## **PRODUCT SUMMARY**



Over 35,000 quality industrial control products at great everyday prices are available on our webstore 24/7/365, and each one comes with the FREE customer service you deserve.

## **VAUTOMATION**DIRECT □

www.AutomationDirect.com I-800-633-0405

The #1 Value in Automation

#### **VAUTOMATIONDIRECT**§

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#### **Contacts**

fax: 1-770-889-7876

phone: 1-800-633-0405 or 1-770-889-2858

Monday - Friday 9 a.m. - 6 p.m. ET

mail: Aut

**AutomationDirect** 3505 Hutchinson Road Cumming, GA 30040

#### **Technical Support**

fax:

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- Buy direct and save
- Everyday low prices
- Rated tops in customer service year after year www.automationdirect.com/reviews
- With huge inventory your order ships fast!
- Tens of thousands of products!

# Complete up-to-date price list is always available online.

- Find products, search, print or e-mail
- Click on part numbers to link directly to our online store for pricing, specs, up-to-the-minute stocking information and more

#### Download your copy:

www.automationdirect.com/pricelist



#### **Online catalogs with pricing**

Our complete catalogs, with current pricing, are online in PDF format. PDFs have easy-to-use features such as search, direct links to online store by part number, easy navigation and much more. Save most referenced sections to your mobile device or computer.



Check out all product catalogs: www.automationdirect.com/PDFcatalog



While our most up-to-date information is always online 24/7, some people still prefer to have a copy locally.

If you'd like a copy of our latest catalogs, they are avilable on USB electronic media.

Request your FREE USB catalog www.automationdirect.com/USBcatalog

# What makes us the #1 Value in Automation?

In addition to great products with great pricing, you get:

- FREE Technical Support
- FREE FAST Shipping of in-stock products on orders over \$49\*\*
- FREE Product Manuals (download)
- FREE software (download) for most products
- 45-day money-back guarantee on most products

www.automationdirect.com

1-800-633-0405

<sup>\*\*</sup> See Terms and Conditions or our Web site for details

## The common sense way to buy industrial controls<sup>®</sup>



#### www.AutomationDirect.com

**Quality Products** www.automationdirect.com

(download PDF) Great Prices www.automationdirect.com/pricelist

Helpful Online Resources www.automationdirect.com/videos

**Solid Company** www.automationdirect.com/info

#1 Voted Service www.automationdirect.com/service

Satisfied Customers www.automationdirect.com/reviews

Automation Direct.com has been a leader in providing affordable, quality industrial control products to the U.S. and Canada for more than two decades.

As a privately-held efficiently run company, we take pride in serving our customers the way they want to be served - honestly and fairly. We do everything we can to accomplish this day in and day out.

- Honest up front pricing (no gimmicks)
- Quick delivery order today, it ships fast!
- FREE shipping on orders over \$49
- Our technical support team provides superior assistance and has consistently received high ratings from satisfied customers. And it won't cost you a cent!

















## **AutomationDirect:** much more than just a ".com"

AutomationDirect is a non-traditional industrial controls company using the best ideas from the consumer world to serve your automation needs. We deliver quality products fast for much less than traditional suppliers. See below . . .

#### You need quality products at great prices.



For over 25 years, we've been offering a better value on industrial controls by running our direct business efficiently and passing the savings on to you. No complex pricing structures or penalty for small orders, just low everyday prices on everything from

Programming software for products can be costly, so we help you out by offering FREE software for our most popular products, including all our latest PLC families and C-more HMIs. No license or upgrade fees

www.AutomationDirect.com/price



inloada6/

#### You want complete product information to make the right purchase decision.



make sense. We have exhaustive documentation, including overviews, technical specifications, manuals and CAD drawings online, and it's all free to access with

Whether you're deciding on purchasing our products or learning our products after you buy, why jump through hoops or even pay for the information you need? That doesn't

We have over 1,000 videos online to get you up to speed quickly. When shopping online, if a product you're looking at has video, it will be available right there for you to view.

We even provide FREE online PLC training to anyone interested in learning about industrial controls.

www.AutomationDirect.com/plc-training



#### You don't want to wait for your order.

We have fast shipping, and it's FREE if your order is over \$49.\*

At AutomationDirect, we strive to have what you need, when you need it. We've invested heavily into infrastructure, inventory, and warehouse automation so that we can continue to provide you with quality products, at great prices, extremely fast!

(Certain items may have early order deadlines, see Webstore for details by part).

\*Order over \$49, and get free shipping with delivery in 2 business days (or less) within the U.S. (Certain delivery time or shipping cost exceptions may apply; see Terms and Conditions online for complete



#### You want to be confident in our products and our commitment to you.

We stand behind our products and guarantee your

We want you to be pleased with every order. That's why we offer a 45-day money-back guarantee on almost every stock product we sell. (See Terms and Conditions online for exclusions.)





#### You insist on getting better service and you want it FREE.

We consistently recieve top reviews from our long time and new customers. We feel serving our customers is our top priority and it's never been just a slogan or catchphrase for us. Selling a great product at a great price with excellent customer service is just common sense.

See for yourself, and check out our company reviews. Real reviews from real customers ... and we don't edit out the bad ones. We're not 100% perfect but we can certainly aim for it!

www.AutomationDirect.com/reviews

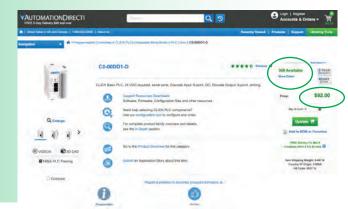
## This ".com" is powered by ".awesomepeople"!

Our primary focus has always been customer service practical products, great prices, fast delivery, and helpful assistance. But the intangible value of customer service is something that cannot be faked, automated or glossed over.

Our team members here at AutomationDirect.com approach every day with one goal in mind - serve the customer. If the answer to any decision is "Yes, this is good for our customers", then we do it, whether personally or via self-serve features on our site.



Easy access to account and order history, online returns



**Upfront** pricing and realtime stock availability

"Should we have real upfront pricing online and realtime stock availability? Yes, this is good for our customers."

"Should we have FREE tech support before, during, and after any sale instead of charging yearly fees for

Yes, this is good for our customers."

"Should we offer FREE software on many products instead of charging licensing

Yes, this is good for our customers."

"Should we have all our documentation online for FREE so people can access anytime, even before they choose to purchase?

Yes, this is good for our customers."

"Should we offer more selection by consistently introducing more new quality products almost continually? Yes, this is good for our customers."

"Should we offer FREE shipping for orders over \$49?

Yes, this is good for our customers."

All these are discussions we've had internally and all have made us wonder "can we do that?", "that will be hard to accomplish". "no one else is doing that, how can we?". But if you bring it back to the simple answer, "Yes, this is good for our customers", then the perceived obstacles really don't matter.

Our company has evolved dramatically since 1994, and it's this type of decision making by all our team members over the years that keeps our customers coming back and new customers checking us out daily.



Check us out at: www.automationdirect.com

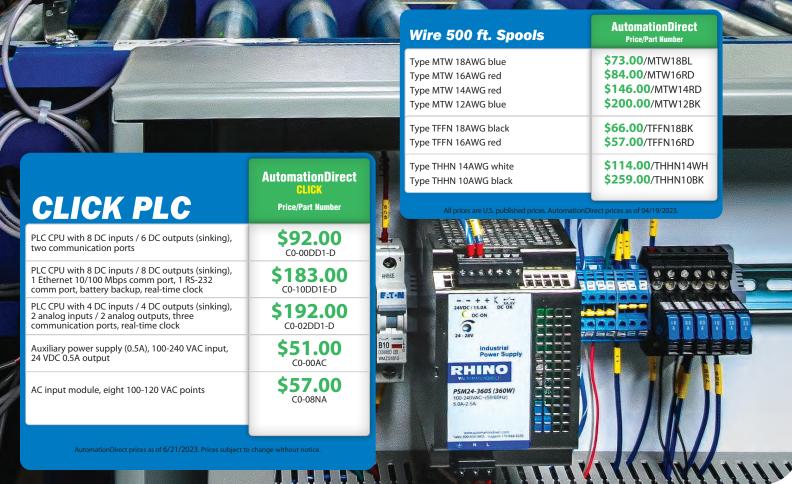


no limitations.



**Great Prices** www.automationdirect.com/pricelist

## If it's in your cabinet, it's online at www.AutomationDirect.com **FOR LESS!**



#### So why are our prices so low?

AutomationDirect offers tens of thousands of high-quality industrial automation products, both name brand and private-labeled. Because of our volume purchases, many suppliers give us great deals, allowing us to offer very attractive prices on everything from programmable controllers to terminal blocks.

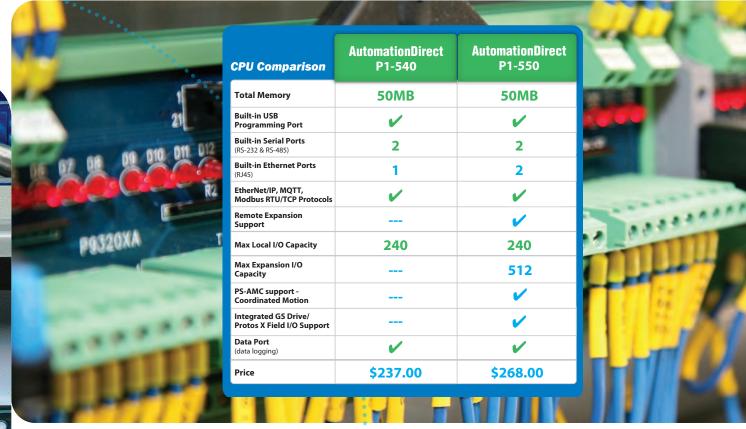
Instead of paying salespeople, we invest in offering the most comprehensive information at your fingertips, from detailed product specs to educational content and videos.

