionally precise motion control, a self-cooled design that generates a low level of heat, a design that is ideal for applications which require downsizing and shorter cycle time.

The SGM7F line offers eight different models to suit a wide range of industrial applications, including dial tables, transfer lines, die actuators, electronic parts assembly, and print registration.

### For more information:

Yaskawa America  
Phone: (800) 927-5292  
[www.yaskawa.com](http://www.yaskawa.com)



# iwis

OFFERS ACCUMULATION CHAIN FOR CONVEYING SYSTEMS

For logistics and material handling applications, chain specialist iwis Drive Systems offers a comprehensive range of accumulation chains that have proven exceptionally efficient and durable—and therefore economical—in numerous comparisons. Accumulation chains are used for conveying, accumulating and separating a wide range of different goods.

As a rule, these chains run continually, driven through the track rollers on the chains' outside, which also support the chain in the profile. The conveyed goods rest on the transport or accumulation rollers, which are fitted between the chain links. Accumulation chains from iwis feature special low-friction rollers that ensure an extremely efficient operation of the chain and therefore the entire conveying system. The low-friction rollers also allow easy positioning of the transported material at any point along the transport path and remove the need to start and stop the chain, which could influence product orientation and agitate content.

The accumulation chains are available in different versions, including versions with offset accumulation rollers for optimized load distribution, maintenance-free Megalife accumulation chains with nickel-plated plates and pins for lubricant-free operation, accumulation chains with protection for fingers and small parts for increased machine and personal safety, and side-bow accumulation chains with offset accumulation rollers for conveying systems with extremely small bend radii.

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## Parsons Peebles

EXTENDS MEDIUM AND HIGH VOLTAGE STANDARD MOTOR RANGE

Parsons Peebles recently launched their new medium and high voltage standard motors extending their current portfolio of engineered and drop-in replacement solutions.

The main product types that will feature in the Parsons Peebles standard product portfolio include the PPD series, an IC411 motor which is a self-ventilating, enclosed machine with external fins and an external shaft mounted fan. The PPT Series is an IC611 motor which is also an enclosed machine and has a built on heat exchanger and shaft mounted fans. The PPC Series, an ICO1 motor, is a self-ventilating machine that is integral fan cooled by a shaft mounted fan. These all conform to the IC code as laid down in 60034-6.

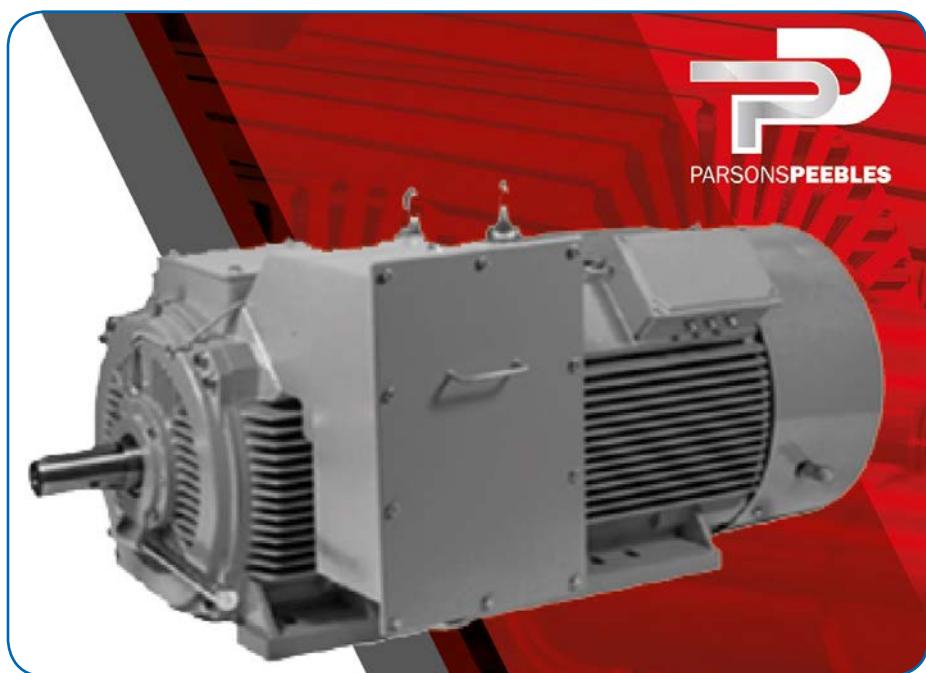
The three-phase squirrel caged induction designs, come in a range of

