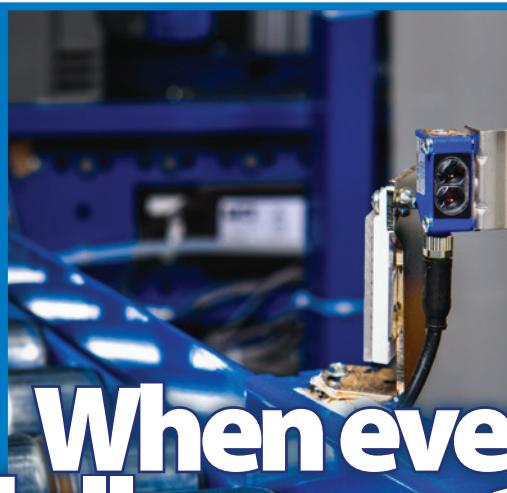


PRODUCT SUMMARY



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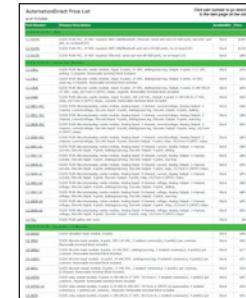
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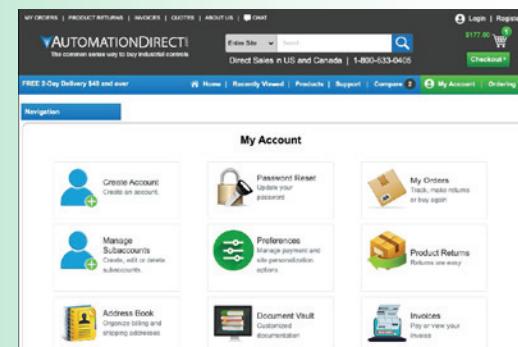


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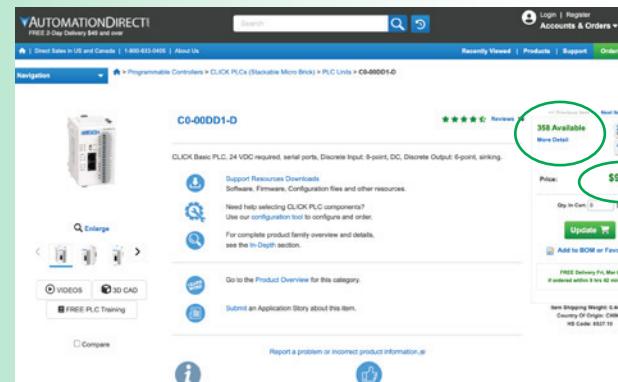


Our primary focus has always been customer service — practical products, great prices, fast delivery, and helpful assistance. But the intangible value of customer service is something that cannot be faked, automated or glossed over.

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



Check us out at: www.automationdirect.com

“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 tech support?
Yes, this is good for our customers."

“Should we offer FREE software on many products instead of charging licensing fees?
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."

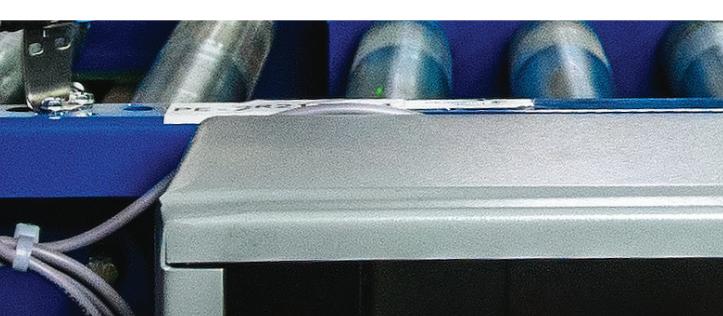
“Should we offer FREE shipping for orders over \$49?
Yes, this is good for our customers."

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.

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CLICK PLC

AutomationDirect CLICK Price/Part Number

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CO-00DD1-D

\$183.00
CO-10DD1E-D

\$192.00
CO-02DD1-D

\$51.00
CO-00AC

\$57.00
CO-08NA

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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.

UL 489 Miniature Circuit Breakers		AutomationDirect <i>VS.</i> Eaton Circuit Breakers	McMaster-Carr	Grainger		
Single pole 1 AMP Mini Circuit Breaker C trip curve	\$32.00 FAZ-C1-1-NA-SP		\$64.00 5789T102		\$105.34 FAZ-C1/1-NA-SP	
Triple pole 10 AMP Mini Circuit Breaker C trip curve	\$98.00 FAZ-C10-3-NA		\$197.72 5789T92		\$320.44 FAZ-C10/3-NA	

Prices may vary by dealer. Many other part numbers are available from all vendors. All prices are U.S. published prices. AutomationDirect prices as of 06/10/2024. McMaster-Carr prices from <https://www.mcmaster.com> 06/10/2024. Grainger prices from www.grainger.com 06/10/2024.

AutomationDirect	AutomationDirect	Global Industrial	Global Industrial	Grainger	Allied Electric
M.G.M. 1818 IEC frame with NEMA mount	WEG .5018ES3EBMW56CFL-S NEMA frame	U.S. Motors BMU12S2A NEMA frame	Leeson 114159.00 NEMA frame	Marathon 056117F5349 NEMA frame	Baldor WEBNM3542 NEMA frame

0.5 hp brake motor,
230/460 VAC,
1800 rpm, 56C frame
(or equivalent mount)

\$584.00
\$858.00
\$1,025.00
\$1,125.00
\$1,125.00
\$1,272.00

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Motor Controls	AutomationDirect <i>VS.</i> Allen-Bradley	ABB				
9 Amp Contactor	\$18.50 HMC-9B30-11-AS		\$119.00 * 100-C09D10		\$61.53 * A9-30-10-84	
40 Amp Contactor	\$56.00 HMC-40A30-22-AS		\$265.00 100-C37D00		\$233.29 * A40-30-10-84	
10 Amp Motor Starter	\$42.00 HMMP-32HR-10		N/A		\$153.89 MS325-12.5	

* This product includes 1 N.O. Aux contact

All prices are U.S. published prices. AutomationDirect prices as of 10/14/2024. Allen-Bradley prices taken from www.wernerelectric.com 11/5/2020. ABB prices taken from www.galco.com 11/5/2020. Prices and specifications may vary by dealer and configuration. Prices subject to change without notice.

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"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 design challenges."

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	Pneumatics	McMaster-Carr	Grainger	MSC		
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.	\$653.00 SG4-30-030-OO-E (sender/receiver)		\$48.00 AVS-5312-24D		93.27 6124K13		\$195.00 3JC16	
Safety limit switch, pull-reset action, plunger actuator, 30mm plastic body, 1/2 NPT	\$15.50 AP2R11X11		\$71.00 AFR2-3233		---		\$104.50 4ZK92	
Safety relay module, single channel, for E-stop circuits, 24 VDC, 2 N.O. contacts	\$126.00 LG5924-02-61-24		\$21.00 A1201SN		\$27.41 6489K141		\$28.23 3669K458	
All prices are U.S. published prices. AutomationDirect prices as of 1/23/2025. Prices subject to change without notice.			\$32.00 PÜ14BLK100		\$81.00 5097T411		\$373.11 NB-4-035-0100-P	

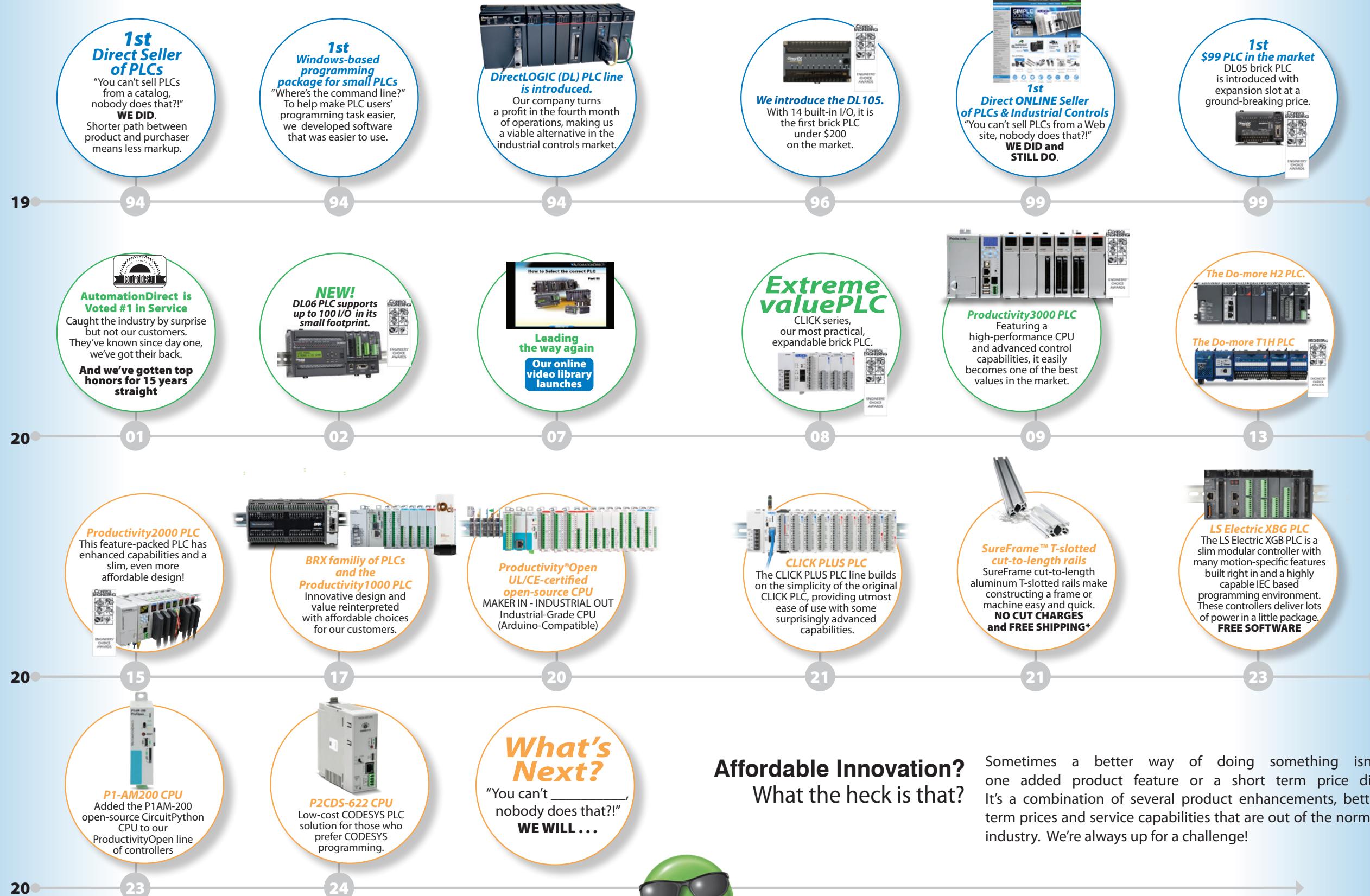
1) Sold by foot, price shown for 100 feet

All prices are U.S. published prices. Many other part numbers are available from all vendors. AutomationDirect prices as of 10/21/2024. McMaster-Carr prices are from www.mcmaster.com 11/5/2020. Grainger prices are from www.grainger.com 11/5/2020. MSC prices are from www.mscdirect.com 11/5/2020. Prices subject to change without notice.



