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# WHAT'S UP WITH **AUTOMATIONDIRECT**.com

FALL 2009

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- STRIDE Ethernet switches
- Encapsulated Transformers & much more...

## SOMETHING OLD, SOMETHING PNEU...

Well, not old exactly - just our newest addition to a time-honored product line - programmable controllers. The Productivity3000 automation controller walks like a PLC, but talks like a PAC. It's got so many features that make you more productive you'll need to go to [www.productivity3000.com](http://www.productivity3000.com) to get the whole story - but at least catch the highlights inside this issue.

And speaking of pneu...matics!! It's a big step into a new category for us, but we think you'll be excited about the NITRA pneumatic product offering and the prices on tubing, fittings, valves, non-repairable cylinders and cylinder position switches. One less reason to go anywhere else for your control system components!

- *The AutomationDirect Team*

1-800-633-0405 | [WWW.AUTOMATIONDIRECT.COM](http://WWW.AUTOMATIONDIRECT.COM)

## PRODUCTIVITY3000 AUTOMATION CONTROLLER

The Productivity 3000 Programmable Automation Controller is the newest generation of industrial controllers that combines features and capabilities of a PC-based control system with that of a typical programmable logic controller. Productivity3000 is a modular, rack-based system of up to 115,000 I/O points with local, expansion and remote I/O bases and a full lineup of discrete, analog and specialty I/O modules. The high-performance CPU has 50Mb memory, fast scan times and industry-leading seven communication ports for \$599.



**ProductivitySuite software FREE**

**(\$495 value)** We want you to see just

how productive this new controller can make you. That's why we're offering the software for FREE (downloadable online) right now - check out the tools, instruction set and programming/debug environment that will let you configure and program a system in less time than you can imagine.

## TOP 10 Hardware Highlights

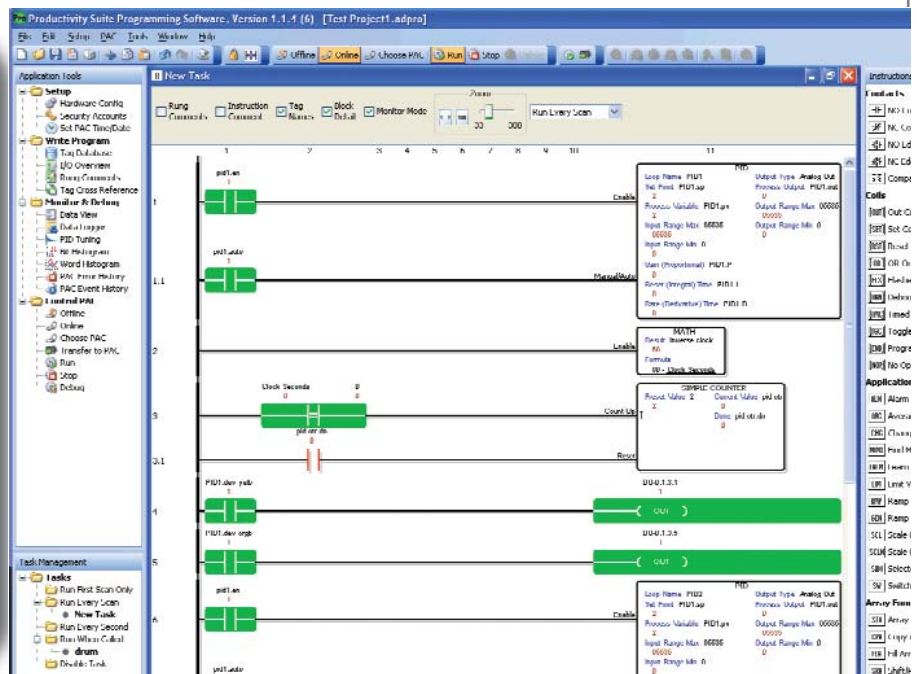
- High-performance CPU with **50Mb memory**, fast scan time
- **Modular** rack-based footprint with 36 discrete and analog I/O option modules, up to 115K+ I/O
- Unmatched **built-in communications** capabilities, including local and remote I/O ports and networking
- Integrated **drive communications** over Ethernet
- **LCD display on CPU** and Remote Slave for configuration and diagnostics
- Patent-pending **LCD display on ALL analog modules** - Helpful in troubleshooting and reading process values
- **Hot-swappable I/O**
- No module placement restrictions - **any module in any slot**, any base
- **No power budget** limitations
- Optional I/O terminal blocks or easy ZIPLink **plug-and-play wiring**

and a two-year warranty to boot!