We offer the ease and speed of online ordering and account access 24/7, but if you need personal assistance, we are just a phone call away for everything from product selection assistance to ordering and easy returns.

#### We're adding products all the time

We're adding products continuously, choosing the best-in-class for features, price and quality. Our name-brand products come from companies such as Fuji Electric, Eaton, WEG, and Saginaw. These are multi-billion dollar companies that build world-class quality products often sold through other automation companies as well.

We also offer private-labeled products for even more savings. The manufacturers of these products are often building products for other leading automation companies and large consumer companies. We co-engineer many of these products with the manufacturer to ensure our customers are getting the features they ask for and ship all in-stock products quickly and efficiently on a daily basis.



#### AutomationDirect: Shopping the world to bring you the most practical products in the industry, in-stock, ready to ship and at the right prices.

"They seem to have culled down all the products in the world to a useful set that are properly priced, yet no junk. And they can offer their own support for most of them, not shuffle me off to the manufacturer. Many people have started using them based on my recommendation, and they thank me.

- Chris in Kettering, Ohio

"Your company is exactly what I was looking for. Detailed specs are a must when working with automation products, and I have not needed to ask any questions as all the information is already on the site.

Lightning fast shipping has been great, and when I make future orders I will not think twice about availability; again right there on the site. Keep up the great work! You are truly making it a pleasurable experience to shop online."

- Dan in Akron, OH

"As an automation integrator, AutomationDirect is usually my first stop when starting a new design or developing a proposal. Their Web site has all of the specifications and information needed when trying to come up with solutions for easy and difficult de-

Another great advantage to my business is the ability to get pricing, check availability and place orders after normal business hours (this is the time I can work without interruption). Keep up the great work!"

- Jay in Collegeville, PA

Safety Devices	AutomationDirect Price/Part Number
Datalogic safety light curtain, sender/receiver pair, hand protection, 24 VDC, 30mm resolution, 300mm protected height, 0.2-20m operating distance, safety category Type 4, IP65.	\$628.00 SG4-30-030-00-E (sender/receiver)
Safety limit switch, pull-reset action, plunger actuator, 30mm plastic body, 1/2 NPT	\$15.50 AP2R11X11
Safety relay module, single channel, for E-stop circuits, 24 VDC, 2 N.O. contacts	\$121.00 LG5924-02-61-24
All prices are U.S. published prices. AutomationDirect prices as of 12/07/2022. Prices subject to change without notice.	





## Decades of affordable innovations have made us the #1 VALUE IN AUTOMATION!

We opened our doors in 1994 and from day one our focus has been providing you with quality products, great prices and outstanding service.

#### 1st **Direct Seller** of PLCs

"You can't sell PLCs from a catalog, nobody does that?!" WE DID. Shorter path between product and purchaser means less markup.

**1st** Windows-based package for small PLCs Where's the command line? To help make PLC users'

programming task easier,

we developed software

that was easier to use.



DirectLOGIC (DL) PLC line is introduced.

Our company turns a profit in the fourth month of operations, making us a viable alternative in the ndustrial controls market.



We introduce the DL105. With 14 built-in I/O, it is the first brick PLC under \$200 on the market.



\$99 PLC in the market DL05 brick PLC is introduced with expansion slot at a ground-breaking price.

19



#### **AutomationDirect is Voted #1 in Service**

Caught the industry by surprise but not our customers. They've known since day one, we've got their back.

And we've gotten top honors for 15 years straight









high-performance CPU and advanced control capabilities, it easily becomes one of the best values in the market.



20





#### This feature-packed PLC has enhanced capabilities and a slim, even more



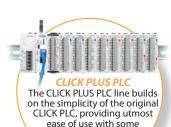


Productivity1000 PLC

Innovative design and value reinterpreted with affordable choices for our customers



**UL/CE-certified** MAKER IN - INDUSTRIAL OUT Industrial-Grade CPU



surprisingly advanced





slim modular controller with many motion-specific features built right in and a highly capable IEC based programming environment These controllers deliver lots of power in a little package, FREE SOFTWARE

20





programming.



Affordable Innovation? What the heck is that?

Sometimes a better way of doing something isn't just one added product feature or a short term price discount. It's a combination of several product enhancements, better long term prices and service capabilities that are out of the norm for our industry. We're always up for a challenge!

of controllers





## At AutomationDirect.com we have the PLCs you need at the prices you want.

Oomnloadable S

for many

## **VAUTOMATION DIRECT**

Regardless of your project or system needs, Automation Direct has a PLC to match your specs and your budget. So whether you're building a simple process or a complex machine, you can count on us for affordable PLCs you can rely on.

#### **Automation Direct Federation Partner PLC Families**

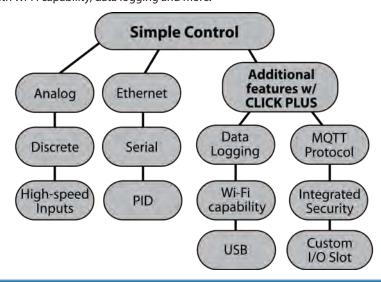
We've partnered with three well-respected companies in the automation technology field (our "federation partners") to manufacture three of our own PLC product lines in order to meet the demands of the automation market while at the same time guaranteeing the utmost satisfaction.

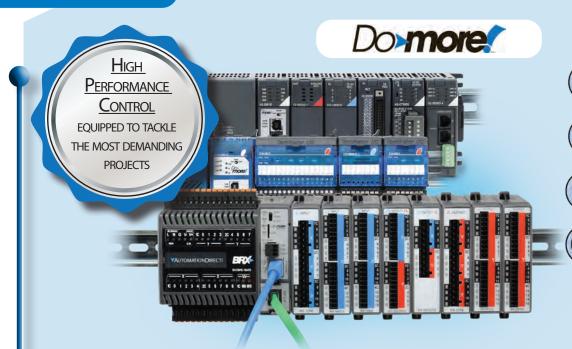




Check latest pricing: https://go2adc.com/CLICKCPU-price

The CLICK/CLICK PLUS PLC family offers extreme value for everyday applications. The compact size and easy programming make CLICK PLCs great for small applications and beginner projects. The CLICK PLUS series adds modern features to the CLICK PLC line with Wi-Fi capability, data logging and more.







Advanced Control fixed memory addressing Advanced Data Ethernet Analog **HTTPS** Motion Logging Protocol Data File DMX512 Discrete Serial PID Management Protocol MQTT/ Built-in PLC USB **MQTTS** High-speed Outputs Simulator Protocol Custom 200+ Integrated Embedded Universal I/O Comm Slot Instructions Security Help Videos Web Server/ Rest API

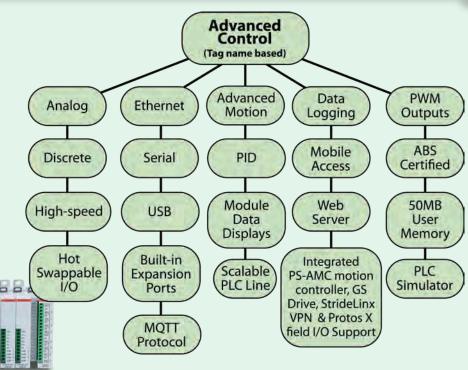
Check latest pricing: https://go2adc.com/Do-more-price

The Do-more PLC family is determined to get it done. This programming powerhouse has one of the most advanced instruction sets in the market and many other features that allow it to stand strong against any challenge.



The Productivity PLC family offers the utmost versatility in both hardware and software. This scalable PLC line will easily conform to large systems with tons of I/O or smaller/ segmented systems using limited I/O. With tag name programming, device integration that includes PS-AMC motion controllers, GS drives, Protos X field I/O and others, and a few WOW factors, like analog data displays, Productivity PLCs are a perfect fit for almost any application.

Check latest pricing: https://go2adc.com/Productivity-price



Productivity Series .....



#### **CLICK - The almost free PLC**

The CLICK micro-brick PLC is one of the best PLC values in the industry. With basic models starting UNDER \$100 and FREE easy-to-use programming software, CLICK is by far the most practical PLC for the smallest of applications and the perfect tool for beginners.

"Have used this model Click in many small applications, and it has worked, reliably, for many years. We even talked some customers out of using "programmable relays" for they are not as versatile or as cost effective as this PLC."
Todd in ONTARIO, CA



#### **CLICK PLC features:**

them everywhere.