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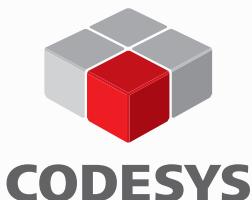


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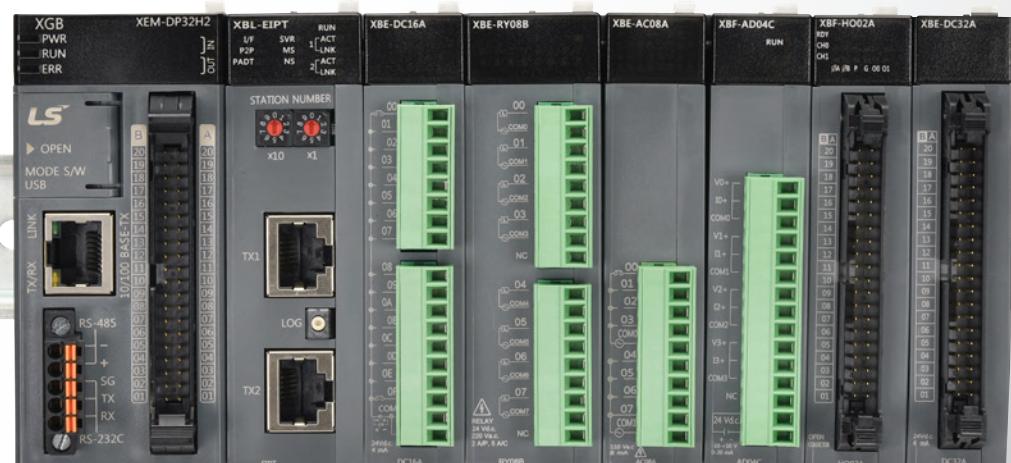


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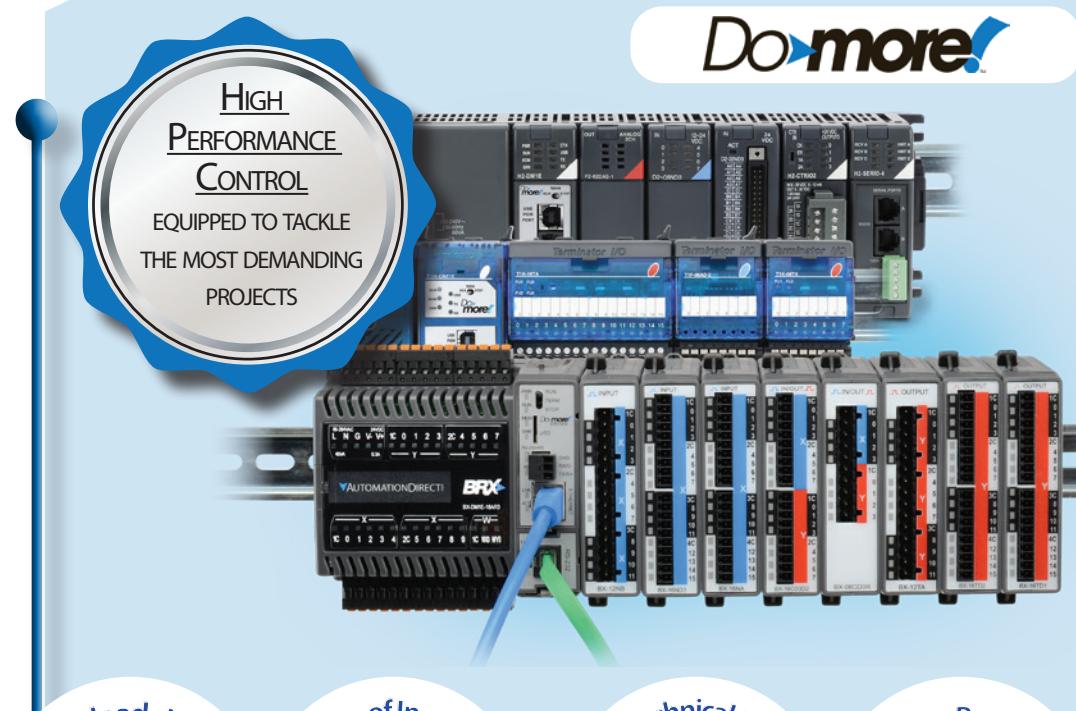
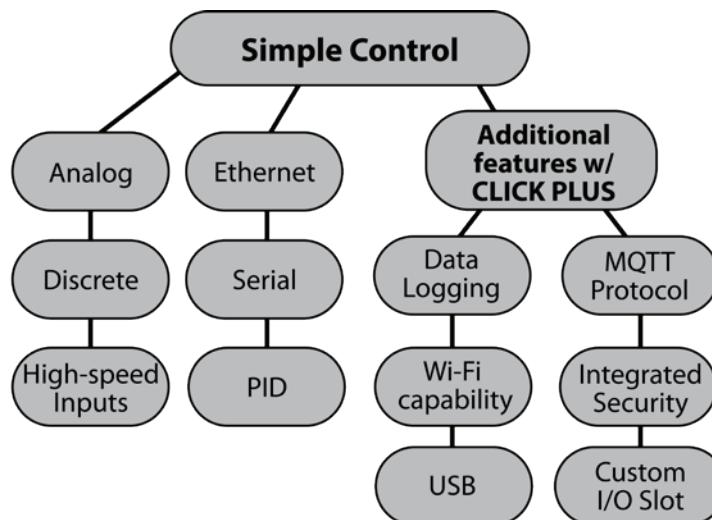
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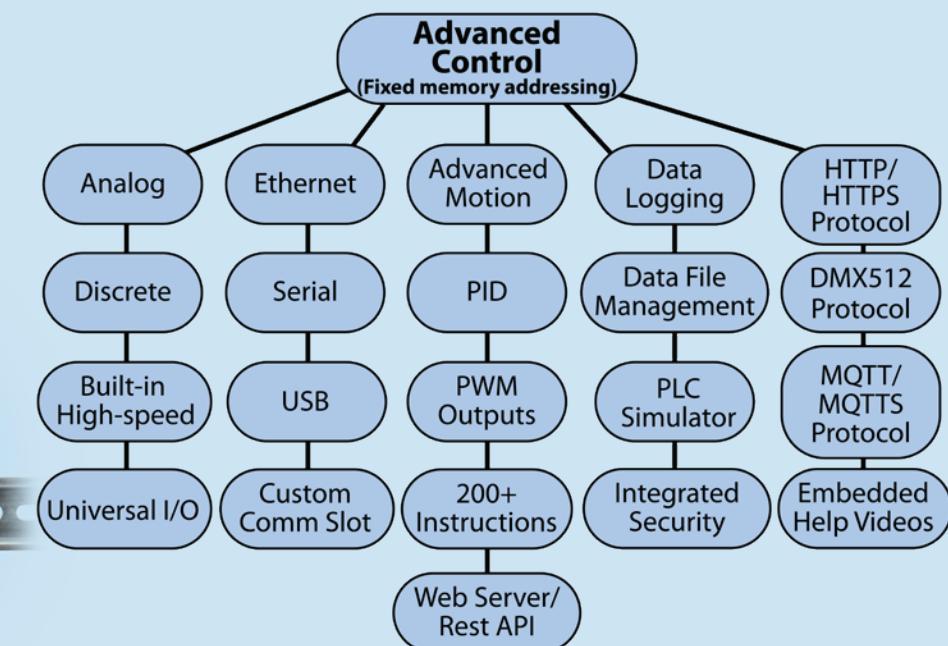
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PLUS

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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.



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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.

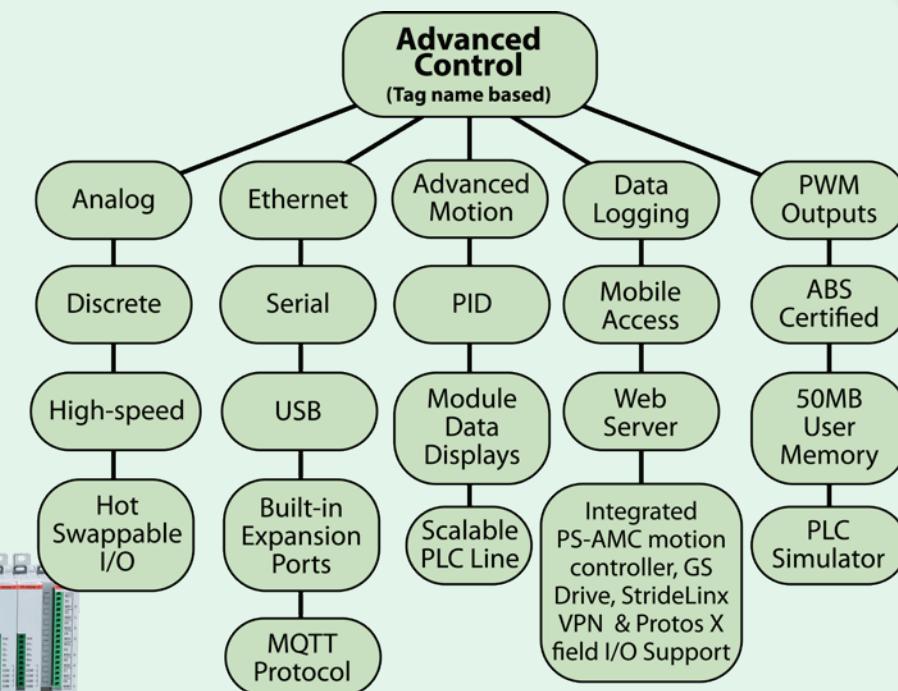


The Productivity PLC family offers the utmost versatility in both hardware and software. This scalable PLC line will easily conform to large systems with tons of I/O or smaller/segmented systems using limited I/O. With tag name programming, device integration that includes PS-AMC motion controllers, 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.