## TOP 10 Software Highlights

- Auto set-up and discovery of hardware
- Tag name database programming
- Task management
- Advanced "fill-in-the-blank" instructions
- Seamless Database connectivity
- Graphical HTML-based Help File
- Run-time editing
- Project file and user documentation stored in CPU
- USB data logging on the CPU
- Tag database export to C-more HMI

all in an intuitive Windows-based programming environment



## NITRA PNEUMATIC CYLINDERS AND SWITCHES; MORE FITTINGS AND VALVES

Cylinders start at  
**\$9.50**

The NITRA Pneumatics A-Series non-repairable stainless steel round body cylinders includes bore sizes from 7/16" to 2" and stroke lengths from 1/2" to 18" to meet a broad range of applications. These high quality cylinders are constructed with stainless steel bodies and double rolled-in high strength aluminum end caps with full flow ports. Cylinder switches are also available for cycle counting or operation confirmation.

- Interchangeable with other common brands of round body cylinders
- Available bore sizes: 7/16", 9/16", 3/4", 7/8", 1-1/16", 1-1/4", 1-1/2", 2"
- Single-acting (spring return) and double-acting models
- Nose, pivot and double-end mounting options
- Pre-lubricated for long, maintenance-free performance
- 250 psi operating pressure
- Models available with magnetic piston for position indication
- 3-year warranty
- Made in the USA



Additional push-to-connect union valve fittings have been added, including stop, check and manual hand valves.



[www.automationdirect.com/pneumatic-parts](http://www.automationdirect.com/pneumatic-parts)

## LED SENSOR CABLES

Starting at:  
**\$10.75**

Now get sensor quick-disconnect and patch cables with LED indicators. These cables work with 10-36 VDC PNP sensors.

- Quick-disconnect cables in 2m, 5m and 10m cable lengths
- Patch cables with right-angle M12 female plug with LED indication on one end and axial male plug on the other end, in 0.3m, 0.6m, 1m, 2m, 5m, and 10m cable lengths
- LEDs indicate power and presence of signal
- PUR (polyurethane) jacket for oily and direct sunlight applications
- IP67 /IP68 / IP69K, II rated



[www.automationdirect.com/cables](http://www.automationdirect.com/cables)

## 1200 AND 3600 RPM MOTORS

Starting at:  
**\$70.00**

The IronHorse® general purpose AC motor line now includes 3-phase 1200 RPM six-pole and 3600 RPM two-pole models. The existing 1800 RPM motors range from 0.33 to 300 horsepower. These TEFC motors have 5:1 variable torque and 2:1 constant torque ratings and are ideal in applications such as fans, conveyors, pumps and more.

- Six new 56C 3600 RPM rolled steel motors ranging from 0.33 to 2 HP
- 13 new T-frame cast iron motors in 3600 and 1200 RPM models in sizes from 1 to 10 HP.



[www.automationdirect.com/ironhorse-motors](http://www.automationdirect.com/ironhorse-motors)

## CLICK CPUS WITH ANALOG I/O

Starting at:  
**\$129**

The new CLICK CPUs with analog all include three communication ports (two RS232 and one RS485), real time clock and battery backup for internal SRAM. CLICK CPUs are configured with the easy-to-use programming software, available as a free download.