- Stand-alone PLC units with built-in discrete or discrete/analog I/O
- Expandable with stackable I/O modules up to 142 discrete or 54 analog I/O points total
- Onboard communication (Ethernet and serial options)
- · High-speed counter/timer support
- Micro size approximately 2"(W) x 3"(H) x 3"(D)
- Removable terminal blocks for easy wiring
- Optional battery backup and real time clock/calendar
- FREE programming software with a simple but practical instruction
- Easy PID for simple process control (Ethernet models only)

Learn more at: www.CLICKPLCs.com



#### **CLICK PLUS PLC features:**

- All the great features of the original CLICK PLC
- · Wired and wireless CPU options
- Data logging (microSD support)
- IIoT ready with MQTT protocol
- Modbus RTU, Modbus TCP and EtherNet/IP protocol support
- · Wi-Fi with Bluetooth provisioning
- · Micro USB programming port
- Option module slot(s) for custom I/O configurations in lieu of fixed I/O
- Enhanced security

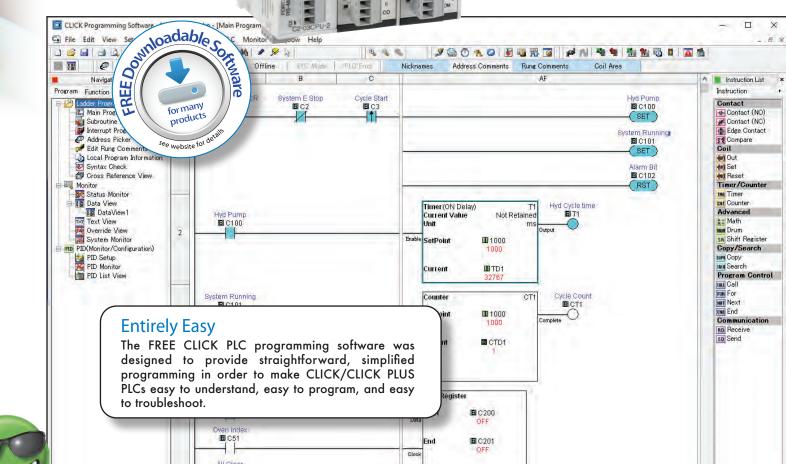
Building on the original CLICK's simple design, the new CLICK PLUS PLCs offer the same practical control but with some surprising bells and whistles. Using the same FREE, streamlined PLC programming software as its predecessor, the CLICK PLUS PLCs provide no-headache programming combined with advanced capabilities like Wi-Fi communication and data logging.

With a low starting at price and with its robust, advanced feature set, the CLICK PLUS PLC line is undoubtedly the unmatched value leader!



Check latest pricing: https://go2adc.com/clk-ps

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CCC W 5 K 8 7 8 9 K 0 1 2 3

HIGH PERFORMANCE CONTROL **EQUIPPED TO TACKLE** THE MOST DEMANDING **PROJECTS** 

"The Do-More PLC is one of the best I have worked on in over 15 years. I easily had my program written and tested (using the simulation in the software!) in very little time. The instruction set is one of the best in the market..." Garry in TRENTON, ON

#### Do-more than ever before.

The ground-breaking Do-more! PLC control technology was developed to tackle both straightfoward and complex applications in no time. This PLC series is loaded with hardware and software features (including the FREE simulator and Rest API functionality) that provide an extensive toolbox to satisfy even the most demanding projects.

One of the many benefits Do-more PLCs offer is device-centric programming. This programming method allows the user to configure software "devices" that act as liaisons between the ladder code and the hardware itself. For example, easily create a device to handle communication rates, timeouts, etc. all behind the scenes without any extra ladder programming. This feature along with the other efficiencies built into the Do-more platform, and the many tools it provides, will allow you to master any control challenge, GO! FREE Do-more PLC software: https://go2adc.com/dmsw-ps

#### Full-featured hardware with FREE software that offers:

- Project simulator provides a head start on code verification
- Added efficiency with device-centric programming and easy top-down configurations
- User defined structure data types
- Support for tasks, programs, subroutines, and interrupt service routines (ISRs)
- Embedded video help
- Dashboard for easy navigation
- Complete program, data file and memory management
- · Robust instruction set with custom motion profiles and Axis
- Modular, easily adaptable PID control loops
- Enhanced troubleshooting tools including Debug, Trend and PID views (with PID auto tune)
- Integrated project, communication and OS security
- · Software selectable analog with auto-scaling
- Stage sequencing
- Seamless integration with high-level IT systems and IIoT/cloud platforms using MQTT(S), HTTP(S), FTP protocols and Rest API
- · Much more..

## Do-more! really packs a punch



Built using extensive software development expertise with customer feedback and decades of PLC hardware design knowledge, these PLCs deliver advanced functionality at a budget-friendly price.



Here are a few of the many features available with the Do-more family of PLCs:

- High-performance processors
- Internal RAM and optional external microSD data storage (on select models)
- Ethernet, serial and USB communication available
- Onboard high-speed I/O with high-speed expansion I/O options for frequencies up to 2MHz (BRX series only)
- Hot-swappable communications port (BRX series only)
- FREE advanced programming software with powerful develop-



#### Do-more! BRX PLC platform

The latest Do-more edition, built exclusively for the Do-more engine. Available in four form factors with up to 36 I/O points built in.

Check latest pricing: https://go2adc.com/dmbrx-ps





I/O hardware, this PLC series is incredibly powerful and an incredible bargain.

Check latest pricing: https://go2adc.com/dm-ps





#### Do-more! T1H PLC platform

The compact T1H series control system combines the modular and space-saving package of our Terminator I/O line with a highly capable Do-more! CPU.

Check latest pricing: https://go2adc.com/dm-ps

Find out all you need to know at: www.Do-morePLC.com



#### Automation Direct

## FREE software that's designed around YOU

#### Your success is our success

At AutomationDirect, we aren't interested in squeezing every dollar we can out of your PLC purchase. We would much rather give you what you need to be successful with our products and in turn keep you coming back. That's why we never charge a dime for the Do-more Designer programming software. This software was designed to not only be easy-to-use but to provide the tools you need to get the most out of your Do-more! PLCs. We want you to be satisfied with your purchase, and paying extra for software just isn't that satisfying!

Download the fully-functional (not a demo) software and try it out. You'll be surprised at how robust FREE can be.

Automation Direct: The #1 Value in Automation





"The Do-More software is more user friendly than any I have ever used before. PID, Modbus communications, Filters etc... All very easy to use!"

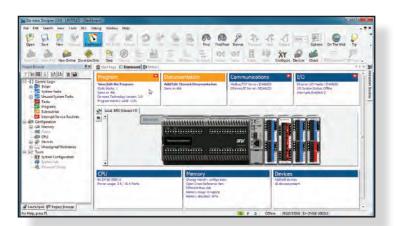
SK in ENDERBY, BC

## Let our instructional videos show you how

Enhanced video help is incorporated right into the instruction set of Do-more Designer. If you need assistance with an instruction, you can select the video icon (if available) to see a quick video explanation of how the instruction works and/or how it needs to be configured.

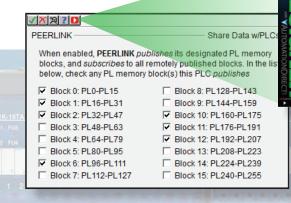
#### No Frustration Navigation

The Do-more Designer software is jam-packed with features and includes an intuitive software interface to make finding your way around easier than ever. The System Dashboard gives you real time project status such as enabled interrupts and used program memory percentage. It also provides interactive graphics and links that will take you directly to the feature you need to get the job done.



PEERLINK Share

Data w/PLCs

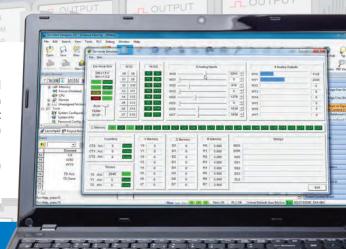


#### **Timesaving Project Simulator**

The integrated simulator provides virtual inputs, outputs and memory locations that you need to test your control program without the hardware connected. This can jump-start your project development on the front end and reduce unexpected errors when the system goes live.

Think about that - you can test your program design before even ordering the hardware!

See all that Do-more Designer has to offer: www.Do-morePLC.com



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## Productivity PLCs - value engineered to perform



#### Easily adapts to meet your needs

The Productivity family of PLCs is our most versatile family. In terms of hardware, Productivity offers three distinct form factors with two being rack-based and one being stackable. Each series offers different I/O capacities but all use the same programming software, allowing you to easily scale your control up or down depending on the application or machine build. The ProductivitySuite software provides versatile programming with tag name addressing that has no predefined memory structure, and offers convenient device integration for easy plug-and-play operation with our PS-AMC motion controllers, GS drives, Protos X field I/O, and StrideLinx VPNs.

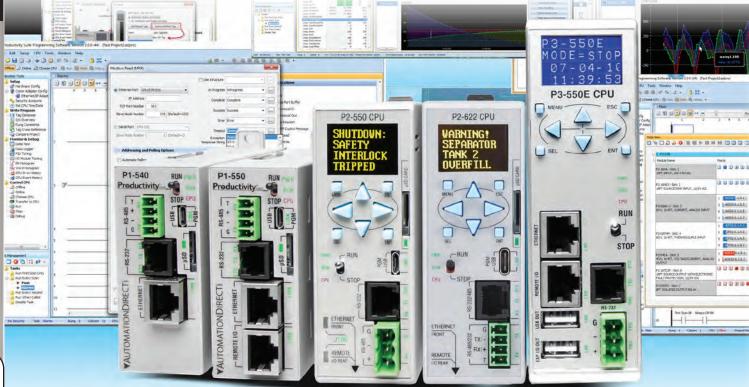
> "We are an OEM, and in the past used the Allen-Bradley Compactlogix platform for our higher end equipment. We think we have found its replacement...The idea of a low cost controller, with all the available communication ports is a big plus for us. We really like, and prefer, the tag based programming utilized by this unit. We typically use drives to control conveyors running to our machinery, and the fact that the drive communication, and variables are on-board is fantastic... We think this one is a winner!" Todd in ONTARIO, CA

Here are just some reasons to consider the Productivity

- Numerous onboard communication ports to meet in-house and on-site network requirements
- High-contrast OLED/LCD displays provide accurate process variable data as well as system diagnostics in real time - No meter required! (P2000/P3000 only)
- · Convenient QR codes link customers to needed documents in an instant (P1000/P2000 only)
- · Auto-discover local and remote PLC bases, Protos X field I/O, PS-AMC motion controllers and GS series drives
- Integrated StrideLinx VPN support
- Access to remote installations using integrated web server and/or mobile app
- EDS file support for easy EtherNet/IP device setup and an EDS file library to upload, store, and manage your EDS files
- Hot-swappable I/O for easy hardware changes on-the-fly (P2000/P3000 only)
- Scalable product offering from large control systems with thousands of I/O and high demand applications (speed, communications, expandability) to simple, low cost, space-saving stackable I/O platforms
- Project simulator provides a head start on code verification
- ABS certified for marine applications (select P2000/P3000



## Increase your productivity in more ways than one



Whether you are a machine builder, systems integrator or anyone in need of a advanced, low-cost controls solution, the Productivity family of controllers can deliver. Built to go above and beyond, these controllers offer many outstanding features that provide easy programming, multiple networking solutions, and faster troubleshooting.