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Productivity® Series



CLICK PLCs are so simple and inexpensive...



CLICK

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



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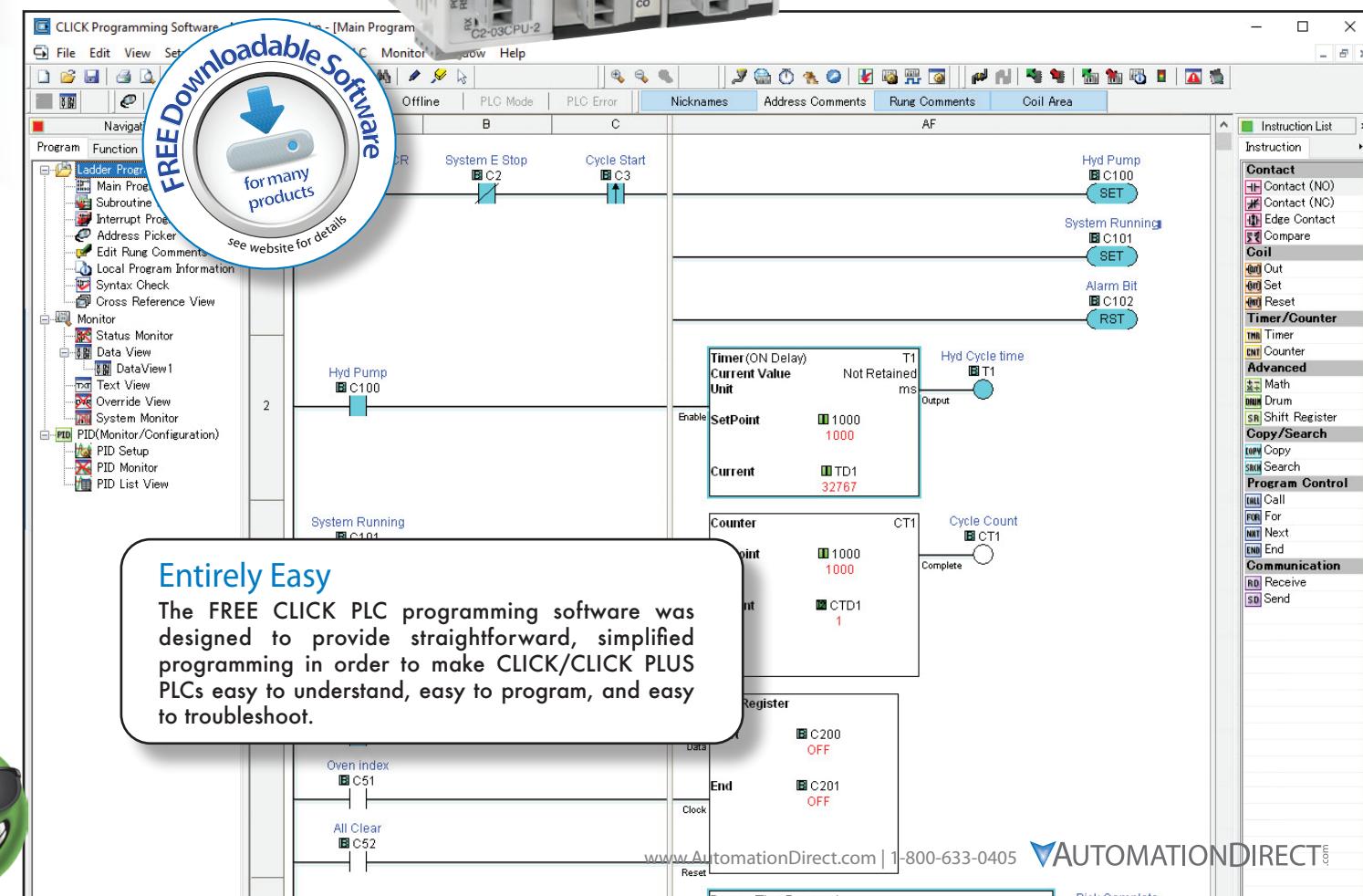
CLICK PLUS PLC features:

- 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>



Most PLCs will do but only some will Do-more!



"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 straightforward 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, big or small.

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 commands
- 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 capability
- 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 development tools



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.

This advanced controller comes with embedded data logging, versatile motion control, onboard serial communication with Ethernet option, an additional hot-swappable communications port, integrated discrete, high-speed, and high-performance analog I/O (select models), and numerous built-in connectivity options including MQTT(S), HTTP(S), FTP protocols, and more.

Stand-alone PLC units starting at \$199.00

Expandable I/O starting at \$53.00



Do-more! H2 and T1H PLC platforms

The H2 series CPU allows the power of Do-more to be deployed in existing DirectLOGIC 205 systems.

Add the compact T1H CPU to an installed Terminator I/O base to transform simple I/O into an enhanced, high-performance control system.

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

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.

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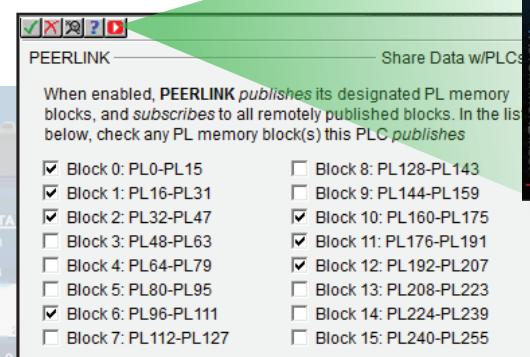
"The Do-More software is more user friendly than any I have ever used before. PID, Modbus communications, Filters etc... All very easy to use!"

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.



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!

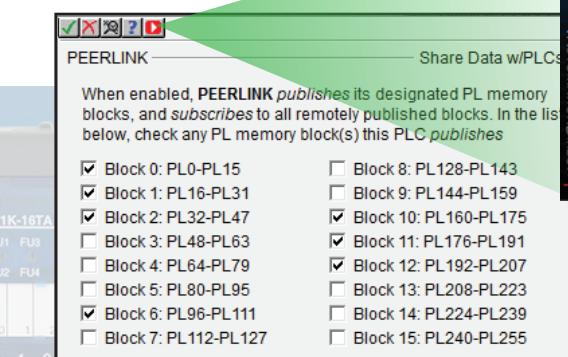


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GO! www.Do-morePLC.com

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.



Productivity PLCs - value engineered to perform

Increase your productivity in more ways than one



Productivity[®] Series

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 series:

- 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 modules)



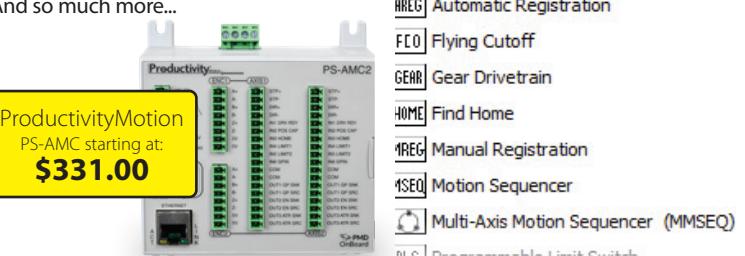
Check latest pricing:
<https://go2adc.com/Productivity-price>



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 (MQTT w/P2-622 CPU), custom protocols, and more
- 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 changes
- Tag name programming with advanced user-defined structure data types
- Easy-to-use coordinated motion control with the PS-AMC motion controllers and built-in motion instructions
- And so much more...



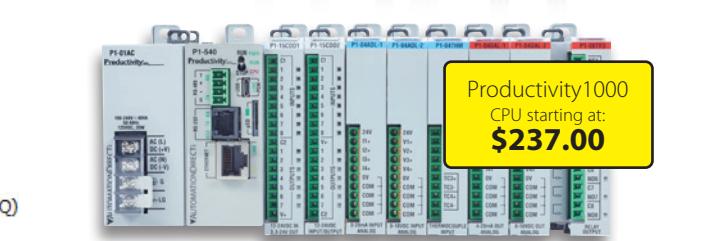
ProductivityMotion
PS-AMC starting at:
\$331.00



Productivity3000
CPU starting at:
\$750.00



Productivity2000
CPU starting at:
\$361.00



Productivity1000
CPU starting at:
\$237.00

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

Fast Programming with FREE downloadable 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.

Developed in-house with customer feedback

Productivity Suite is our free programming software for the Productivity family of controllers. Our own software engineers developed this programming package at our headquarters near Atlanta, Ga. It was designed with input from our technical service team who communicate on a daily basis with our customers. As a result, Productivity Suite not only meets but exceeds the needs of our customers, and provides a quick, user-friendly way to efficiently program the Productivity family of PLCs.

