



# Mtech Product Update

**TURCK** Industrial Automation  
**Product News**

[www.turck-usa.com](http://www.turck-usa.com)

## New EtherNet/IP™ Gateway

**TURCK Inc.** announces its new EtherNet/IP *piconet*® gateways. The gateways are available with either eight M8 *picofast*® or four M12 *eurofast*® connectors, and provide four points of digital I/O.

The gateway has two fiber-optic connectors to add modules and increase the number of I/O points on a single node. A new extension module with eight inputs and outputs and terminal strips that offer cage clamp technology for mounting inside a panel is also available. Up to 255 extension modules may be connected to the gateway.

**TURCK** has also improved its IP-Link fiber-optic communication system to allow up to 15 meters between modules. This will make it feasible to encircle an entire machine with I/O using a single node on the network.

Network & Interface Products



## New Handheld Programming Unit for *BL ident* RFID



Introducing a new handheld unit to program data carriers within its new **BL ident** RFID system. Read and write operations are easily programmed to the data carriers at any location with the handheld unit. The data is then displayed on an illuminated touch screen (in decimal, binary, hexadecimal and ASCII code) where it may be edited and written to the appropriate data carrier as required.

The **BL ident** handheld operates with Microsoft Windows CE, making data transfer as simple as exporting a Microsoft Excel file. A WLAN connection allows the **BL ident** handheld to transfer data directly to a SPC or PC, regardless of the location. This means that the data is always available – even when the automated system is standing still.

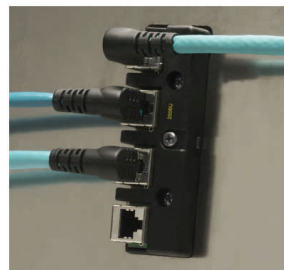
The handheld unit also features automatic read operations, comparison of data records, definition of password protected areas and option WLAN, Bluetooth and GPRS features.

Also See the Turck website for their Interactive RFID Simulator at <http://pdb.turck.de/rfid/start.jsp?lang=en>

## Fully Overmolded Right Angle RJ45 Connector

**TURCK** introduces the first ever fully overmolded right angle RJ45 connector cordset on the market. This cordset is ideal for connections in tight spaces and Ethernet panel builders, and compliments **TURCK's** Ethernet cabinet adapter.

The right angle RJ45 connector is overmolded with tough Polyurethane, and is available with internal or external tabs. The cables are also available with or without shielding in 4 or 8-wire configurations and stranded conductors.



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Turck offers the following Industrial Automation Solutions:

Proximity Sensors—Capacitance Sensors—Temperature, Pressure, and Flow Sensors  
Cordsets and Connectivity Products—Rotary & Linear Encoders—Network I/O—RFID

[www.mtechmn.com](http://www.mtechmn.com)



**SureCross™ DX70 Wireless Networks**

deliver a low-cost dedicated wireless industrial I/O system, providing directly mapped I/O using a Gateway and Node, each equipped with four discrete inputs and outputs, two analog inputs and outputs, and link loss output—all for under \$1000. DX70 also offers two-way RX/TX communications with full acknowledgement and easy Installation, making it a cost-effective, simple to implement solution for remote I/O applications or plant environments where conduit and wiring are impractical. A Node on the DX70 network can be easily deployed and is used to gather information that is concentrated at a DX70 Gateway system controller, which can be located up to three miles away. DX70 uses a Frequency Hopping Spread Spectrum (FHSS) protocol and Time Division Multiple Access (TDMA) technology to ensure reliable, secure data communication. In addition, DX70 offers an enhanced security feature called binding to minimize any possible noise or interference caused by other wireless products.



Note from Banner Vision:

They are looking for customers that can use the new Vision BEAD tool, and provide valuable feedback. Banner is willing to provide an evaluation system for the right applications

Also, If we can't get the Vision Sensor, **don't forget about the lighting.** Banner lighting is intense

**Sealed Linear Array Lights** deliver high-intensity illumination of large areas or objects at long distances. The

high-power, solid-state arrays are housed in a durable, waterproof, IP68-rated housing, making them a superior lighting option for washdown environments. Banner linear array lights connect directly to 24V dc power; constant intensity and strobe control are built into the light. Linear array lights are available in 290 or 580 mm array lengths. They are offered in models with infrared or visible red, blue, green or white LEDs and with a choice of clear acrylic, glass or acrylic diffusing windows. The arrays' LEDs illuminate targets with a lens angle of 10°, and arrays are available in a 316 stainless steel or nickel-plated aluminum housing for rugged, reliable operation in difficult industrial environments. All models are sealed for use in washdown applications, while stainless steel models provide added protection from harsh, corrosive chemicals. Models also provide continuous or strobed operation through a dedicated strobe input line. Prices start at \$950.