voltages, most commonly 3.3 kV, 6.6 kV and 11 kV with class F insulation and class B rise as standard. The product range covers 2 to 10 poles in sizes up to 560 frame, across a power range of 185 kW to 2.8 MW.

"We are excited at this next step in the continued development of the Parsons Peebles product offering to our customers. This launch is an important part of our journey, while continuing to enhance our reputation and brand as a full service and product provider across the whole electromechanical landscape," said Frank Barrett, CEO, Parsons Peebles Group.

**For more information:**

Parsons Peebles Group  
Phone: +44 (0) 1383 421 150  
[www.parsons-peebles.com](http://www.parsons-peebles.com)



# Moticont

## ADDS SERVO ACTUATOR TO SDLM SERIES

The new SDLM-019-070-01-01 direct drive linear motor is the latest addition to the series of zero backlash, zero cogging, high acceleration, high speed, high resolution, long life linear servo motors from Moticont. Also known as an electric cylinder, this compact direct drive linear motor is just 0.75 in. (19.1 mm) in diameter and 2.75 in (69.9 mm) long. Protected inside the motor housing, the linear optical quadrature encoder is directly connected to the shaft for the greatest possible accuracy. This direct drive linear motor features 1.25  $\mu$ m (0.000049 in.) of resolution.

The SDLM-019-070-01-01 direct drive linear motor has a stroke length of 0.500 in. (12.7 mm) and a continuous force rating of 9.7 oz. (2.7 N) and peak force of 30.7 oz. (8.5 N). This non-commutated direct drive servo motor features: Quiet long life plain linear bearings, an integrated internal (1.25 micron resolution) quadrature optical encoder with differential outputs, and a non-rotating shaft. Some applications include: Manufacturing (assembly and inspection equipment), sorting and packaging, semiconductor handling, medical equipment and instruments, antenna positioning, dampers and valve actuators.

Direct coupling of the load or stage to the low inertia non-rotating shaft eliminates backlash and allows for high acceleration/deceleration. Both ends of the motor and shaft ends have threaded mounting holes for easy integration into new and existing applications. The SDLM-019-070-01-01 Direct Drive Linear Actuator is also available as a complete plug-and-play linear motion system with a matching motion controller.

### For more information:

Moticont  
Phone: (888) 785-1804  
[www.moticont.com](http://www.moticont.com)



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# Boca Bearing

## EXPANDS MOUNTED UNIT BEARINGS AND INSERTS

The Boca Bearing Company is proud to announce the expansion of their line of mounted unit bearings and inserts. Mounted unit bearings are used when a shaft axis is perpendicular to the bearing mounting surface. Available in 2 or 4-hole configurations, flange mounted unit bearings and pillow blocks provide a method of accurate mounting fits and load support.

Stainless steel mounted unit bearings are designed to meet all of the most demanding operating environments such as the medical, food, beverage or chemical industry. Stainless steel is ideally suited for applications that require frequent wash downs, operate near food or liquid contaminants and have a high exposure to harsh chemicals or humidity.

Boca Bearing also offers thermoplastic mounted unit bearings consisting of a high-grade, thermoplastic housing with a stainless steel insert. Full ceramic or ceramic hybrid insert bearings

can be substituted upon request from a 0.5000 inch bore to a 1.5000 inch bore in both metric and inch sizes. Thermoplastic housings will never rust or corrode and characteristically exhibit excellent stiffness, mechanical strength and dimensional stability.

Also offered is the mini mounted unit bearings which have a rustproof housing made with a special alloy or stainless steel 304 with bearings made from high carbon chromium bearing steel or stainless steel 440C. Low profile mini mounted units are ideally suited for tight spaces. Pillow block and two bolt flange styles are available now. Selection of the appropriate bearing can be accomplished with knowledge

of the shaft size and radial and thrust load requirements.