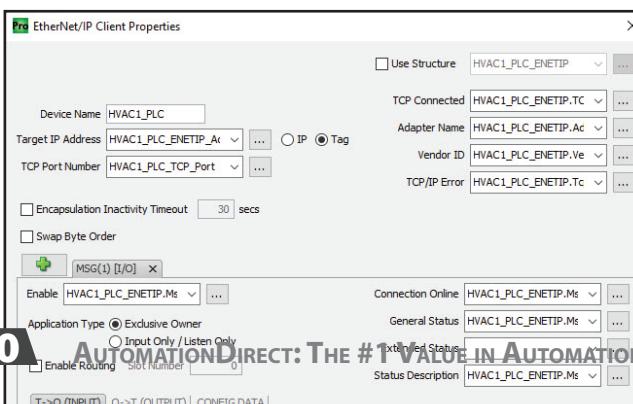
Productivity[®] Suite



ONE SOFTWARE PACKAGE PROGRAMS ALL PRODUCTIVITY PLCS!

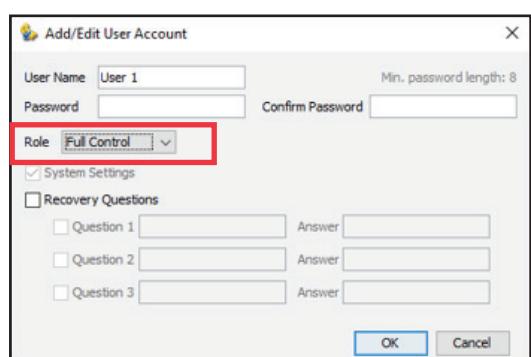
Variable communication

Productivity Suite provides utmost flexibility when it comes to PLC communication and with the Variable Communications Instructions (VCIs), you can reconfigure your communication links with simple tag value changes. By using tags in the parameter fields of Modbus, serial, EtherNet/IP, MQTT, etc. configurations, you can dynamically modify the messages, target IP addresses, and other connection parameters from the ladder code or directly from a connected HMI.



Easy access control

The Productivity Suite software has several remote access security features built in including project file encryption and user roles. User roles allow you to control who has access to the project file and what they can do with it. Full control, full monitor, limited monitor, and read only are some of the roles available and they can be easily set from the User Account dialog.



Simple simulation

There is no better way to get a head start on project development than building code ahead of time with the assistance of a project simulator. Now you can start your logic early and verify its operation even before the hardware has arrived!

Simply select the "Simulator" option in the toolbar, transfer your code as you would with a real CPU, turn on monitoring and/or open a Data View window, and start testing your code. This tool comes in handy not only with new builds but also when maintaining existing systems. With systems that are already live, and where a shutdown may be required, getting in and getting out quickly is crucial and the simulator is there to help make sure there won't be any surprises.

Simulator supports:

- Analog or Discrete I/O simulation
- Data View monitoring
- Modbus TCP/IP, EtherNet/IP and CPoE (custom protocol over Ethernet)
- Ignores unsupported instructions

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.

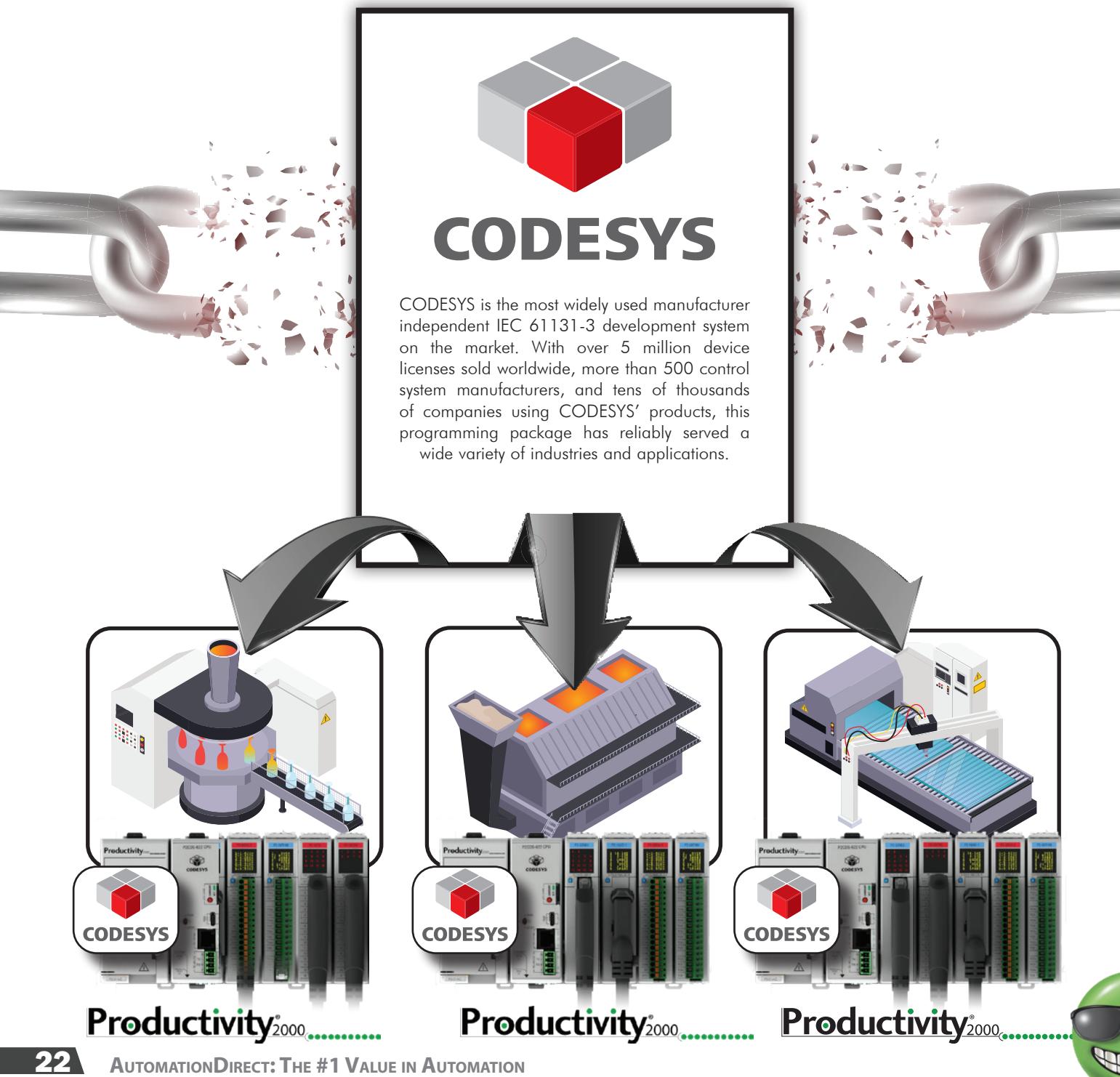
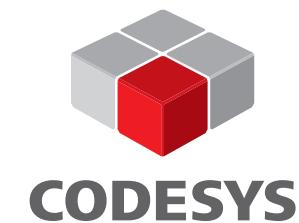
For example, `Mixing_Tank(1).Transfer_Pump(2).VFD.RUN_Command` which contains two nested UDS arrays (Transfer_Pump and VFD) inside the Mixing_Tank UDS definition.

Name	Type	System ID	Cols	Retentive	Mod Start	Forceable	I...	Comment
Mixing_Tank	Structure, User, ID, Tank	AR1ISTRUC-0000010	3					
Mixing_Tank(1)	Structure, User, ID, Tank	AR1ISTRUC-0000010(1)	3					
Name	Type	System ID	Cols	Reten...	In Use	Comment		
Level	Integer, 16 Bit Unsigned	AR1US16-000009(1)						
Temp	Float, 32 Bit	AR1F32-0000011(1)						
Mixer_On	Boolean	AR1C-0000018(1)						
Color	String	AR1STR-0000031						
Transfer_Pump	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008...	3					
Transfer_Pump(1)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (1)	1					
Transfer_Pump(2)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (2)	1					
Name	Type	System ID	Cols	Reten...	In Use	Comment		
Flow_Rate	Float, 32 Bit	AR2F32-000003(1)...						
Vibration_Sensor	Integer, 16 Bit Unsigned	AR2US16-000009(1)...						
VFD	Structure, User, ID, VFD	AR2ISTRUC-000008(1)...	3					
Transfer_Pump(3)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (3)	1	3				
Transfer_Pump(4)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (4)	1	3				
Transfer_Pump(5)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (5)	1	3				
Transfer_Pump(6)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (6)	1	3				
Transfer_Pump(7)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (7)	1	3				
Transfer_Pump(8)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (8)	1	3				
Transfer_Pump(9)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (9)	1	3				
Transfer_Pump(10)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (10)	1	3				
Transfer_Pump(11)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (11)	1	3				
Transfer_Pump(12)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (12)	1	3				
Transfer_Pump(13)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (13)	1	3				
Transfer_Pump(14)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (14)	1	3				
Transfer_Pump(15)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (15)	1	3				
Transfer_Pump(16)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (16)	1	3				
Transfer_Pump(17)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (17)	1	3				
Transfer_Pump(18)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (18)	1	3				
Transfer_Pump(19)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (19)	1	3				
Transfer_Pump(20)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (20)	1	3				
Transfer_Pump(21)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (21)	1	3				
Transfer_Pump(22)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (22)	1	3				
Transfer_Pump(23)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (23)	1	3				
Transfer_Pump(24)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (24)	1	3				
Transfer_Pump(25)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (25)	1	3				
Transfer_Pump(26)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (26)	1	3				
Transfer_Pump(27)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (27)	1	3				
Transfer_Pump(28)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (28)	1	3				
Transfer_Pump(29)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (29)	1	3				
Transfer_Pump(30)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (30)	1	3				
Transfer_Pump(31)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (31)	1	3				
Transfer_Pump(32)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (32)	1	3				
Transfer_Pump(33)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (33)	1	3				
Transfer_Pump(34)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (34)	1	3				
Transfer_Pump(35)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (35)	1	3				
Transfer_Pump(36)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (36)	1	3				
Transfer_Pump(37)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (37)	1	3				
Transfer_Pump(38)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (38)	1	3				
Transfer_Pump(39)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (39)	1	3				
Transfer_Pump(40)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (40)	1	3				
Transfer_Pump(41)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (41)	1	3				
Transfer_Pump(42)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (42)	1	3				
Transfer_Pump(43)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (43)	1	3				
Transfer_Pump(44)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (44)	1	3				
Transfer_Pump(45)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (45)	1	3				
Transfer_Pump(46)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (46)	1	3				
Transfer_Pump(47)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (47)	1	3				
Transfer_Pump(48)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (48)	1	3				
Transfer_Pump(49)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (49)	1	3				
Transfer_Pump(50)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (50)	1	3				
Transfer_Pump(51)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (51)	1	3				
Transfer_Pump(52)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (52)	1	3				
Transfer_Pump(53)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (53)	1	3				
Transfer_Pump(54)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (54)	1	3				
Transfer_Pump(55)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (55)	1	3				
Transfer_Pump(56)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (56)	1	3				
Transfer_Pump(57)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (57)	1	3				
Transfer_Pump(58)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (58)	1	3				
Transfer_Pump(59)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (59)	1	3				
Transfer_Pump(60)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (60)	1	3				
Transfer_Pump(61)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (61)	1	3				
Transfer_Pump(62)	Structure, User, ID, Transfer_Pump	AR2ISTRUC-000008(1), (62)	1	3				