- 4 DC In / 4 DC Out (sinking), 2 analog in, 2 analog out (current / voltage selectable) (\$129)
- 4 DC In / 4 DC Out (sourcing), 2 analog in, 2 analog out (current / voltage selectable) (\$129)
- 4 DC In / 4 Relay Out, 2 analog in, 2 analog out (current / voltage selectable) (\$139)



[www.automationdirect.com/click-plc](http://www.automationdirect.com/click-plc)

## MOTOR MONITOR RELAYS

Starting at:  
**\$21.00**

New ProSense motor monitoring relays plug into industry-standard 8-pin octal sockets for DIN rail or panel mounting.

- Phase monitoring relays protect against undervoltage or overvoltage faults on typical 3-phase systems; also protect against single phasing
- Alternating relays are used for motor load protection where optimization of load usage is required by equalizing the run time of two loads
- Pump seal failure relays monitor the shaft seals for submersible pumps for leakage; single or dual-channel relays available



[www.automationdirect.com/motor-control-relays](http://www.automationdirect.com/motor-control-relays)

## ZIPport JUNCTION BLOCKS

Starting at:  
**\$39.00**

ZIPport multi-port junction blocks are a simple, cost-effective way to organize machine wiring, especially useful as sensor junction blocks to consolidate wiring from various types of sensors.

- 4, 6 and 8-port junction blocks
- Field wireable or five-meter cable versions feature four and five-pin M12 connectors
- Choice of one or two I/O per port
- Available with or without power and signal LED indicators
- Operating range of -20 to +80° C
- IP67 rated with all ports connected or covered with protective caps



[www.automationdirect.com/junction-blocks](http://www.automationdirect.com/junction-blocks)

## ZIPport PANEL INTERFACE BOXES

Starting at:  
**\$37.00**

ZIPport™ panel interface connectors mount on the outside of electrical control panels and act as pass-through connections, allowing interface with PLCs and other programmable devices without opening the control cabinet

- Over 30 configurations available with single, duplex or GFCI power outlets, as well as a no-power option
- Communications connectors available include D-sub, RJ45, RJ12, USB, Ethernet and Allen-Bradley Data Highway
- Standard-reset 3A circuit breaker limits power output
- NEMA rated and UL approved; RoHS compliant



[www.automationdirect.com/panel-interface-connectors](http://www.automationdirect.com/panel-interface-connectors)

## MORE DINNECTORS

Starting at:  
**\$31.00**  
for 32

The DINnector line of terminal blocks now includes circuit disconnect, thermocouple and plug-in style terminal blocks plus supplementary circuit breaker terminal blocks and sockets.

- Disconnects allow fast circuit disconnection without rewiring; available with or without LED indicators
- Thermocouple terminal blocks provide suitable connections to thermocouple sensor wires
- Single and double-level plug-in terminal blocks accept EURO plugs
- Supplementary circuit breaker terminal blocks are available in 1/4 to 10A sizes; sockets available with or without LED indicators



[www.automationdirect.com/dinnectors](http://www.automationdirect.com/dinnectors)

## UP TO 575V MOTOR CONTACTORS

starting at  
**\$13.75**

FUJI Electric's SC and Odyssey series of motor contactors are now available in voltages up to 575V.

- SC contactors in ranges of 440-480V and 500-550V at 60Hz; frame sizes of 43, 54 and 67 mm
- SC SUPERMAGNET contactors in 88, 100 and 115 mm frame models, with AC coil voltage ranges of 380-450V and 460-575V at 60Hz
- Odyssey series contactors in 138 and 148 mm frames, with voltage ranges of 380-450V and 460-575V at 50/60Hz



[www.automationdirect.com/motor-controls](http://www.automationdirect.com/motor-controls)

## FLEXIBLE CORD

Starting at  
**\$19.00**  
50 ft. SE00W

Multi-conductor flexible service cord is now available for indoor and outdoor applications.