### For more information:

Boca Bearing Company  
Phone: (561) 998-0004  
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# Brother Gearmotors

INTRODUCES LINE OF RIGHT ANGLE  
HYPOID GEARING BRUSHLESS DC  
GEARMOTORS

Brother Gearmotors, a division of Brother International Corporation that offers a wide range of ultra-reliable, sub-fractional AC gearmotors and reducers for the food & beverage, packaging and material handling industries, has introduced a line of Brushless DC electric gearmotors (BLDC). Also, known as Electronically Commutated Motors, Brother's portfolio of brushless DC gearmotors are ideal for environments requiring virtually maintenance-free operation and accurate speed control as well as operation over a wide speed range. They are also desirable for settings where brush dust contamination is to be avoided or brush contact arcing could affect electronically sensitive equipment. Features include several shaft configurations, custom options, maintenance free, lubricated and sealed for life as well as very Safe 12-48 VDC motors with a wide speed control range.

The new brushless motors are designed to work with an OEM's own design drive or standard brushless drives from Brother with features such as adjustable acceleration, deceleration, open or closed loop operation, current limiting and other performance and safety features.

"Brother Gearmotors is pleased to add this set of high-efficiency brushless gearmotors to our product offerings," said Matthew Roberson, vice president of Brother Gearmotors. "At Brother, we strive to provide our customers with the full array of gearmotors they need to remain both competitive and cost-effective."

## For more information:

Brother Gearmotors  
Phone: (908) 704-1700  
[www.brother-usa.com/gearmotors](http://www.brother-usa.com/gearmotors)



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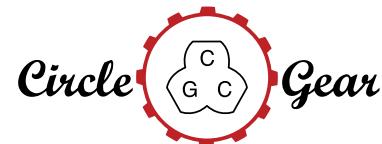
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**SICK**

## ULTRASONIC FLOW SENSOR DETECTS FLOW VOLUME

The new non-contact DOSIC ultrasonic flow sensor from SICK is used to detect the flow volume of conductive and non-conductive liquids. With its measurement channel and stainless-steel housing, the ultrasonic flowmeter is suitable for measuring tasks in hygienic and highly demanding environments.

The rugged and compact model combined with a hygienic design ensures highly reliable measurement results. This makes the sensor ideal for a wide range of application possibilities, including those where space restrictions or aggressive media play a role.

Two configurable digital inputs and outputs and up to two analog outputs, as well as an IO-Link interface to a superordinate control unit, ensure that you get just the right start position. The IO-Link reduces cabling and also enables complete control and monitoring of the sensor in Industry 4.0 machine environments.

The absence of moving parts in the sensor eliminates potential contamination risks in the demanding hygienic environments of the food industry. In addition, the sensor has a straight, seal-free, and self-emptying measuring tube made of high-quality stainless steel (316L with  $Ra \leq 0.8$ ). The high-quality stainless-steel housing also provides the necessary ruggedness and resistance. It therefore goes without saying that the sensor has EHEDG

certification and demonstrates FDA conformity. Since there is no contact between the sensor and the flowing media, and the flow volume is determined in a non-contact manner, aggressive cleaning agents in CIP and SIP operations are not a problem either. The sensor can easily withstand temperatures up to 143 degrees Celsius in SIP processes for up to one hour.

In addition, the sensor automatically



adjusts its parameters if the medium is changed. This "Plug & Measure" solution eliminates the need for initial medium calibration and reduces installation and operating costs.

### For more information:

SICK, Inc.  
 Phone: (800) 325-7425  
[www.sickusa.com](http://www.sickusa.com)

# Ruland

JAW COUPLINGS UTILIZED FOR PRECISION CONVEYORS

Ruland zero-backlash jaw couplings have a balanced design, accommodate all forms of misalignment and have high dampening capabilities, making them an ideal fit for precision conveyors with frequent starts and stops. These conveyor applications are often found on equipment used in semiconductor, solar, optical inspection, and medical automation. Jaw couplings offer system designers a wide range of sizes and performance characteristics to fit their application requirements.