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!**

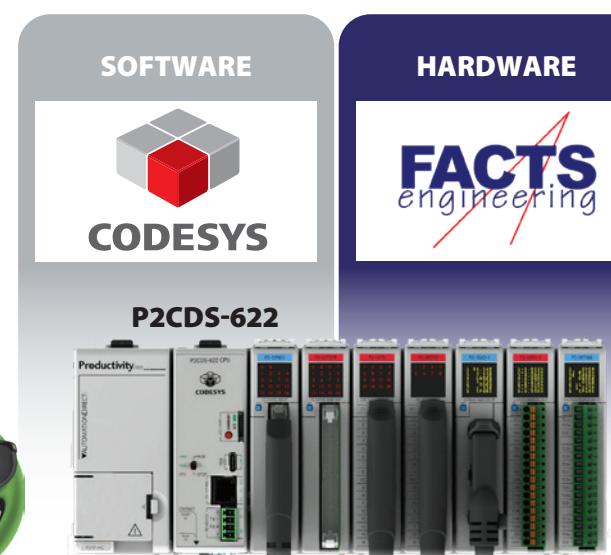


The P2CDS-622 CPU features a CODESYS runtime application housed in a Productivity2000 controller form factor. This CPU has ample communication capabilities, works seamlessly with low-cost Productivity2000 I/O modules, and includes the CODESYS IEC 61131-3-compliant software package along with several 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 visually
- Fieldbuses included (normally purchased separately):
 - 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>**

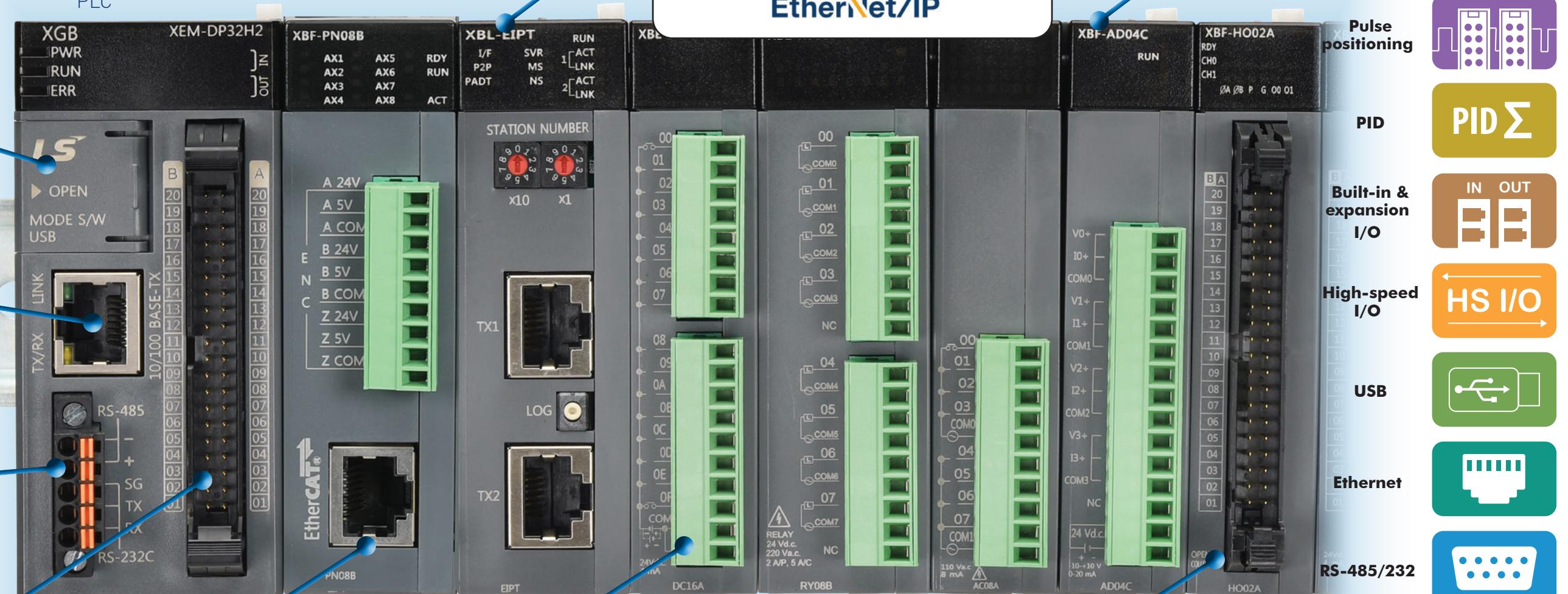
Get ready to say “YES!” to LS

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 AutomationDirect. The LS Electric controllers offer 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 \$279.00 starting price, and the **FREE** tech support provided by AutomationDirect, and you'll definitely say "YES!" to LS!



LS
XGB

PLC



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

Ethernet
(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 monitoring connections.

RS-485/RS-232C
(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*
(Up to 32 points)
Select PLC CPUs offer a high-density I/O port with 16 DC inputs 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).
16-point 2-axis PLC CPUs and 14-point relay output PLC CPU are also available.

EtherCAT®
Add up to 2 EtherCAT modules for up to 16 axes of precise positioning.
• 4- or 8-axis positioning modules
• Differential and single-ended encoder input(s)
• RJ45 10/100MB Ethernet port

Expandable I/O
For many applications, the built-in I/O provided by the CPU alone will suffice. For those systems with an abundance of I/O or specialty I/O needs, the PLC can be easily expanded with several analog/temperature, relay, discrete, load cell, or high-speed I/O expansion modules.
Additional racks of remote I/O can also be added using the XEL-BSSRT bus coupler.

EtherNet/IP Module

(2) RJ45 ports

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 sessions
- 32 client / 64 server CIP connections
- Class 1 connected implicit (I/O) messaging (scanner and adapter)
- Class 3 connected explicit messaging (server only)
- Unconnected explicit messaging (client and server)

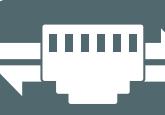
High-speed I/O Modules*

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.

FREE
SOFTWARE w/
multiple IEC
languages



EtherCAT®
positioning



Advanced
motion
control



Pulse
positioning



PID



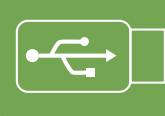
**Built-in &
expansion**
I/O



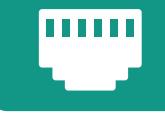
**High-speed
I/O**



USB



Ethernet



RS-485/232



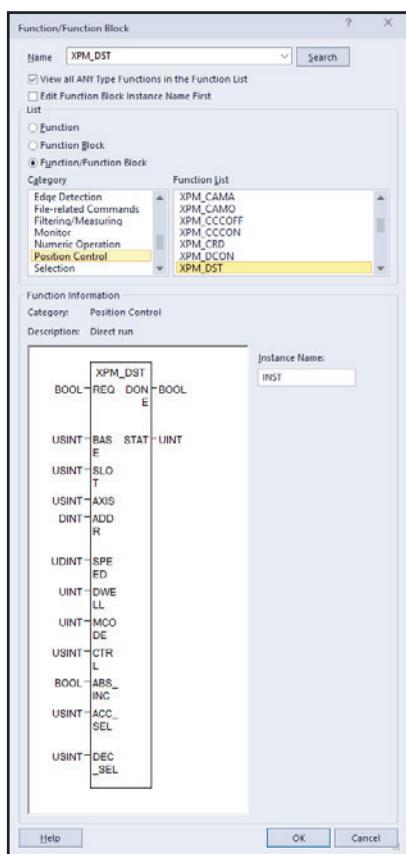
*32-point PLC CPUs, 32-point I/O modules, and high-speed modules require a Smart Link cable and terminal block for wiring.
Not required with 14- or 16-point PLC CPUs.