Here are a few more of the many benefits you get with Productivity:

- · CPUs with expansive 50MB memory
- 32GB of microSD data logging
- · Unmatched built-in communications capabilities, including local and remote I/O ports, EtherNet/IP, MQTT (MQTTS w/P2-622 CPU), custom
- Built-in Ethernet port allows for HMI and peer-to-peer or business system networking (no Ethernet communications module needed)
- Modular rack-based or stackable footprint with many discrete and analog I/O option modules, scalable up to 59K+ I/O
- Plug-and-play USB programming (on select CPUs)
- Advanced "fill-in-the-blank" instructions for utmost ease of use
- Variable communications instructions for on-the-fly connection
- · Tag name programming with advanced user-defined structure data
- Easy-to-use coordinated motion control with the PS-AMC motion controllers and built-in motion instructions





AREG Automatic Registration

FEO Flying Cutoff GEAR Gear Drivetrain

HOME Find Home

1REG Manual Registration

1SEQ Motion Sequencer Multi-Axis Motion Sequencer (MMSEQ)

PLS | Programmable Limit Switch



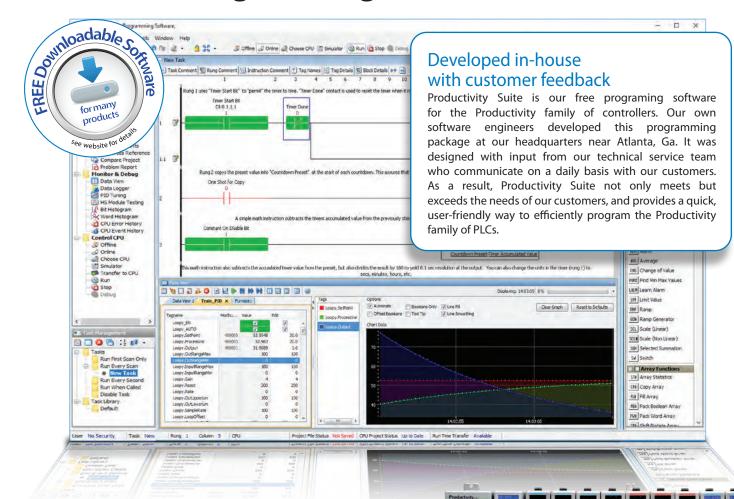




See what Productivity can do for you at: www.ProductivityPLC.com

#### Automation Direct

## **Fast Programming with FREE software**



# Program your way! Tag name based control that's powerful and easy to use

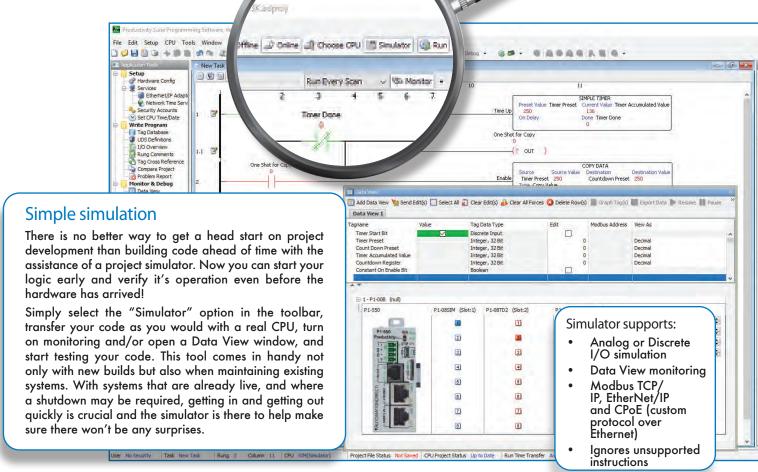
With Productivity Suite you have the freedom to define user tags with no limits or fixed boundaries. Configure timers, counters, integer words or any other data types you need. With tag name based programming, there are no pre-defined, fixed memory maps and no wasted, unused memory allocations.

Tag name based control also offers the ability to descriptively identify the control elements in your program. Older, fixed memory controllers force the use of pre-defined nomenclature for the data types. Which would you rather see when troubleshooting: T4:01 or Oven1 Purge Timer.Pre? The tag name helps identify the element as a numeric value for the oven purge timer's preset, making its purpose immediately clear.

FREE Productivity Suite PLC software: https://go2adc.com/psw-ps

Productivity Suite

ONE SOFTWARE PACKAGE PROGRAMS ALL PRODUCTIVITY PLCS!

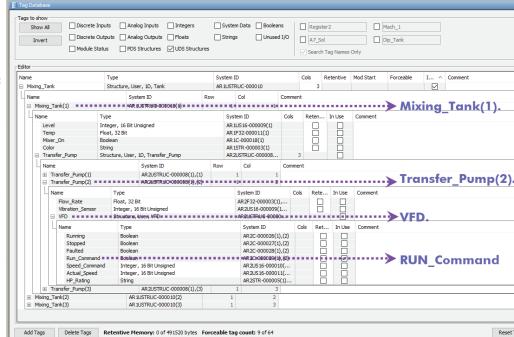


## Advanced user defined structures

User defined structures (UDS) are a powerful tool that helps speed up program development and improve uniformity of your logic. A UDS is a group of data types (BOOL, FLOAT, INT, pre-defined structures, etc.) which are defined by the user and re-used at will.

Productivity Suite allows you to embed arrays within the UDS definition, as well as, create arrays of structured tags so that you can programmatically index through your tag variables.

For example, Mixing\_Tank(1).Transfer\_ Pump(2).VFD.RUN\_Command which contains two nested UDS arrays (Transfer\_Pump and VFD) inside the Mixing\_Tank UDS definition.



There's so much more! See all that Productivity Suite has to offer at: www.ProductivityPLC.com

## ProductivityCODESYS - CODESYS power in a Productivity package

If you know and love CODESYS but have stayed away from implementing it in many of your applications because of high hardware costs, then the Productivity family of controllers has what you need. We've taken the time-tested Productivity2000 hardware and combined it with a CODESYS processor so you can afford to deploy CODESYS in many more ways, bringing a powerful world-renown IEC-based programming package to applications large and small.

Break the chains of high prices! Add more programming power to your systems for less with **ProductivityCODESYS!** 





The P2CDS-622 CPU features a CODESYS runtime application housed in a Productivity2000 controller form factor. This CPU has ample communication capabilities, works seamlessly with low-cost Productivity2000 I/O modules, and includes the CODESYS IEC 61131-3-compliant software package along with several add-on licenses free of charge, so you can now reap the benefits of this powerful platform without breaking the bank.

- Full IEC 61131-3 compliant
  - · Sequential Function Chart
  - Ladder Diagram Function Block
  - Structured Text
  - Continuous Function Chart (CFC) programming is an extension to the IEC 61131-3 standard and uses interconnected function blocks to represent control logic
- Fieldbuses included (normally purchased Modbus RTU, Modbus TCP, EtherNet/IP Scanner, and EtherNet/IP Adapter
- · Visualization WebVisu included (normally purchased separately)
- IIoT library included (normally purchased separately): MQTT Client w/ TLS, Web Client (http, https), AWS IoT Core Client, Azure IoT Hub Client, and more







## Productivity 2000



The CODESYS software platform has found its home with numerous PLC manufacturers over the years. Many of these manufacturers charge premium rates for their CODESYS-enabled hardware which makes deploying CODESYS systems very cost prohibitive. Well, not anymore! By combining low-cost Productivity hardware with the power of CODESYS software, FACTS Engineering has created a value packed advanced control solution that makes CODESYS power accessible to anyone.

Learn more about the most affordable **CODESYS solution on the market:** https://go2adc.com/cs-ps



Productivity 2000

CODESYS

**CODESYS** 

CODESYS is the most widely used manufacturer independent IEC 61131-3 development system on the market. With over 5 million device licenses sold worldwide, more than 500 control system manufacturers, and tens of thousands of companies using CODESYS' products, this programming package has reliably served a wide variety of industries and applications.

Productivity 2000

www.AutomationDirect.com | 1-800-633-0405



# Get ready to say "YES!" to LS

What do you get when you take a well-established, global PLC manufacturer and combine that with a customer-focused, value-centric online supplier? You get the best of both worlds, otherwise known as the LS Electric XGB PLC from Automation Direct. The LS Electric controller has many great features including a robust hardware selection, FREE advanced IEC-based programming software, and many high-level motion specific capabilities. Add to that the customer satisfaction, the amazing \$299.00 starting price, and the **FREE** tech support provided by Automation Direct, and you'll definitely say "YES!" to LS!