Also Ask about the following New Banner Products:

- WORLD-BEAM® Q20 Series Sensors
- DUO-TOUCH Run Bar with STB Buttons
- Safety Light Screen Muting Module Models MMD-TA-11B and MMD-TA-12B

**PICO-GUARD™ Fiber Optic E-Stop**

Buttons work in conjunction with the PICO-GUARD Controller and other optical elements in personnel safety and equipment protection applications. The E-Stop Button is used with Banner's plastic fiber optic cable and offers a simple, quick means of connecting and disconnecting the fiber. Models are available with fiber entry/exit from either the same side or opposite sides of the housing. When paired with the PICO-GUARD Controller, the E-Stop Button meets Safety Category 4 applications (per ISO 13849-1) and is certified for use in harsh and potentially explosive environments. The PICO-GUARD E-Stop Button directly connects to PICO-GUARD Controllers, allowing for the easy integration of the E-Stop and other safety devices into one convenient safety circuit. With an impact-resistant enclosure, the E-Stop Button is rated IP65 and complies with ANSI NFPA 79 and IEC 60204-1 emergency stop requirements. List price for the PICO-GUARD E-Stop Button is \$160.

1. Push Button
2. IP65 rated housing
3. Fiber Connection port
4. Mounting Base



**Product Highlights**

- Offers models with fiber connections on same side or opposite sides for use with PICO-GUARD controllers in personnel safety and equipment protection applications
- Designed for use in potentially explosive environments and in environments with high levels of EMI or RF noise
- Accommodates up to 3 E-stops in series on a single channel
- Complies with ANSI NFPA 79 and IEC 60204-1 emergency stop push button requirements
- Meets Safety Category 4 applications (per ISO 13849-1), when used with PICO-GUARD controllers.

Banner Engineering offers the following Industrial Automation Solutions:

Photoelectric Sensors—Measurement & Inspection—Safety Products—Vision Sensors—Wireless I/O—EZ Lights

## EXTRAK Modular Rodless Belt-Driven Actuators

Exlar's new Extrak™ rodless actuators complement Exlar's "long life" line of rod style actuators and create, in one source, the broadest offering of electric linear actuators anywhere. This addition makes Exlar your one-stop solution center for all your linear and rotary actuator needs. Exlar's products are designed for heavy duty [continuous motion] applications and are ideal for industrial positioning or material handling applications with their high speed and long stroke length capabilities. Electric actuators from Exlar will perform millions of operations over the life span of the machine where they are applied. Like Exlar's rod style actuator, Exlar's rodless actuators use components which are designed for extreme robustness and long life. The belt drive actuators employ Gates PowerGrip premium glide belts which make them virtually indestructible.

There are numerous advantages to the Extrak design:

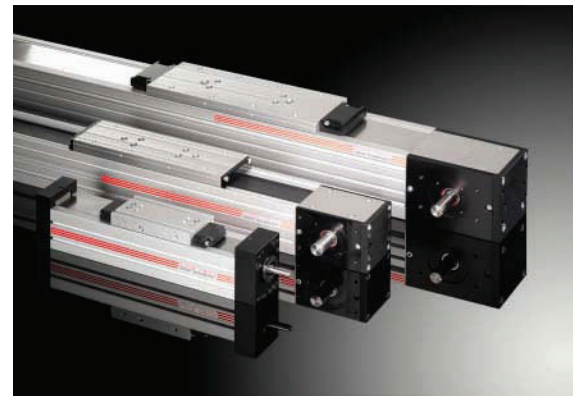
- ▶ Speed of over 16 feet per second (5 m/sec) with linear guide rails is achievable depending on the load, driving motor, and actuator drive type. These higher speeds greatly increase the application versatility of the actuator. With the innovative roller guide system, speeds of over 32 feet per second are achievable.
- ▶ Stroke lengths are available up to 22 feet (6.7 m). Optional limit switch packages allow the stroke length limits and homing reference positions to be set within the physical limits of the actuator.
- ▶ Flexible – The rodless actuators utilize a close-coupled motor mounting flange for mounting your choice of NEMA or metric dimension motors, gearboxes, clutches, and brakes. This allows the unit to be customized to specific application requirements with the smallest possible package.
- ▶ Shorter overall length – Unlike the rod-style actuator, the extended and retracted lengths are the same. This permits a smaller envelope for the actuator and allows it to be applied in more size restricted applications.