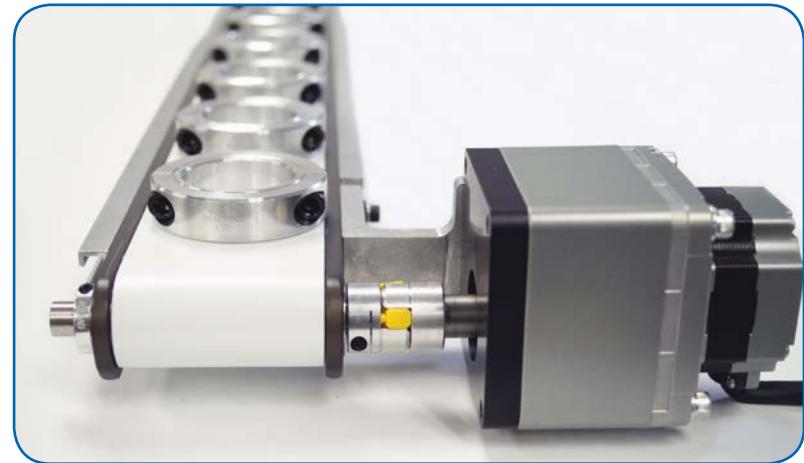
Zero-backlash jaw couplings from Ruland are made from two polished aluminum hubs and a spider type insert. The curved jaw profile of the hubs press fits to the spider, ensuring zero-backlash operation. Hubs are available in clamp or set screw style with inch, metric, keyed, and keyless bores. Spiders are available in three durometers: 98 shore A for high stiffness, 92 shore A for a balance of stiffness and compliance and 85 shore A for the highest amount of dampening. Conveyor designers can mix and match hubs and spiders to create a coupling that best fits the need of their application.

Ruland jaw couplings have a standard balanced design for reduced vibration at higher speeds which is critical for conveyors in applications such as rapid optical inspection where errors can be caused by slight deviations in expected positioning. Jaw couplings are considered fail safe because if the spider fails, the jaws on the two hubs will interlock with no loss of power transmission. This prevents the system from coming to an abrupt stop and damaging sensitive high value items such as semiconductor or solar wafers.

Ruland jaw couplings are made from bar stock sourced from select American mills and carefully manufactured in Ruland's factory in Marlborough, Massachusetts. They are available in bore sizes ranging from  $\frac{1}{8}$  inch to  $1\frac{1}{4}$  inches or 3 mm to 32 mm. Stainless steel hubs and spiders with a center hole are available by request.

## For more information:

Ruland Manufacturing Co., Inc.  
Phone: (508) 485-1000  
[www.ruland.com](http://www.ruland.com)



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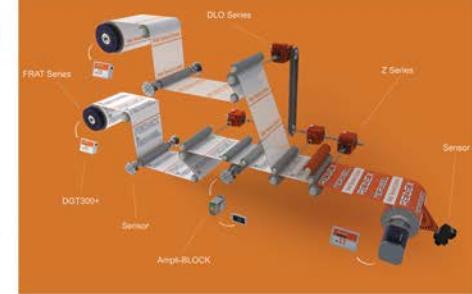
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# Rexnord