**USB Port** 

(Mini-B) Provides a guick connection with a PC for online monitoring and program control.

**Ethernet** 



#### **EtherNet/IP Module**

((2) RJ45)

Add 1 or 2 EtherNet/IP modules to provide separate and secure networking, featuring:

- Symbolic tag-based communication for easy connection with other PLCs
- Two RJ45 10/100MB Ethernet ports
- 16 client / 32 server EtherNet/IP encapsulation
- 32 client / 64 server CIP connections

XBE-RY08B

XBE-DC16A

- Class 1 connected implicit (I/O) messaging (scanner
- Class 3 connected explicit messaging (server only
- Unconnected explicit messaging (client and server)

EtherNet/IP

XBE-AC08A

**USB** 



## High-speed I/O Modules\*

Two high-speed counter modules are available with (2) high-speed inputs and up to a 500kHz switching frequency (depending on model) for precise pulse tracking applications.

XBE-DC32A

XBF-HOU2A

ØA ØB P G 00 01

**Ethernet** 



**RS-485** 



### RS-232



#### Pulse positioning



#### **EtherCAT** positioning



**Built-in &** expansion 1/0







**Advanced** motion control

1/0



**FREE SOFTWARE** w/ multiple IEC lanauaaes



### EtherCAT® Module

Add up to 2 EtherCAT modules for up to 16

- 4- or 8-axis positioning modules
- RJ45 10/100MB Ethernet port

Ether CAT.

#### Expandable I/O

XBL-EIPT

P2P

PADT

SVR

NS

STATION NUMBER

1 CACT

2 ACT

For many applications, the built-in I/O provided by the CPU alone will suffice. For those systems with an abundance of I/O. the PLC can be easily expanded with up to 7 analog, relay, discrete, or high-speed expansion modules.



\*CPUs, 32-point I/O modules, and high-speed modules require a Smart Link cable and terminal block for wiring.

#### **High-density I/O Modules\***

(32 points)

As with the CPU modules, select expansion modules offer high-density I/O connections with up to 32 points in a single module, providing space and cost savings.

**CPU** with 2-axis control only:

# PI C

XGB

## PWR RUN ERR OPEN MODE S/W

XEM-DP32H2

XBF-PN08B

AX2

AX3

A CO

B 24V

B 5V

B COI

Z 24V

Z 5V

Z CO

AX5

AX6

AX7

AX8

RDY

RUN

ACT

(RJ45) 10/100MB Auto-MDIX Ethernet port used for Modbus TCP/IP client and server, Email (SMTP client), XGT dedicated, user defined, and programming/online

#### RS-485/RS-232C

monitoring connections.

(5-pin)

Combines a 2-pin RS-485 port and a 3-pin RS-232C port into one. Used for Modbus RTU/ASCII, XGT dedicated, and user-defined serial connections.

**Built-in I/O\*** 

and 16 DC outputs, featuring embedded

high-speed I/O capable of pulses up to

200kHz and providing 2 or 6 axes of

motion control (depending on model)

EtherCAT® is a registered trademark

and patented technology, licensed by

Beckhoff Automation GmbH, Germany

#### (32 points) High-density I/O port with 16 DC inputs

axes of precise positioning.

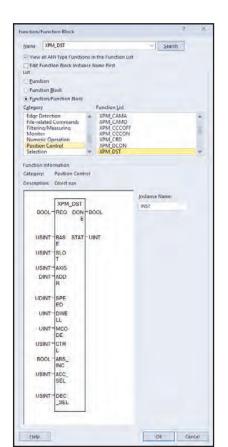
- · Differential and single-ended encoder

V @ % % % 👨 1001

LS



## **FREE** IEC-based programming software



#### State-of-the-art instructions

The XG5000 programming software has all the usual commands you would expect from a PLC software instruction set including timer, counter, compare, etc., but it also features a wide variety of specialized and state-of-the-art instructions for efficient code development including:

- Data processing
- High-level math
- Advanced motion control
- Multiple data and code conversion



#### Powerful software that's absolutely FREE!

The LS Electric XGB PLC programming software is an advanced tool for configuring and programming LS PLCs. This highly developed software has been fine-tuned over the years to provide a wealth of features and capabilities, including:

**X5**000

PLC Programming

- Program segmentation with different Scan programs and various Task programs
- Numerous data types including IEC standard data types (64 bit available) and 3-dimensional arrays
- Handy two-dimensional trend graph (X-Y plotter)
- Easy edits of global and local variables using MS Excel or View Variable, View Device, View Flag, Auto-fill options in software
- Convenient program edits with unlimited Undo/Redo functions, block edits in cell units, an enhanced Find/Replace function, program execution controls, and more
- Various monitoring functions such as variable monitoring, device monitoring, system monitoring, trend monitoring, special module monitoring, etc.
- Various message windows to edit and inspect the program easily
- Custom events that allow actions to take place once user defined conditions are met for a specific device
- Editing, monitoring, or managing multiple interlocked PLCs included in the same project at the same time

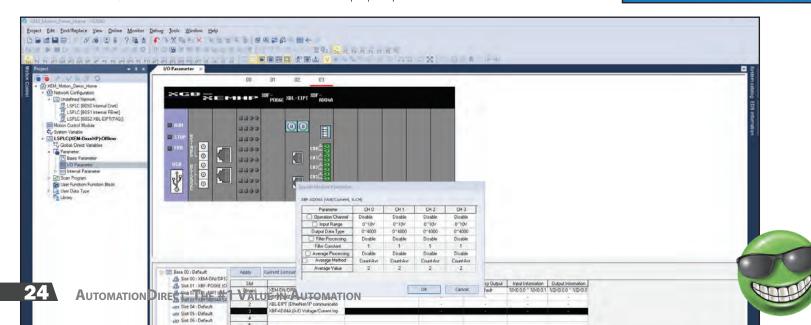
61131

Online editing capabilities

### Built-in project simulator provides huge time savings

The XG-SIM is a Windows-based virtual PLC that allows an operator to execute and debug a program without a physical PLC present. With the simulator, you can validate your control logic as it is created instead of in the field for much easier startups.

- Simulate a program created with ladder, structured text, or sequential function charts
- Use functions such as system monitor, device monitor, trend monitor, data trace, and user events as if online with a real PLC
- Simulate I/O as if field devices are connected to ensure proper system-wide control



The LS Electric XGB PLC can be programmed using four of the five languages included in the IEC 61131 standard for industrial controllers:

Type Device/Variat

如智助 配的用用的用品

1. Ladder Diagram (LD)

Sounloadable.

formany

products

XPM\_RST

XPM\_STP

Project Edit Eind/Replace Yiew Online Monitor Debug Jools

3 m m a > 8 a P & ? B 4 f 7 X

XEM Motion Demo

Undefined Network

USPLC (BOSO Internal Cnet)

USPLC (BOS1 Internal FEnet)

System Vanable
LSPLC(XEM-DxxxHP)-Offline

III I/O Parameter

Most Recently Used

unction Name

A PER A TEN A TEN A STEEL A ST

ESC PS FET OF COM OFF 100 ME OF PS PS OFF 179 PS FET 179 PS 178 PS 178 PS 178 PS

123

L25

L26

- 2. Structured Text (ST)
- 3. Sequential Function Chart (SFC)
- 4. Instruction List (IL)

You can decide whether to utilize well-established Ladder Logic or go with the text-based Structured Text language. Maybe you prefer graphical Sequential Function Charts to organize your program. With the LS XGB PLC you can pick the language you or your customers prefer and run with it. With Ladder or Structured Text, the XG5000 software has many versatile function blocks available, including advanced motion control specific blocks, for convenience when programming complex systems.

But that's not all! See more of what the XG5000 software has to offer at: https://go2adc.com/lssw-ps



# ProductivityOpen - MAKER IN...INDUSTRIAL OUT

Industry-tough control solutions for the DIY'er



Productivity1000 industrial I/O

**INDUSTRIAL-GRADE SHIELDS** 

**INDUSTRIAL-GRADE OPEN CPU** (C++ Arduino or CircuitPython)

**INDUSTRIAL-GRADE** PRODUCTIVITY1000 I/O **MODULES** 

**OVER 25 YEARS OF AUTOMATION EXPERTISE** 

**LONG-TERM PRODUCT SUPPORT** 

## Productivity Open Open

With Productivity®Open UL/CE-certified open-source CPUs you get all the features of a standard Arduino plus the power and reliability of an industrial controller for only \$69.00!

#### What can they do?

The P1AM CPUs are blank canvases and with the right know-how, you can make them do almost anything.

- Simple data logging
- IIoT functions
- Pick and place
- Greenhouse automation
- HVAC control
- · Water treatment processes

### · Package/material handling · Generator switchgear Lighting control • The possibilities are ENDLESS!

#### Open source at heart

The processor circuit of P1AM CPUs is designed to mimic the Arduino MKRZero microcontroller. By doing this, the CPUs are able to recognize most available Arduino MKR format shields and/ or all of the industrially-hardened Productivity shields. The P1AM-100 CPU uses the Arduino IDE and can be programmed using C++ code or it can utilize most Arduino sketch programs found on open-source websites. The P1AM-200 CPU utilizes CircuitPython programming and

can be coded using any text editor or IDE, or C++ using the Arduino IDE. Numerous sample programs are also available for CircuitPython that can be easily downloaded to the P1AM-200 CPU.