- Type SJE00W: 300V, 18 to 10 AWG, 2, 3 and 4-conductor, 50 and 250 ft. lengths
- Type SE00W: 600V, 18 to 10 AWG, 2, 3 and 4-conductor, 50 and 250 ft. lengths
- Type W: 2000V, 8 AWG, 4-conductor, 10 to 250 ft. lengths
- UL, CSA, RoHS compliant



[www.automationdirect.com/flexible-portable-cord](http://www.automationdirect.com/flexible-portable-cord)

## 22MM PLASTIC PILOT DEVICES

starting at  
**\$4.75**

This full line of 22mm plastic pilot devices, including pushbuttons, selector switches and joysticks, are made with fiberglass reinforced thermoplastic.

- Illuminated and non-illuminated pushbuttons in six colors come with one normally-open or normally-closed contact block.
- Illuminated and non-illuminated selector switches in two- or three-position models; key-operated versions also available
- Joysticks available in two- or four-position versions, with either maintained or momentary operation
- Contacts rated at 10 amps thermal current
- Accepts up to 14 AWG wire in pressure plate wire terminals
- UL listed, CSA, RoHS and CE compliant



[www.automationdirect.com/22mm-plastic](http://www.automationdirect.com/22mm-plastic)

## STRIDE ETHERNET SWITCHES

Starting at  
**\$99.00**

STRIDE line now includes metal and Lexan industrial unmanaged Ethernet switches and Media Converter.

- Lexan or aluminum housings
  - Industrial temperature range versions (Lexan): -10 to +60° C
  - Wide temperature range versions (Aluminum): -40 to +85° C



[www.automationdirect.com/ethernet](http://www.automationdirect.com/ethernet)

## PNEUMATIC TUBING/FITTINGS

Starting at  
**\$4.00**  
5-pk fittings

NITRA pneumatics line includes tubing, fittings and flow control valves.

- Polyurethane and Nylon tubing, 100 & 500 ft. packages, inch and metric
- Push-to-connect fittings, including union straight, reducers, and tees
- Push-to-connect flow control valves - elbow meter-in and -out, and inline



[www.automationdirect.com/pneumatic-parts](http://www.automationdirect.com/pneumatic-parts)

## HOLLOW SHAFT GEARBOXES

Starting at  
**\$169.00**

The Ironhorse® worm gearbox line has now been expanded to include a hollow shaft version of every size/ratio gearbox already offered.

- Six gear ratios from 5:1 to 60:1
- Four frame sizes
- C-flange input
- Cast iron, one-piece housing



[www.automationdirect.com/worm-gearboxes](http://www.automationdirect.com/worm-gearboxes)

## SURESTEP STEPPING SYSTEMS

Stepping motors start at:  
**\$17.00**

Expanded line includes five new stepping motors, three new linear power supplies and two new drives.

- Bi-polar stepping motors now from 61oz-in to 1291 oz-in
- Power supplies now include 48 VDC @ 5A, & 10A, and 70 VDC @ 5A, along with the existing 32 VDC @ 4A
- Two new advanced programmable drives include internal indexing capability.



[www.automationdirect.com/stepper-systems](http://www.automationdirect.com/stepper-systems)

## ENCAPSULATED TRANSFORMERS

Starting at  
**\$91.00**

The Hammond HPS Fortress series transformers are encapsulated to seal out moisture/airborne contaminants; meets NEMA and ANSI standards for indoor/ outdoor applications.

- Available from 0.50 kVA up to 5 kVA
- UL and CSA listed, and CE marked
- 10-year limited warranty



[www.automationdirect.com/power-transformers](http://www.automationdirect.com/power-transformers)

## C-MORE® REMOTE ACCESS

New feature  
**FREE**  
with all C-more full featured panels

View and control C-more panels from anywhere via a PC Internet Web browser

- Monitor and control screen operations of panel as if touching the panel itself
- Browser based - no additional software to purchase
- Three access levels with user configured passwords: View Only, View and Screen Change only, Full Control



[www.automationdirect.com/C-more](http://www.automationdirect.com/C-more)

## CLASS 2 POWER SUPPLIES

Class 2 starting at  
**\$46.75**

RHINO NEC Class 2 plastic low-profile switching supplies offer:

- Eight models with power ratings from 12W to 90W
- 5, 12 or 24 VDC adjustable output
- Universal input 85-264 VAC
- Output current limitation



[www.automationdirect.com/class2-dc-power-supplies](http://www.automationdirect.com/class2-dc-power-supplies)

## TEMPERATURE MEASUREMENT

Switches start at  
**\$89.00**

ProSense® temperature measurement devices

- TSD25 temperature switches from -4 to 284°F (-20 to 140°C)
- TTD25 temperature transmitters provide 4-20mA output with ranges of 0 to 100°C or 0 to 300°F
- RTD probes (4-wire, 100 Ω platinum, Class A elements) and thermowells



[www.automationdirect.com/temp-sensors](http://www.automationdirect.com/temp-sensors)

## CLICK videos now on Learn.automationdirect.com

We've added several new videos to our Learn.AutomationDirect.com site. The latest series of short videos help viewers understand the ins and outs of getting started with the CLICK PLC and its programming software.

Titles in this series include:

### What is a PLC?

(Basics of PLCs, featuring CLICK series)

### CLICK PLCs - An Introduction

Brief Product Overview

### CLICK PLCs - A Closer Look

Detailed Product Overview

### CLICK PLCs - Getting Started

Before you begin using your CLICK PLC

### CLICK PLCs - Getting Started Part 1

Installing the Programming Software

### CLICK PLCs - Getting Started Part 2

Launch the Programming Software

### CLICK PLCs - Getting Started Part 3

Creating a Project



### CLICK PLCs - Getting Started Part 4

Save and Compile Project

### CLICK PLCs - Getting Started Part 5

Apply Power

### CLICK PLCs - Getting Started Part 6

Establish PC to PLC Communications

Be sure to check <http://learn.automationdirect.com> for these and many other informative videos.

## New video promotes cooperative Robotics program

AutomationDirect and Forsyth County, Georgia have kicked off the 2009-2010 Robotics season, now in its fifth year. Due to the hard work of the parent mentors, teachers and students, there are now over 40 teams in the county, from



Lego League teams in the elementary schools to the FIRST Robotics team at the high school level. In addition to FIRST, there are teams that participate in the BEST, VEX, and MATE (underwater robots) competitions throughout the school year. One encouraging result of the program and the student demand that it has generated is that Forsyth

County has installed an entire Engineering/Robotics Career Pathway in all high schools and is creating two Engineering Career Academies within those schools as well. And to highlight and encourage participation in the Robotics program this year, FIRST team alumnus (and first-year Animation student at Savannah College of Art and Design) Chris Folea created this new commercial for the local movie theatre (top link on "More" page at Learn site). See it at:

<http://learn.automationdirect.com/more/more.html>

## automationtalk

### Upcoming Webinars

#### ETHERNET

**October 14, 2009**  
**2:00pm EST**

Learn about the devices that will allow your automation equipment to communicate faster and more reliably with Ethernet communication modules. We will show advantages of Ethernet over serial communications, give brief overviews of our Ethernet products that include hubs, switches, Ethernet PLC modules, Ethernet Remote IO, C-more touch panel Ethernet, and Ethernet AC drive modules.

#### INDUSTRIAL COMPONENTS

**October 28, 2009**  
**2:00pm EST**

We showcase industrial components including enclosures, disconnects, wire duct, pushbuttons and lights, all products needed to complete a total panel building project. We will go into detail on each product, discuss the highlights, prices and specs.

#### MOTOR CIRCUIT PROTECTION

**November 11, 2009**  
**2:00pm EST**

Motors are the workhorses in almost all automated equipment and processes. This talk show will cover the different hardware available to control their operation, and we will also show the products used to provide protection to the circuits that power motors.

Sign up at  
[www.AutomationTalk.com](http://www.AutomationTalk.com)

**We're introducing NEW PRODUCTS every month, all at our EVERYDAY LOW PRICES**

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This issue of our Product News Bulletin will keep you up to date.



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