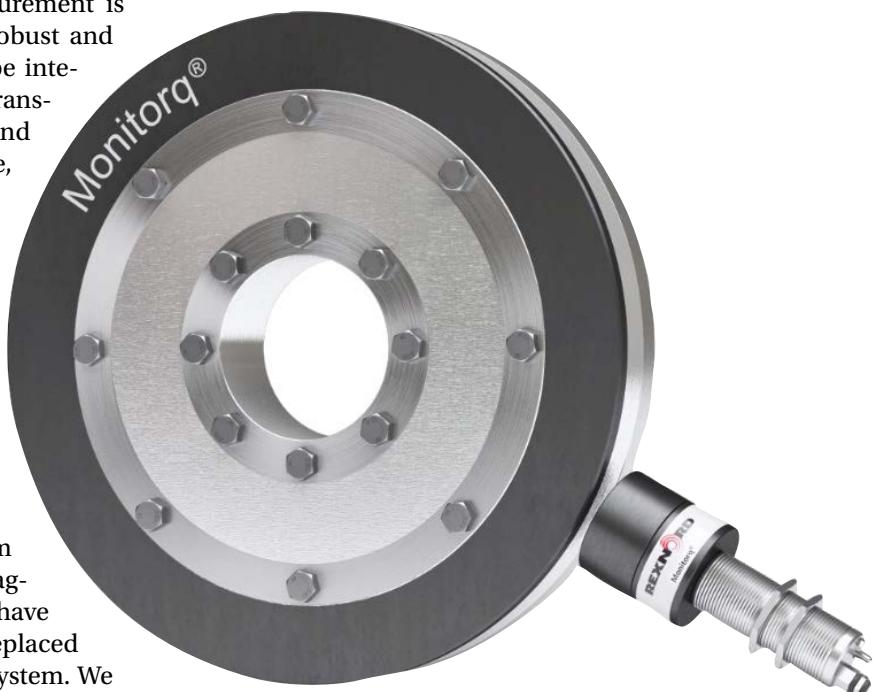
## ANNOUNCES NEW INDUSTRIAL TORQUE MONITORING

The latest in industrial process torque measurement is now available from Rexnord. Monitorq is a robust and reliable torque measuring device which can be integrated into a driveline using standard power transmission products such as couplings, pulleys and gears. It provides a true measurement of torque, from any location in a drivetrain.

The innovative Monitorq system is comprised of a strain-gauged torque ring and an E-90 Sensor. The E-90 Sensor provides the torque ring with inductive power and receives a radio signal back from it. The radio signal is converted into an output signal proportional to torque that can be directly connected to a control system, or shown on a dedicated screen.

"The design of this latest version of Monitorq has been driven 100 percent by feedback from our customers," said Rob Hucker, product manager, Rexnord Shaft Management Solutions. "We have removed batteries from the torque ring and replaced them with a state-of-the-art inductive power system. We have also increased the accuracy of the torque signal to 1% of full-scale torque while at the same time increasing the sampling rate to 1 kHz. We're very excited to see the first Monitorq ship to customers."

Rexnord Monitorq enhances equipment performance by providing a variety of functions ranging from simple overload protection to production or process control and condition monitoring, as used in modern preventative maintenance systems.



### For more information:

Rexnord

Phone: (866) 739-6673

[www.rexnord.com/monitorq](http://www.rexnord.com/monitorq)

# R+W

## OFFERS SPECIALLY-DESIGNED ST SERIES COUPLING FOR EXTRUDING EQUIPMENT

R+W has expanded its line of ST series safety couplings, with a specially designed version now available for the protection of extruding equipment. Taking advantage of the well-proven ball-detent safety element system, the driving and driven ends separate within milliseconds of a torque

overload, protecting the extruder from damage and reducing expensive repairs and costly downtimes. The driveline is free to coast to a stop after disengagement, and re-engagement simply requires that a force be applied to the back sides of the plunger modules, either with a soft hammer or pry bar. A wide variety of disengagement torque values are available through a selection of adjustment ranges.

The safety couplings are designed with an integrated elastomer-jaw set, absorbing vibration and shock, as well as allowing for compensation for axial, angular, and parallel shaft misalignment.

Lateral mounting by means of the fully split clamping hubs simplifies the installation process and eliminates the need to move heavy motors and gearboxes during installation or removal.

### For more information:

R+W America

Phone: (630) 521-9911

[www.rw-america.com](http://www.rw-america.com)

# Granite Devices Inc.

## IONI SERVOMOTOR DRIVE PERFORMS MULTI-AXIS SYNCHRONOUS MOTION CONTROL

Granite Devices Inc., a Finnish servo drive manufacturer has released a new industrial servomotor drive contributing high degree of time and cost saving features to the machine automation market.

A “swiss knife of motion control” IONI starts a new era of servo drives by bringing snap-on installation, built-in SIL2 safety functions and unforeseen compactness in 700W class in just  $70 \times 37 \times 7$  mm form factor.