\*The P1AM-200 CPU is also equipped with a Crypto coprocessor ensuring performance doesn't suffer when using encryption libraries.





Programmed using the FREE Arduino IDE (P1AM-100/200) or any text editor including Notepad++ (P1AM-200).

sketch\_dec06a | Arduino 1.8.10 File Edit Sketch Tools Help #include <Plam.h> #include <P1 HSC.h> \* For information on the PIAM-1 int \_PBVAR\_1\_outCounts = 0 ; Serial.begin(9600, SERIAL\_8N1); while (!P1.init()) void loop()

> Learn more about the ProductivityOpen industrialized open source solution: https://go2adc.com/pro-ps



## Rugged HMIs that are priced right!

## A lot of HMI for your money **C-more** Touch Panels are designed to give you one of the best costs of ownership, considering initial price, features, ease of use, reliability and free award winning technical support. We continue to improve hardware and software features. Perhaps this is why more and more people find that *C-more* has what it takes to meet most of their HMI application needs. But don't take our word for it, see for yourself. Visit our Web site (https://go2adc.com/cm-review) for a sample of the reviews for *C-more* HMIs.

Check latest pricing: https://go2adc.com/cm-price

INDIRECT: THE #1 VALUE IN AUTOMATION

## Hundreds of powerful features

C-more touch panels are fully programmable and provide power and flexibility through a vast set of features. Color TFT touch screen HMIs are available in sizes from 4 inches up to 22 inches, or in a headless version

- · FREE Software
- · Pre-built touch panel components for easy screen design
- Screen objects such as Toggle Switch, Slide Switch, Selector Switch, Throw Switch, Thumbwheel Switch, Meters, PID Faceplates, Analog/Digital Clock
- · SD card for user program backup and logging (selected models)
- Field expandable user memory
- Up to 16.7M colors
- Multiple languages (up to 9)
- Various communication capabilities with up to 2 Ethernet ports, up to 3 serial ports, and up to 4 USB
- · Up to 9999 screens, depending on complexity
- Built-in clock and calendar
- Built-in soft keypad for numeric and alphanumeric entry
- Password protection for every touch object
- · Passwords for up to eight user groups
- Import bitmaps or bitmap objects, such as pushbuttons
- 40-character tag names
- · Sound Animation Objects
- Project Simulation
- Object grouping
- Color gradation for objects
- Analog touch overlay (no predefined touch cells)

**FREE** 

- Overlapping Objects
- Background Screens
- · Send e-mail
- Web server
- FTP Server
- Plus more . . .

C-more Remote App Store Available now in

the **C-more** headless HMI, you can display your factory floor data how and where you choose. The EA9-RHMI has all the powerful functionality of the C-more Touch Panel HMIs, but without display size restrictions. This HDMI-enabled device works with televisions, monitors, projectors, and most any other HDMI display device of any size to display real-time data or messages. Use the **C-more** Remote mobile app or the embedded Web Server if you prefer no local display at all.

MOTE VEAR

### **FREE Software**

Download as often as you need. No license or key needed.

Get it now:

www.go2adc.com/cmoresw

## Do more for LESS with C-more Micro Panels!



for more vibrant and colorful project screens.

**C-more Micro** panels are one of the most popular and reliable, value-packed operator interfaces in the industrial market today. No matter the budget or system size, we have a **C-more Micro** operator panel for the job. And all of our panels come with FREE programming software that includes a project simulator and many other time saving features. You'll always get the biggest bang for your buck with **C-more Micro**.

- Micro touch panels and non-touch panels available
- The 3-inch cost-conscious panels display standard or high contrast STN monochrome graphics with 12 selectable background colors
- 32K color TFT displays are available on larger display models
- Ethernet communication built in on 3-inch and 4-inch EA3 models. optional Ethernet communications module (EA-ECOM) available for 6-inch EA3 models
- Download FREE programming software with simulator at: https://go2adc.com/microosw
- Full 2-year product warranty

Check latest pricing: https://go2adc.com/cm-price

### **Industrial LED message** displays keep your plant personnel in the know ViewMarg LED message boards can display preformatted and real-time factory floor data messages sent by a PLC, PC, or other master device. The text message displays can be controlled by:

VIEW MARQ

- ASCII strings through the RS232 or RS485 port
- Modbus RTU messsages through the RS232 or RS485 port
- Modbus TCP messages through the Ethernet port

#### The ViewMarq line offers:

- One-, two-, and four-line displays
- Viewing distances up to 400 feet and 140 degree viewing
- (1) RS232, (1) RS485 and (1) Ethernet port standard
- NEMA 4 / NEMA 12 extruded aluminum housings suitable for harsh environments
- · Chain and wall/ceiling mount brackets included

Check latest pricing: https://go2adc.com/vm-price





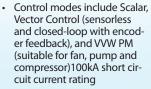




### AC Drives and DC Drives for less!

#### WEG CFW500 High-performance AC Drives

Support closed-loop flux vector speed control as well as torque control modes and can operate both AC induction motors and permanent magnet AC motors. Offered in models with an IP20 or IP66/NEMA 4X enclosure.



STO - Safe Torque Off

WEG - CFW300 Drive Units

Sixteen units available from 1/4hp to 5hp\*

V/Hz control mode and sensorless vector

drive with sensorless vector support

three-phase) and 460 VAC

and GS20X AC Drives

Take the best features of our popular

built-in I/O, and include an integrated

PLC with optional Ethernet communi-

cations, GS20X models come in a NEMA

• Available horsepower sizes from 1/4hp

Voltages available: 120 VAC, 230 VAC

(single and three-phase), 460 VAC, 575 VAC

GS2 series drives, add Sensorless Vector and Field Oriented Control, expand

**DURApulse GS20** 

Available horsepower sizes from 1/4hp

Voltages available: 120, 230 VAC (single and

Voltages available: 120 and 230 VAC (single and

(120 / 230 VAC) w/ PLC

High-performance VFD

in compact size

three-phase)

control modes

up to 10hp\*

4X enclosure.

up to 30hp\*

Built-in PLC

- Built-in PLC
- Optional Ethernet communications Modbus TCP and Ethernet/IP
- Speed and torque control down to 0 (zero) rpm & precision of 0.01% for speed control are attainable with closed-loop encoder feedback using vector control
- Available horsepower sizes from ¼hp up to 150hp\*
- Voltages available, 230 VAC (single and three-phase), 460

Web

000

#### NEMA 4X (IP66) features

- Protection against high-pressure water spray
- Suitable for use in direct sunlight
- Direct machine mount

#### High-performance built-in features

- · Built-in SoftPLC (Same programming software as other WEG VFDs CFW-WPS)
- Built-in RS-485 (Modbus RTU) communica-
- Plenty of built-in I/O, expandable with option modules
- Built-in 24VDC power supply (max. 150 mA)

#### **Optional Accessories and features**

- STO Safe Torque Off (TUV certified) with option module
- · Keypad with backlight, with main display line, secondary display line and bar graph display

#### WEG - CFW100 Micro Drive Units (120 / 230 VAC) w/PLC

Smallest VFD in the world that's still loaded with featur

- Available horsepower sizes from 1/4hp to 1hp\*
- Voltages available: 120 and 230 VAC (single and three-phase)
- · Built-in PLC
- · V/Hz control mode and sensorless vector control modes

#### IronHorse ACN IRONHORSE **NEMA 4X AC Drives**



#### DURApulse® GS10 Micro AC Drives Our most affordable and compact inverter

NEMA 4X sensorless vector AC drives have features normally only found on more expensive drives, in a NEMA 4X enclosure at a great price.

- 240 VAC: three-phase up to 20hp, single-phase up
- 460 VAC: three-phase up to 30hp, single-phase up

#### **DURApulse High-Performance** AC Drives - GS4 Series

Sensorless vector technology up to 300hp, w/PLC

- Available horsepower sizes from 1hp up to 300hp\*
- Voltages available: 230 VAC (single and three-phase), 460 VAC
- Built-in PLC

#### DC Drives - GSD Series

Available in Open Frame and NEMA 4/12 or 4X **Enclosed versions** 

- Available horsepower sizes from 1/50hp up to 3hp\*
- Low voltage ranges supported from 12 to 40VDC
- High voltage ranges supported are 120 and 240 VAC
- Models available with open frame or NEMA 4/4X enclosures



#### **AC Motor Soft Starters**

Semiconductor solid state soft starters provide many advantages when used instead of electromechanical contactors.



- 3-phase 5-40A @ 208-460 VAC
- 1-phase 17-361A @ 110-240 VAC, or 3-phase @ 200-600 VAC Full-Featured SR55 Series:

17-477A @ 200-480 VAC

Basic SR35 Series:

· Basic WEG SSW07 Series: 17-412A @ 220-575 VAC



GO! https://go2adc.com/softstarters-ps

#### Software

Easily configure your system components with our user-friendly software packages. Most of our software is available for free download including PLC programming software, HMI programming software, drive configuration software and many others. Our software provides the tools you need to get your system up and running fast.

- Free PLC programming software (download)
- Configuration software packages for a variety of process instruments
- Free motion control systems' configuration software (download)
- Free HMI programming software (download)
- · Free AC drive configuration and programming (built-in PLC) software (download)



**GO!** http://go2adc.com/software-ps

### Universal Field I/O

For controller installations where end devices are located long distances away, field I/O or distributed I/O systems can greatly improve system efficiency and reduce wiring costs. Localizing field terminations at the machine or device being monitored/controlled allows for easier installations/modifications, shorter wire runs, and faster troubleshooting.