### Profile Size

Exlar's Extrak actuators are available in three different profile [frame] sizes; 65 mm, 80 mm, and 110 mm. This allows you to conveniently match the physical size allowed by your application with the required performance. Stroke lengths are available up to 24.9 feet (7.6 m) of usable stroke. These rugged actuators can carry heavy loads up to 1,650 pounds in high duty applications – even higher loads are possible for intermittent duty service.

### Motors

Exlar Extrak actuators are modular in design thus allowing the user to mount any IEC 60, 90, or 115 mm frame or Nema 23, 34, or 42 frame motors.



## Tritex Linear Actuator

### Three Technologies – One Actuator

Exlar's Tritex™ Series actuators combine three technologies to deliver for the first time a truly simple and low cost electric alternative for fluid power actuators. Tritex actuators with built-in mechanical converters also replace electric drive systems employing ball screw or gear reducer mechanisms for a complete actuation solution. Tritex actuators represent an all-electric actuator solution for moving and/or positioning mechanical devices in a large variety of industrial or military grade applications. Tritex actuators eliminate the need for pneumatic and hydraulic cylinders while improving position performance, reducing cycle times and eliminating the maintenance associated with fluid power devices. Ball screw mechanisms, and separately mounted gear reducers are also a thing of the past because rotary to linear converters or mechanical reducers are designed in.

### Less is More

The Tritex Series of electric actuators combine a brushless servo motor, servo amplifier and position controller in a single industrial grade enclosure. This eliminates both the external servo amplifier and the expensive and failure prone cables associated with a typical servo system. Component selection, design and installation are completely eliminated. Trouble-shooting and debugging of individual components; gear reducers, rotary-to-linear converter mechanisms and the complex wiring layout typical of such a system are gone. The panel space for a separately mounted amplifier and installation of that amplifier are no longer necessary.



### Product Feature

- 24 to 48 VDC power
- Integrated brushless motor, amplifier and controller
- IP54 sealing standard (linear)
- IP65 sealing option (standard for rotary)
- Multiple connectorization options
- 3 inch (76mm) frame size
- 3 to 18 inch (75 to 455mm) strokes available
- 0.1, 0.2 and 0.5 inch lead (2.54, 5.08, 2.7mm) planetary roller screws
- 1250 lbf (5560N) max continuous thrust capacity, 2270 (10,000N) peak
- 16.6 inches (421mm) per second max linear velocity
- Multiple standard and custom mounts available



## Products for Factory and Process Automation

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Mtech Represents  
the following fine products



## OUR OBJECTIVE

Mtech is a manufacturer's representative dedicated to providing O.E.M.'s and users with solutions to their factory automation applications. This objective is accomplished by integrating 35 years of experience with state of the art products to fill our customer requirements.

## REGIONS SERVED

### TURCK, BANNER, & AMC

Minnesota, Western Wisconsin, North Dakota, & South Dakota

### EXLAR

Minnesota, Western WI, North Dakota, South Dakota, Iowa, & Nebraska

## ADVANCED MOTION CONTROLS Company Update

[www.a-m-c.com](http://www.a-m-c.com)

### Corporate Overview

Advanced Motion Controls (AMC) is a world leading servo drive manufacturer providing solutions for motion control. Today, servo drives are an essential part of motion control systems, and AMC servos are an excellent foundation for high performance. Specifying AMC's products in the servo system strengthens the user's competitive advantage. Advanced Motion Controls has become synonymous with servo solutions that are reliable, cost-effective, customer specified and delivered on time.



### Mission Statement

The mission of Advanced Motion Controls is to profitably develop,

manufacture, sell and support competitive high value motion control products

### Capabilities

Advanced Motion Controls' core product competency and capabilities lie in providing standard and completely customized servo drive solutions for diverse motor technologies. To achieve this we have incorporated powerful manufacturing capabilities that compliment producing a wide range of products. Major investments in facilities, capital equipment and quality control processes represent a commitment to excellence. The ability to respond quickly to customer requirements is paramount to success. Our staff is constantly pushing the limits of technology. Innovative designs, automated production and ISO 9001 compliance combine to create products that efficiently produce maximum power output in the smallest possible packages.

### Locations

Advanced Motion Controls has a global presence in the motion control industry. Our world headquarters in Southern California is home to our engineering, manufacturing and direct sales. Cutting edge research and development takes place at our European headquarters in Budapest Hungary.