IONI implements industry standard, torque, velocity and position controls for AC, brushless DC, brushed DC, linear servomotors and stepping motors between 2W and 700W power. An improved high dynamic range torque control allows seamlessly to connect a range of motor variants to a single drive type.

The real beauty of IONI is the ability to perform multi-axis synchronous motion control out of non-realtime host, such as Windows PC with USB or Ethernet connection. This has been achieved by the means of hardware side trajectory buffering and distributed clock synchronization. Customer's motion control software just fills drives' trajectory buffers to perform silky smooth multi-axis motion.

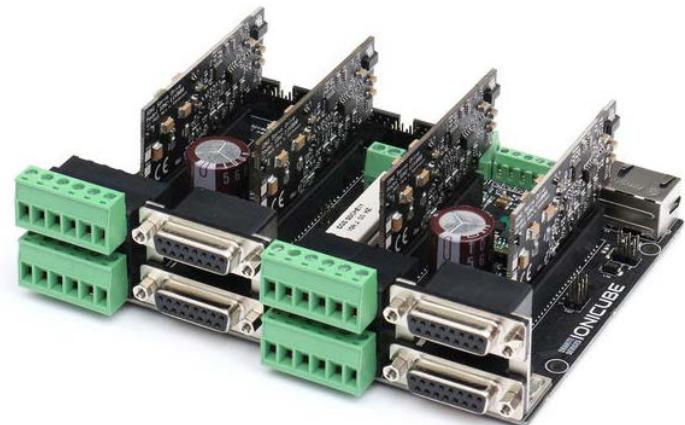
Under the hood, IONI packs an unforeseen level of connectivity. IONI Pro drive model holds all-inclusive support for incremental and sin/cos encoders as a standard feature. Drive connects directly to the fully open C/C++/C# programmable SimpleMotion bus as well as traditional digital pulse train and analog controllers.

IONICUBE and IONICUBE 1X motherboards are offered alongside with IONI drives for customers to build 1-4 axis solutions or larger motion control systems by chaining the motherboards. IONICUBE motherboard schematics are also offered in open source fashion for customers to build their own purpose-built motherboards.

“IONI has proven such swiss knife of motion control approach feasible by using today's latest technologies” says company's product architect Timo Piironen. IONI is available worldwide directly through Granite Devices web shop immediately from the stock.

### For more information:

Granite Devices Inc.  
Phone: +358 44 99 175 33  
[www.granitedevices.com](http://www.granitedevices.com)



# OES

## INTEGRATES LINEAR STAGE SERIES INTO NEW AND EXISTING APPLICATIONS

OES (Optimal Engineering Systems) offers ten high precision, low cost linear positioning stages that can be easily integrated into new and existing applications. Choosing the best slide for the application is easy. The five AQ120 and five AQ130 series of linear motorized stages are available in travel distances of: 50 mm (1.969 in.), 100 mm (3.937 in.), 150 mm (5.906 in.), 200 mm (7.874 in.), and 300 mm (11.811 in.). The compact, AQ120 series of linear stages features high precision steel linear ball bearings and hardened steel shafting and are designed for loads of 15 kg (33.1 lbs) for the AQ120-

50 to 5 kg (11 lbs) for the AQ120-300. The AQ130 series of linear stages features high precision open steel linear ball bearings and supported hardened steel shafting and is designed for loads to 30 kg (66.1 lbs) for all travel lengths.

Each of these black anodized slides features a large table with a pattern of threaded mounting holes, and a precision low backlash ( $2 \mu$ ) 4 mm per turn lead screw. The resolution for all slides is 2 microns per pulse using a 10 microsteps per step motor driver, or just 1 micron per pulse using a 20 microsteps per step motor driver. These stages can easily be configured as XY stages, with a Z axis, or with a rotary, lift, or goniometer stage. All stages are also available with a servo motor and optical encoder, and are compatible with OES' line of motion controllers. Options also include: plug-in motor driver / indexer, stepper motor with an optical encoder for position verification.

### For more information:

Optimal Engineering Systems, Inc.  
Phone: (888) 777-1826  
[www.oesincorp.com](http://www.oesincorp.com)