- IO-Link master modules, hubs, and a variety of IO-Link enabled devices
- Distributed I/O with Modbus TCP, EtherNet/IP, Modbus RTU, DeviceNET communication
- Various combinations of discrete (AC, DC, relay, high-speed) and analog inputs and outputs available



**GO!** https://go2adc.com/fio-ps

**Kelsey** in

wrote:

**WYOMISSING, PA** 

"We've been using Automation Direct for years and will continue to do so. Good selection of products and customer service. Quick shipping, never have any problems. A++ service"

**VAUTOMATIONDIRECT** 

For more information, visit:

go2adc.com/gs20

WARNING



Web

#### IronHorse<sup>®</sup> Digital DC Drives

High-performance digital DC drives in a NEMA 4X enclosure

- Microprocessor-based design that is programmable
- Sizes from ½hp to 2hp in 120 to 240 VAC\*
  - **GO!** http://go2adc.com/drives-ps









#### **Process Control and Measurement**

Process measurement and control implies continuously changing variable data and control methods in an industrial process. Different from discrete (ON/OFF) states, numeric values over a set range are sensed or transmitted in continuous (flow production) or batch (a set quantity or output) processing. Flow, level, and temperature are common process variables.

- Temperature and process controllers
- Digital and process panel meters
- Temperature sensors and transmitters
- Infrared pyrometers
- Pressure sensors and gauges
- · Level sensors and controllers
- Flow sensors and transmitters
- Signal conditioners
- Pipeline valves

http://go2adc.com/process-ps



- Current to pneumatic (I/P) transducers
- Vibration switches and transmitters
- Trumeter graphical panel meters
- · Cloud data logger with I/O
- · Hour meters and counters







#### Structural Frames/Rails

SureFrame cut-to-length aluminum T-slotted rails make constructing a frame or machine easy and quick.

## **NO CUT CHARGES**

- Complete assortment of hardware and accessories to complete your slotted rail
- You specify length and cut angles for each piece
- No cut fees
- Select sizes and weights available in UV-resistant black
- Free 2-day delivery on all orders over \$49



GO! https://go2adc.com/alum-ps





Discrete and analog sensors include rotary encoders for detecting position and speed; sensors for detecting proximity, pressure, temperature, level, flow, current, and voltage; and limit switches for detecting presence or end-of-travel limits. With discrete or analog outputs, these sensors can provide data critical to automating any machine or process.

- · Proximity sensors
- · Photoelectric sensors
- Limit switches
- Precision limit switches
- · Inclination sensors
- Laser sensors
- · Color and contrast sensors
- · Measuring and detection light grids
- Encoders
- Current and voltage sensors

- · Position indicators
- Ground fault sensors
- Pressure sensors and gauges
- Temperature sensors, switches, transmitters and thermometers
- Liquid level sensors
- Flow sensors
- · Ultrasonic sensors
- Fork sensors
- · Linear position sensors
- · Vibration sensors

GOI http://go2adc.com/sensors-ps

#### **Motors and Motor Controls**

Motors are the power transmission workhorse of industry, converting electrical energy into mechanical movement. Selecting an AC motor or DC motor for an application depends on considerations such as power, speed control, cost and ease of maintenance.

For every motor, some form of electrical control is required, from simple ON/OFF to more complex variable speed applications. Motor control devices encompass simple manual controllers, motor contactors and starters, drives and soft starters.

- IronHorse general purpose AC motors up to 300hp
- Stainless steel and white epoxy washdown AC motors
- Stainless steel AC motors
- IronHorse Farm Duty up to 10hp
- IronHorse three-phase ODP motors up to 50hp
- Marathon inverter duty AC motors up to 100hp
- Marathon permanent magnet AC motors up to 10hp

Motors: http://go2adc.com/motors-ps

Motor controls: http://go2adc.com/mc-ps

- Marathon single-phase AC motors up to 5hp
- DC motors up to 2hp
- · Motor controls and contactors up to
- WEG single-phase AC motors up to 2hp
- WEG three-phase AC motors up to 3hp
- WEG brake motors up to 2hp
- U.S. Motors inverter duty AC motors up
- Toshiba Severe Duty AC Motors up to 100hp



#### Motion Control

Motion control typically refers to systems with accurate position/ velocity/torque capabilities operating in either open or closed loop mode. Open loop stepping drives send motion commands to stepper motors, but receive no information about the result. Closed loop servo systems have feedback devices at the motor shaft to verify or adjust the resulting motion.

- ProductivityMotion controller
- LS Electric® XGB Motion-Centric PLC with EtherCAT® SureServo®2 drives and motors,
- LS Electric® servo drives and motors up to 7.5kW (including EtherCAT® models)
- Stepper and servo gearboxes

- SureStep® stepper drives and NEMA motors
- Stepper motor linear
- Leadshine® stepper drives
- Encoders
- · CUI Devices® Kit Encoders
- XYZ gantry components, including linear slides and



GO! http://go2adc.com/motion-ps

#### **Jason in PARAGOULD, AR wrote:**

"Automation Direct is my #1 source for all of my companies automation needs. You just simply can't beat their cost and quality! Pair that with excellent customer service and it makes an unbeatable combination. Way to go Automation Direct!"



**AUTOMATION DIRECT: THE #1 VALUE IN AUTOMATION** 







Pneumatic systems are used extensively in industrial automation and are usually powered by compressed air. Pneumatic systems use actuators such as cylinders that are typically controlled via manual, air-pilot, or solenoid valves, and are designed in when they can provide a lower cost, more flexible, or safer alternative to

- Tubing, hose and fittings in a wide variety of configurations
- Air cylinders and position switches
- Solenoid valves (including ISO 5599 valves)
- · Rodless air cylinders
- · Modular solenoid valves (Ethernet or hardwired)
- Air preparation and air relief valves
- · Pushbutton valves

- Total Air Prep (TAP) all-in-one units
- Rotary actuators and grippers
- · Pressure switches, transmitters, and transducers
- Pneumatic pushbuttons and limit switches
- Electro-pneumatic systems
- Vacuum products; suction cups, ejectors, spring plungers



**GO!** http://go2adc.com/pneumatics-ps



Pilot devices are an integral part of most automated processes, from simple pushbuttons and indicating lights, to selector switches, foot switches, and visual/ audible signal devices. A wide selection of 16mm, 22mm, and 30mm panel-mount devices is available; hazardous location control stations meet environmental listings; signal devices offer a variety of mounting options.

- KILLARK® hazardous location control stations
- IDEM emergency stops
- Fuji 16mm plastic pilot devices
- Fuji®, Schmersal, and Eaton metal/ plastic 22 and 30mm pilot devices
- IP69K-rated pilot devices from Schmersal
- Captron IP69K capacitive pilot devices
- WERMA, Patlite, and Pfannenberg audible and visual signal beacons
- WERMA and Patlite stacklights
- Molex pendant switches
- Foot switches
- · Alarms, horns and buzzers



For pilot devices http://go2adc.com/pilot-ps For stacklights http://go2adc.com/stacklights-ps





#### **Communications**

Communication is a vital component of any modern control system application. Take advantage of that capability with low-priced, highly-reliable communication products such as secure VPN routers, managed/unmanaged Ethernet switches, media converters and Ethernet cables. Serial converters and gateways complete links to simpler systems that may already be in place.

- Industrial managed and unmanaged Ethernet switches
- · StrideLinx VPN routers and cloud services for secure remote access
- Pocket Portal IIoT remote I/O
- MQTT gateways
- Modbus gateways
- Network adapters/ converters
- · Ethernet cables

GO! http://go2adc.com/comm-ps



"I have never had a problem with any of ADC's products. The price and availability of their product line is not matched anywhere that I have found. Their PLC line as well as other automation products are on a par with anything I have found on the market in the same price range and provide a cost effective alternative to the old industry standards that are much more expensive. The only reason I go anywhere else is if they don't have the specific item I am looking for, and that is a very rare occurrence."

#### Water (Potable) Components

Potable water components are designed for use in plumbing, routing, and dispensing of drinking water and other beverages. All materials that come into contact with the subject media are food grade, and most components have National Sanitary Foundation (NSF International) certifications.

- Regulators
- Solenoid valves
- Hand valves Check valves

(10)

- · Push-to-connect water fittings
- Tubing
- Hose
- Hose clamps

**GO!** http://go2adc.com/water-ps





Identification products are devices that identify a unique item, type of item or a code and convert this information into useful data. Barcode scanners and RFID units meet the most common needs for industrial applications.

- Code brand scanners, including 1D, 2D and DPM images; scanners can read all common
- Contrinex RFID devices use radio frequencies to read and transmit data without the need for line of sight.
- Automotion Direct Standalone RFID R/W units provide fast and long range communication with RFID tags
- Datalogic smart vision sensors make a decision based on a captured image, very useful for applications requiring presence and/or orientation object detection.
- Swivellink mounting systems
- · Wenglor vision lighting













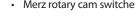
#### Circuit Protection

Circuit protection is a critical part of any industrial or commercial installation, to meet national codes and protect equipment and processes from excess energy that could cause damage or safety issues. An extensive selection of circuit breakers, supplementary protectors, fuses and holders, and disconnect switches is available, many complying with UL 98, UL 508, and UL 489 standards.