**CPUs starting at only
\$279.00**



EtherCAT® is a registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

FREE IEC-based programming software

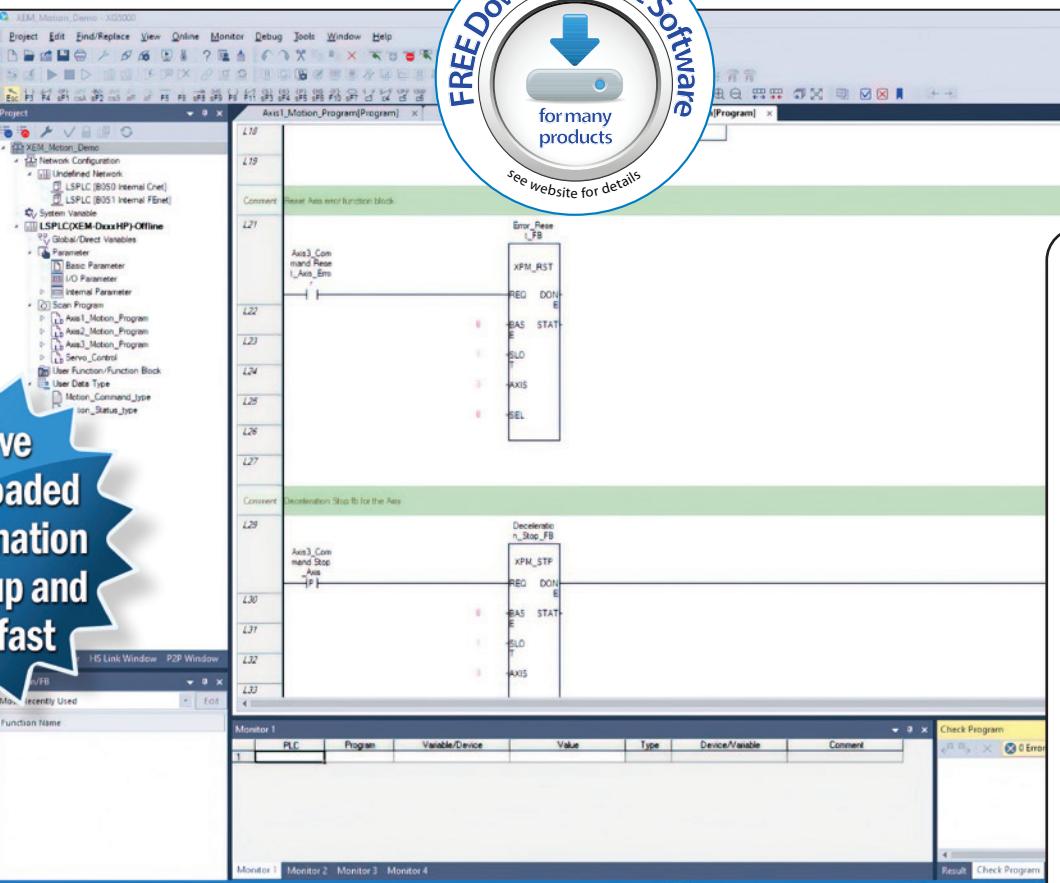


State-of-the-art instructions

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

Extensive help site loaded with information to get you up and running fast



FREE Downloadable Software
for many products
see website for details

Built-in project simulator provides huge time savings

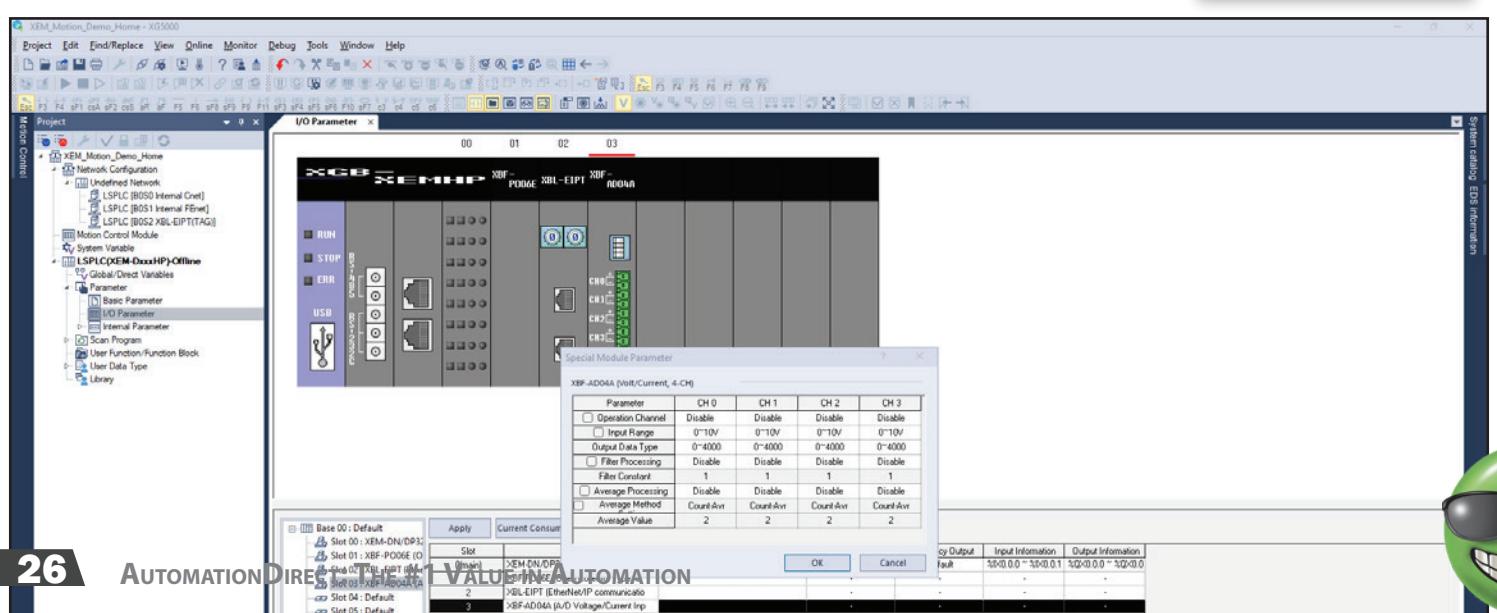
The XG-SIM is a Windows-based virtual PLC that allows an operator to execute and debug a program without a physical PLC present. With the simulator, you can validate your control logic as it is created instead of in the field for much easier startups.

- 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:

1. Ladder Diagram (LD)
2. Structured Text (ST)
3. Sequential Function Chart (SFC)
4. Instruction List (IL)



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:

- 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
- Online editing capabilities

For even more EtherCAT powered motion control, check out the LS XMC motion controller.

The LS Electric XMC controllers are optimized for advanced motion control and offer full EtherCAT capability. They are available in 8- or 16-axis models with a variety of high-tech functionality for a price that can't be beat!

*Supports EtherCAT, G-code, Delta3, Delta3R, Linear Delta, and more with all configuration in XG5000 software.

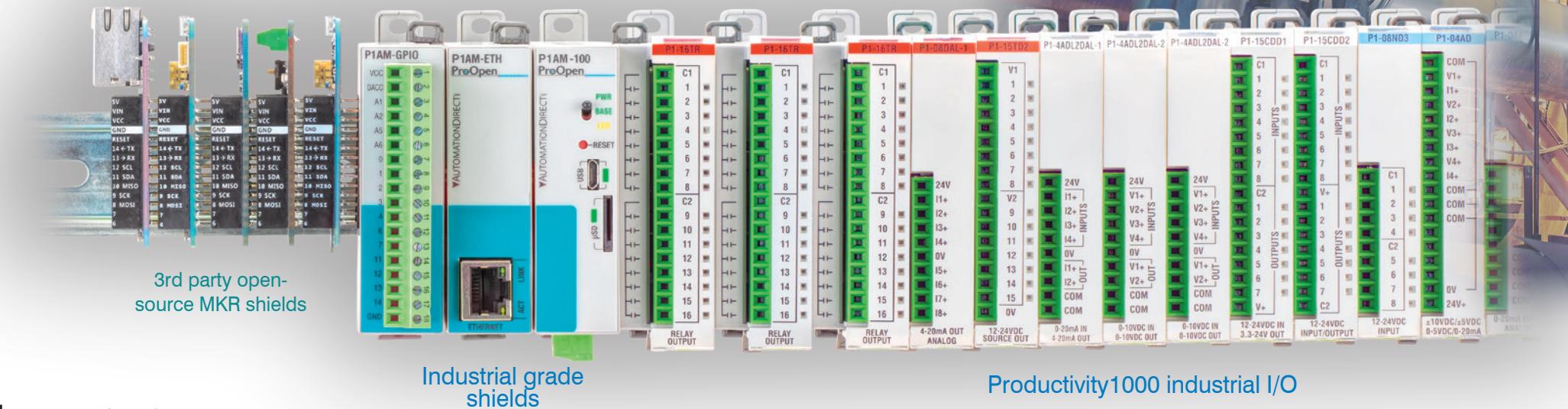


**Learn more:
<https://go2adc.com/ls-ps>**

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



Productivity[®] 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.



Industrial-Grade
Open-Source CPUs
starting at
\$69.00



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

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window
code.py

1 import random
2 import asyncio
3 import board
4 import busio
5 from digitalio import DigitalInOut, Direction
6 import PLAManager
7 import plam_200_helpers as helpers
8 from adafruit_wiznet5k import WIZNET5K
9
10
11 Async def main():
12     base = PLAM.Base() #Initializes base.. Returns the base object.
13
14     # Discrete Output - Comment out this section if you don't have a discrete output module.
15     ch2 = output_module[2] # 2nd channel object for our output module.
16     channel_2_task = asyncio.create_task(plam_blink_output(ch2, 1)) # Blink ch2 on slot 1 every second.
17     channel_4_task = asyncio.create_task(plam_blink_output(output_module[4], -5)) # Blink ch4 on slot 1 every half-second.
18     channel_7_task = asyncio.create_task(plam_blink_output(base[1][7], .25)) # Blink ch7 on slot 1 every quarter second.
19
20     plam_blink_tasks = [channel_2_task, channel_4_task, channel_7_task] # List of tasks to run.
21
22     # Discrete Input - Comment out this section if you don't have a discrete input module.
23     input_module = base[2] # module object for slot 2.
24     ch1 = input_module[1] # 1st channel object for our input module.
25     input_task = asyncio.create_task(print_input_changes(ch1, input_module[2], base[2][3])) # Print changes to ch2 on slot 2.
26
27     # RTC
28     rtc = helper.get_rtc()
29     print(rtc.datetime) # Print current time.
30
31     # EEPROM
32     eeprom = helper.get_eeprom()
33     mac = eeprom.read_mac_address()
34     print("MAC Address is: (" + hex(mac) + ")") # Print MAC Address.
35     eeprom[0] = 1 # Set EEPROM address 0 to 1.
36     print("EEPROM address 0 is: " + hex(eeprom[0]))
37
38     # PLAM-Serial Shield Setup
39     helper.set_serial_mode(1, 232) # Set PLAM-Serial port 1 to RS232 mode.
40     rs232 = busio.UART(board.TX1, board.RX1, baudrate=115200)
41     port2_d = Helper.set_serial_mode(2, -485) # Set PLAM-Serial port 2 to RS485 mode, returns DE pin.