- Eaton and Gladiator UL 489 miniature circuit breakers
- AutomationDirect, Gladiator, and Fuji UL 489 molded case circuit breakers
- Eaton and Gladiator UL1077 supplemen-
- Edison fuses, fuse holders and fuse blocks

http://go2adc.com/circpro-ps

- Socomec, Gladiator®, and Bryant® disconnect switches
- Bryant UL 508 manual motor controllers
- Socomec manual transfer switches
- · E-T-A, Gladiator, and WAGO electronic circuit protectors
- Merz rotary cam switches





### **Hydraulics**



NFPA style hydraulic cylinders with many mounting options





GO! https://go2adc.com/hydraul-ps



You Tube





#### **Paul in TWINSBURG, OH wrote:**

"I have received many ecommerce products and this company is my favorite. Web site is quick and easy to navigate, on-time delivery and great schematic details and don't forget competitive prices. All around \*Five Star\*"



Electrical power products provide safe and efficient power services for industrial and commercial use, and include power transformers, DC power supplies and converters, power distribution blocks, wiring devices, power entry modules, power line filters, surge protectors, and panel interface connectors.

- Acme Electric® and Hammond
- Rhino® and WAGO DC power supplies and converters
- AchieVe and LUTZE power supplies
- SureStep and International Power linear power supplies
- Roxburgh and Eaton line filters and surge protectors
- Hammond drive isolation

- Roxburgh power outlets
- Edison® power distribution blocks
- Bryant® electrical plugs, connectors and receptacles, and other wiring
- AcuAMP® AC current transformers
- · Socomec multifunction power
- Trumeter graphical panel meters
- Surge protection devices



Power transmission products are used in mechanical drivetrains to create movement. Components include linear motion slides and actuators, gearboxes, timing belts/pulleys/bushings, and a host of shaft couplings, bore reducers, and other purely mechanical devices.

- Worm gearboxes
- Stainless steel worm gearboxes
- Helical gearboxes
- · Precision gearboxes
- Timing belts and pulleys
- Couplings and bushings
- · Shafting and shaft supports • igus polymer bearings
- GAM rack and pinions
- · Linear bearings and rail



#### Tools

The world's most trusted tool brands help you perform electrical wiring and mechanical installation tasks easily and reliably. Our tools include screwdrivers, nutdrivers, hex wrenches, torque tools, wrenches, ratchets, pliers, wire cutters and strippers, crimping tools, cutting tools, meters and testers.

- Southwire multimeters and testers
- · Southwire, Wiha, and Wera
- · Sensor tester
- · Wera, Wiha, and MEGAPRO screwdrivering tools
- Wera wrenches, ratchets and sockets
- JOKARI, Southwire, Wiha, and AutomationDirect pliers and stripping tools
- · SapiSelco cable tie tools
- RUKO hole cutting tools
- RUKO grinders and burrs
- Crimping tools from AutomationDirect, Southwire, Wiha, and Z+F,
- Tool cases and bags

GO! http://go2adc.com/tools-ps













#### **Enclosures**

Enclosures house and protect electrical components and wiring in a wide variety of environments, where NEMA rating standards define the degree and type of protection. Modular enclosures provide added cost-savings and same protection as pre-fabricated enclosures

HAMMOND

MANUFACTURING for less. Electrical equipment can be further protected using enclosure thermal management to extend interior component life. Lighting and other accessories accommodate special installation needs.

- Over 6,400 NEMA rated enclosures from AttaBox, Hammond, Integra, Quadritalia, Saginaw, Stahlin, and
- Many types of metallic and non-metallic enclosures
- Modular enclosures
- Data communication racks
- Sanitary enclosures
- HMI Enclosure Suspension arm systems
- · Heating, cooling and climate contro
- Industiral LED lighting
- · Wide selection of























#### Relays and Timers

Relays have been the traditional building blocks of control since the 1950s. Still in wide use for simple control or power conversion, styles include electro-mechanical general or special purpose relays such as high power or hazardous location styles, as well as solid-state relays.

- Electro-mechanical relays
- · Intrinsically safe relays
- Phase monitoring relays
- Alternating relays
- Optocoupler relays
- Pump seal failure relays
- · Voltage monitoring relays
- Slim interface relays
- Power relays
- Solid state relays
- · Hazardous location relavs
- Timer relays
- Multi-Function Digital Counter / Timer / Tachometers
- · Force-guided relays









Even the simplest process should be in compliance with national and international standards, and now it is affordable to get reliability and high performance for  $maximum \, machine \, safety. These \, certified \, machine \, safety \, components \, meet \, equipment$ and personnel protection needs, including safety switches, safety light curtains and safety relays.

- · ReeR MOSAIC safety
- IDEM® and Dold® safety
- Speed/Standstill safety relay modules · WEG safety contactors
- Safety laser scanners
- · Magnetic safety switches

**GO!** http://go2adc.com/safety-ps

- · Magnetic coded safety
- RFID coded safety switches
- Light curtains from Contrinex, ReeR and Datalogic
- · Two-Hand controls
- Trapped key interlocks
- · Safety enabling switches
- · Safety mats and edges
- Safety bumpers
- Intrinsically safe isolators
- · Hazardous location
- Safety enabling switches
- IDEM Z-Range safety devices



### Terminal Blocks and Wiring Solutions

Wiring solutions supply the electrical connections needed to build, upgrade or maintain electrical panels/enclosures and industrial systems. A variety of modular terminal blocks, power distribution blocks, multi-port junction blocks and pre-wired connection cables and modules are available to make quick, clean, safe and efficient installations. Hook-up wire in a variety of ratings is available in pre-cut lengths or in bulk.

- Konnect-It® and DINnectors® terminal block systems
- Bryant power wiring
- Wire duct and tubing
- Standard and sanitary cable entry systems for enclosures
- Wire end connectors, cable glands, sanitary cable glands, connectors and fittings
- ZIPport® connectors
- · Murrelektronik and ZIPport multi-port distribution blocks
- Sensor cables
- General- and special-purpose cable ties
- Epson portable label printers
- Penn-Union mechanical lugs and neutral bars
- Murrplastik discharge plates and EMC shield cable clips



GO! Terminal blocks: http://go2adc.com/tb-ps

### Cut to length cables

All of our cable is available cut to your specified length so you can eliminate waste and purchase only what you need - plus it's cut for free and shipped FAST!!

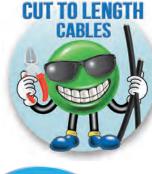
- Portable cords
- Power cables
- Tray-rated cables

THE PROPERTY OF THE PARTY OF TH

- Low voltage control & signal cables
- 600V control cables
- Food and beverage (FDA approved) cables
- Motor and VFD supply
- · Data & Communication
- Process and instrumentation cables
- Thermocouple and RTD

**NOCUT CHARGES** 

Minimum lengths of 10ft nless otherwise indicated



#### Bulk Electrical Hook-up/Building Wire

AutomationDirect has a large selection of quality electrical wire in pre-spooled lengths that meets all NFPA and NEC requirements at great prices.

- · MTW machine tool wire
- · TFFN fixture wire
- THHN general purpose building wire
- · AWM appliance wire
- DLO power cable
- · HAR Harmonized wire











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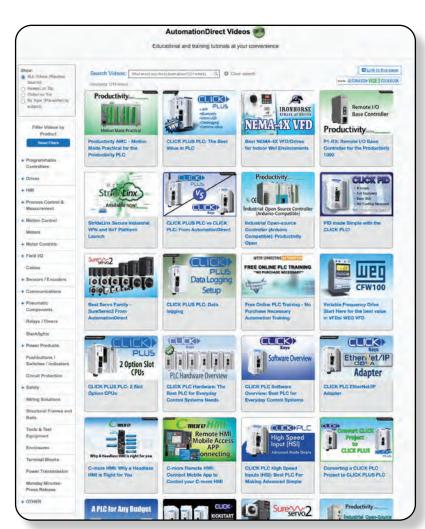
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# Need help choosing the correct parts for your next project? We can help: we have online product selectors for many product families

### Online Selector Tools





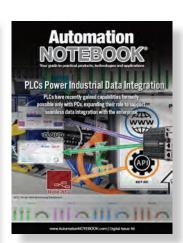


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## **AUTOMATION DIRECT**

#### The best values in the world . . .

We've shopped around to bring you the most practical industrial control products that are in-stock, ready to ship and at the right prices!

#### Hayk in CLAREMONT, CA:

"Competitive prices on most of the selection. Easy to order on the web, no sales rep or middle man needed."

#### Jack in GILLSVILLE, GA::

"Great customer service, tech support, shipping and delivery. Using Automation Direct removes the need to carry a lot of inventory."

#### **THandley in MIDLAND, TX:**

"We have been using Automation Direct for close to 15 years if not more. They have never failed to deliver as promised. Whether its getting a small part sent to one of our job sites along the east coast or overnighting a VFD to our jobsite in Fresno or Oxnard California you can rest assured it will be there when they say it will be there. This has made me a repeat customer for life"

#### **Todd in MEMPHIS, TN:**

"I have been pleased with the service and products for several years. Have only had a couple occasions with a need to speak to customer service and it was always handled promptly and efficiently. The products available, delivery and service keeps me coming back."

#### Henry in LABELLE, FL:

"Over 12 years ago, installed a network of twelve DL06's communicating via H0-ECOM 100 modules throughout our plant, saving thousands of feet of wire previously needed for control wiring. It has allowed the operation and monitoring of pumps, conveyors, and other equipment from multiple locations. More recently, added more control stations using C-MORE touch panels, instead of physical switches and pilot lights. All this has resulted in tremendous savings, safety, ease of troubleshooting, and flexibility. Thank you AD for affordable products, great help with tech support, reasonably (and often free) software and good quality products."



A quality product line, with FREE top-rated technical support and fast shipping!

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