42
```

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>



With the **C-more** headless HMI, you can display your factory floor data how and where you choose. The CM5-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 operational data or messages. Use the **C-more** Remote mobile app or the embedded Web Server if you prefer no local display at all.

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!



STN monochrome versions offer twelve selectable background colors that allow you to use color to convey meaning.

TTFT full color versions offer up to 32,767 colors 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/microsw>
- Full 2-year product warranty

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



VIEWMARQ
LED MESSAGE DISPLAY

Built-in Ethernet (all models)

23.3 inches
12 characters wide
1 line

OUEN1 - 232F
OUEN2 - 198F
2 line

POWERED
BY
100-240V AC
OR 24VDC
4 line

44.89 inches
24 characters wide
1 line

1234567890!@#\$%^&*()+=~
ABCDEFIGHJKLMNOPQRSTUVWXYZ
2 line

TARG 3500
PLAN 3200
ACTL 2300
4 line



Industrial LED message displays keep your plant personnel in the know

ViewMarq 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:

- ASCII strings through the RS232 or RS485 port
- Modbus RTU messages 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 angle
- (1) RS232, (1) RS485 and (1) Ethernet port standard on all models
- 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.

- Control modes include Scalar, Vector Control (sensorless and closed-loop with encoder feedback), and VVV PM (suitable for fan, pump and compressor) 100kA short circuit current rating
- STO – Safe Torque Off
- Built-in PLC
- Optional Ethernet communications Modbus TCP and Ethernet/IP

WEG - CFW300 Drive Units (120 / 230 VAC) w/ PLC



High-performance VFD in compact size

- Sixteen units available from 1/4hp to 5hp*
- Voltages available: 120 and 230 VAC (single and three-phase)
- Built-in PLC
- V/Hz control mode and sensorless vector control modes

DURApulse® GS10 Micro AC Drives



Our most affordable and compact inverter drive with sensorless vector support

- Available horsepower sizes from 1/4hp up to 10hp*
- Voltages available: 120, 230 VAC (single and three-phase) and 460 VAC

DURApulse GS20 and GS20X AC Drives



Take the best features of our popular GS2 series drives, add Sensorless Vector and Field Oriented Control, expand built-in I/O, and include an integrated PLC with optional Ethernet communications. GS20X models come in a NEMA 4X enclosure.

- Available horsepower sizes from 1/4hp up to 30hp*
- Voltages available: 120 VAC, 230 VAC (single and three-phase), 460 VAC, 575 VAC

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



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

- 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

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) communication
 - 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

IronHorse ACG AC Drives



A solid general-purpose drive with many useful features built-in and manufactured to military specifications.

- Available horsepower sizes from 1/2hp to 30hp
- Voltages available: 230VAC (single and three-phase), 460VAC (single and three-phase)

IronHorse ACN NEMA 4X AC Drives



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 to 10hp
- 460 VAC: three-phase up to 30hp, single-phase up to 15hp

DURApulse GS30 AC Drives



A high-performance drive supporting closed-loop flux vector control with many communication options in a compact package.

- Available horsepower sizes from 1/2hp up to 100hp
- Voltages available: 230 VAC (single and three-phase), 460VAC

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



TOSHIBA



Toshiba AS3 AC Drives

High-performance drives from a respected industrial brand. These drives are loaded with features and communications capabilities, which are optional extras on other drives.

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



GO! <http://go2adc.com/drives-ps>

DC Drives



IronHorse® Digital DC Drives

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

- Microprocessor-based design that is programmable
- Sizes from 1/2hp to 2hp in 120 to 240 VAC*

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

GO! <http://go2adc.com/drives-ps>

Soft Starters



AC Motor Soft Starters

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

- Compact WEG SSW05 Series: 10-85A @ 230-460 VAC
- Compact SR22 Series: 1-phase 5-40A @ 110-240 VAC 3-phase 5-40A @ 208-460 VAC
- Basic WEG SSW07 Series: 17-477A @ 200-480 VAC

- Basic SR35 Series: 1-phase 17-361A @ 110-240 VAC, or 3-phase @ 200-600 VAC
- Full-Featured SR55 Series: 17-477A @ 200-480 VAC

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

Kelsey in WYOMISSING, PA wrote:

"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"

Free Full-Featured Downloadable Software

GO! <http://go2adc.com/software-ps>

Easily configure your system components with our user-friendly software packages. Most of our software is available for free download, providing the tools you need to get your system up and running fast.

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



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, EtherCAT, and DeviceNET communication options
- Various combinations of discrete (AC, DC, relay, high-speed) and analog inputs and outputs available
- LS Electric field I/O
- NITRA Pneumatic Automation Link (PAL) system for electrical I/O, pneumatic valves, or both.

GO! <https://go2adc.com/io-ps>

A Wide Selection of Pneumatic products at AutomationDirect.com Prices



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 electric actuators.

- 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

GO! <http://go2adc.com/pneumatics-ps>

Valves for Common Applications

These high-quality valves can be used in many installations throughout the process industry, operating as on/off devices that allow or halt the flow of fluids, or as devices continuously controlling the fluid volume flowing through pipelines. There are several control methods used to operate a valve, including electrical (solenoid operated), pneumatic (air operated), or manual.

- Solenoid process valves
- Modular process valves
- Directional control solenoid valves
- Pilot valves
- Manual valves
- Check valves
- Flow indicators
- Manifolds



GO! <https://go2adc.com/valves-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
- Solenoid / media separated process pipeline valves
- Current to pneumatic (I/P) transducers
- Potable water pressure regulators
- Vibration switches and transmitters
- Trumeter graphical panel meters
- Cloud data logger with I/O
- Hour meters and counters

GO! <http://go2adc.com/process-ps>



Discrete and Analog Sensing

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 and thermometers
- Level sensors
- Flow sensors
- Fork sensors
- Linear position sensors
- Vibration sensors

GO! <http://go2adc.com/sensors-ps>



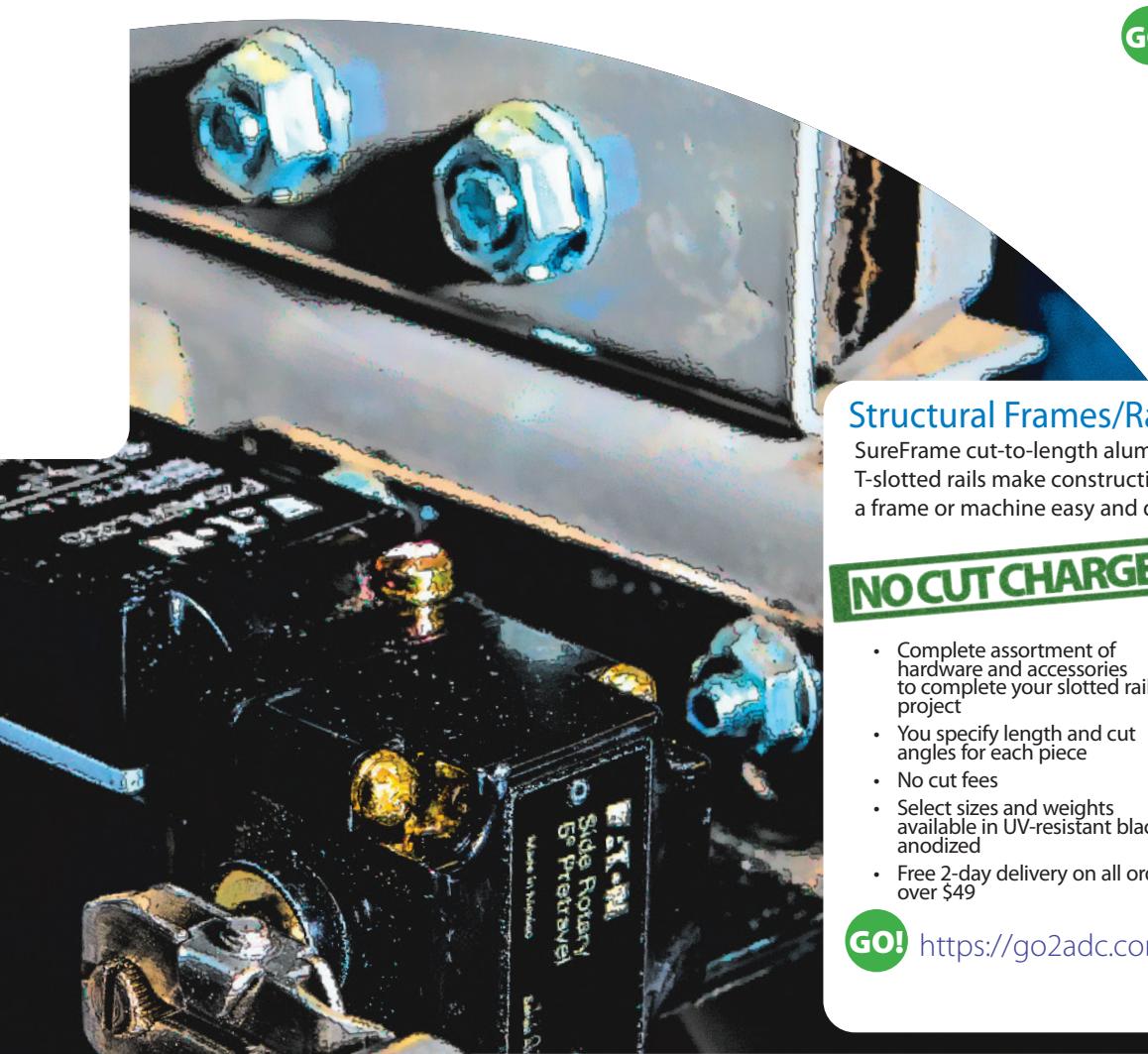
Motors and Motor Controls

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
- Marathon single-phase AC motors up to 5hp
- DC motors up to 2hp
- Motor controls and contactors up to 300hp
- WEG single-phase AC motors up to 2hp
- WEG three-phase AC motors up to 20hp
- WEG brake motors up to 20hp
- U.S. Motors inverter duty AC motors up to 20hp
- Toshiba Severe Duty AC Motors up to 100hp
- M.G.M. IEC motors up to 5hp
- M.G.M. IEC brake motors up to 5hp

GO! Motors: <http://go2adc.com/motors-ps>
Motor controls: <http://go2adc.com/mc-ps>



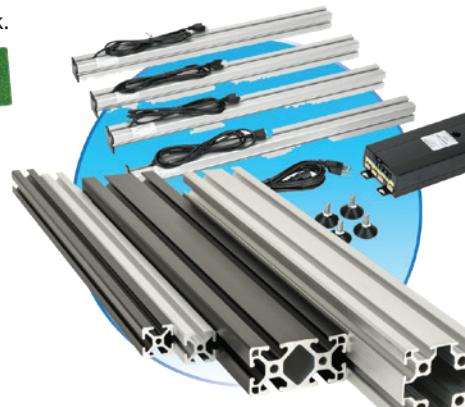
Structural Frames/Rails

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

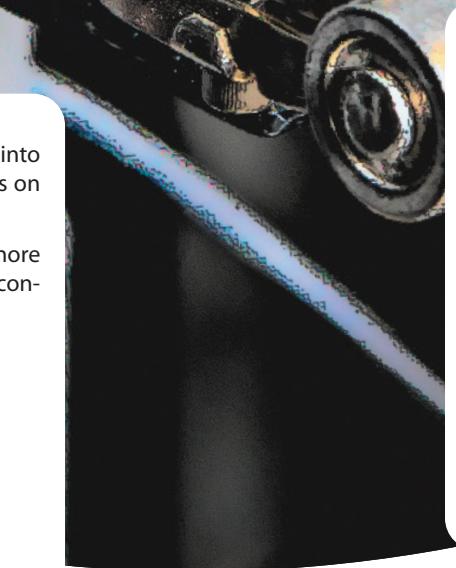
NO CUT CHARGES

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

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



Sureframe®



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®
- LS Electric® XMC Motion Controller with EtherCAT®
- SureServo®2 servo drives and motors, up to 15kW
- 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 actuators
- Leadshine® stepper drives
- Encoders
- SameSky® Kit Encoders
- XYZ gantry components, including linear slides and actuators

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!"





Pushbuttons, Switches and Lights

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.

- 16, 22, and 30mm pilot devices
- IP69K capacitive pushbutton switches
- Pendant Switches
- Pneumatic pushbuttons and switches
- Indicating lights
- Hazardous location control stations and audible alarms
- Emergency stop stations
- Start/Stop control stations
- Pushbutton enclosures
- Foot switches
- Signal towers and LED signal columns
- Audible and visual signaling Devices

GO! 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
- PoE injectors

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



see website for details



Identification

Identification

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 barcodes.
- Contrinex RFID devices use radio frequencies to read and transmit data without the need for line of sight.
- AutomationDirect 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.
- Datalogic rugged handheld barcode scanners
- ifm industrial vision cameras
- Swivellink mounting systems
- Wenglor vision lighting

GO! <http://go2adc.com/ID-ps>



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
- Push-to-connect water fittings
- Brass fittings
- Tubing
- Hose
- Hose clamps
- Pressure, flow, and level sensors
- Modular process valves

GO! <http://go2adc.com/water-ps>





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.

- Molded case circuit breakers
- UL 489 miniature circuit breakers
- UL 1077 miniature supplementary protectors
- Mini-supplementary protectors for terminal blocks
- Electronic circuit protection
- Fuses, fuse holders and fuse blocks
- Manual transfer switches
- Disconnect switches
- Motor disconnects and manual motor controllers
- Mechanical interlocks
- Rotary CAM switches

GO! <http://go2adc.com/circpro-ps>

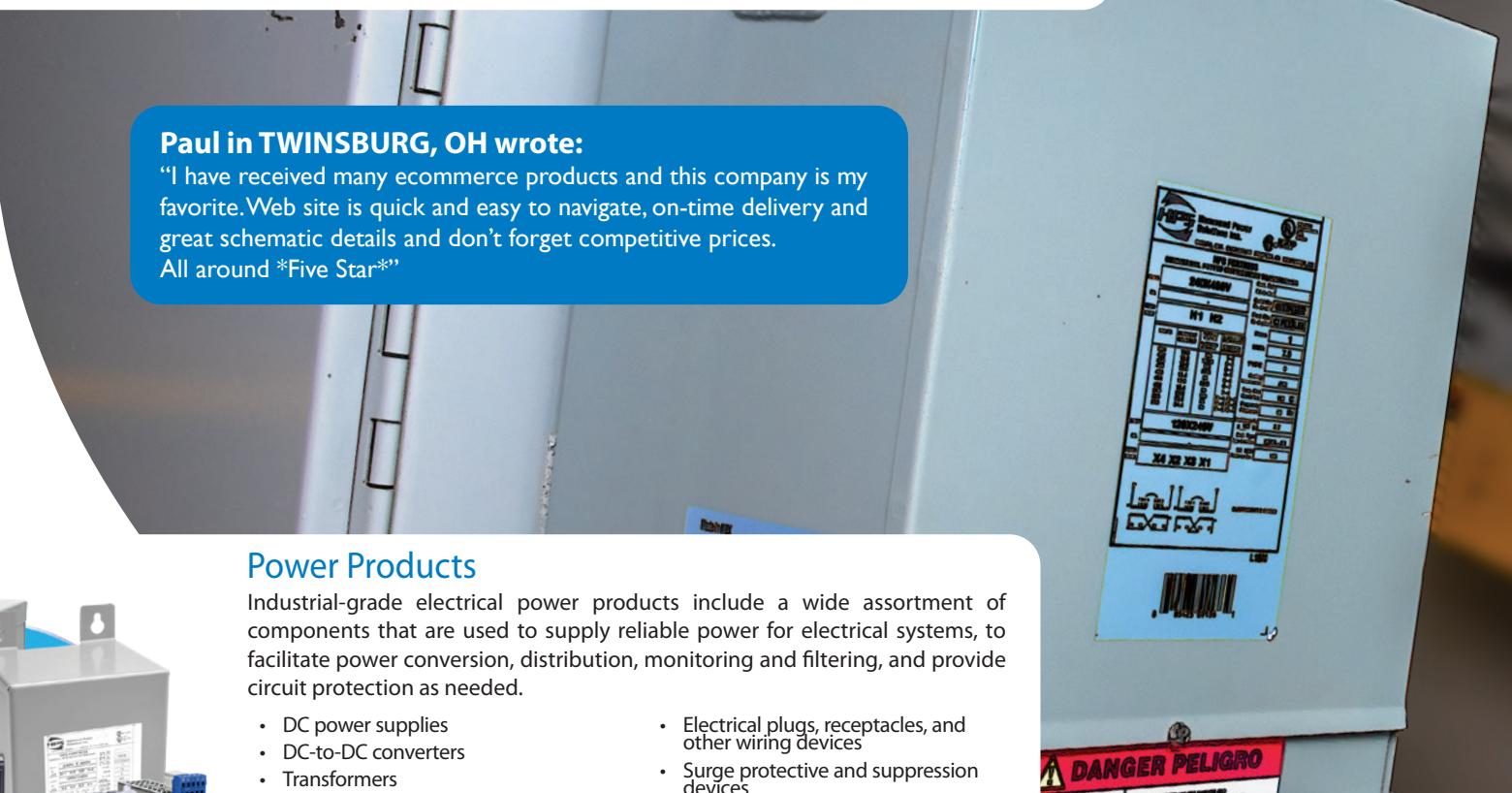


Power Products

Industrial-grade electrical power products include a wide assortment of components that are used to supply reliable power for electrical systems, to facilitate power conversion, distribution, monitoring and filtering, and provide circuit protection as needed.

- DC power supplies
- DC-to-DC converters
- Transformers
- Power meters
- Graphical panel meters
- Power distribution blocks
- Pin and sleeve devices
- Electrical plugs, receptacles, and other wiring devices
- Surge protective and suppression devices
- Power line filters
- Panel interface connectors
- Current transformers
- Mechanical lugs
- Neutral bars

GO! <http://go2adc.com/power-ps>



Hydraulics



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



Hydraulics are a mainstay of mechanical motion in industrial applications. Get these components at great prices for your system needs.

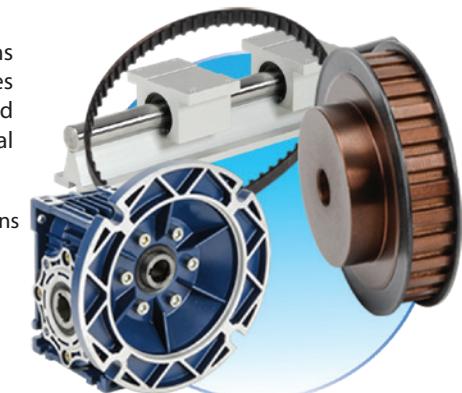
- Bucher hydraulic power units (HPUs)
- NFPA style hydraulic cylinders with many mounting options
- Hydraulic solenoid valves



Power Transmission

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.

- Linear slides and actuators
- Worm gearboxes (stainless steel, cast iron and aluminum)
- Helical gearboxes
- Precision gearboxes
- Strain wave gearboxes
- Timing belts and pulleys
- GAM® helical racks and pinions
- Shafting, bearings and shaft supports
- Linear guides & rail systems
- igus® polymer bearings
- Couplings, bushings and reducers



GO! <http://go2adc.com/ptrans-ps>

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 nutdrivers
- Sensor tester
- Wera, Wiha, and MEGAPRO screwdrivering tools
- Wera wrenches, ratchets and sockets
- Master Appliance heat guns
- 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 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, Teknokol and Wiegmann
- Many types of metallic and non-metallic enclosures
- Modular enclosures
- Data communication racks
- Sanitary enclosures
- HMI Enclosure Suspension arm systems
- Heating, cooling and climate control
- Industrial LED lighting
- Wide selection of enclosure accessories

GO! <http://go2adc.com/enc-ps>



Safety

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 controllers
- IDEM® and Dold® safety relays
- Speed/Standstill safety relay modules
- WEG safety contactors
- Safety laser scanners
- Magnetic safety switches
- Magnetic coded safety switches
- RFID coded safety switches
- Speed/Standstill safety relay modules
- 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 devices
- Safety enabling switches
- IDEM Z-Range safety devices
- Safety machine guarding
- Gate boxes

GO! <http://go2adc.com/safety-ps>

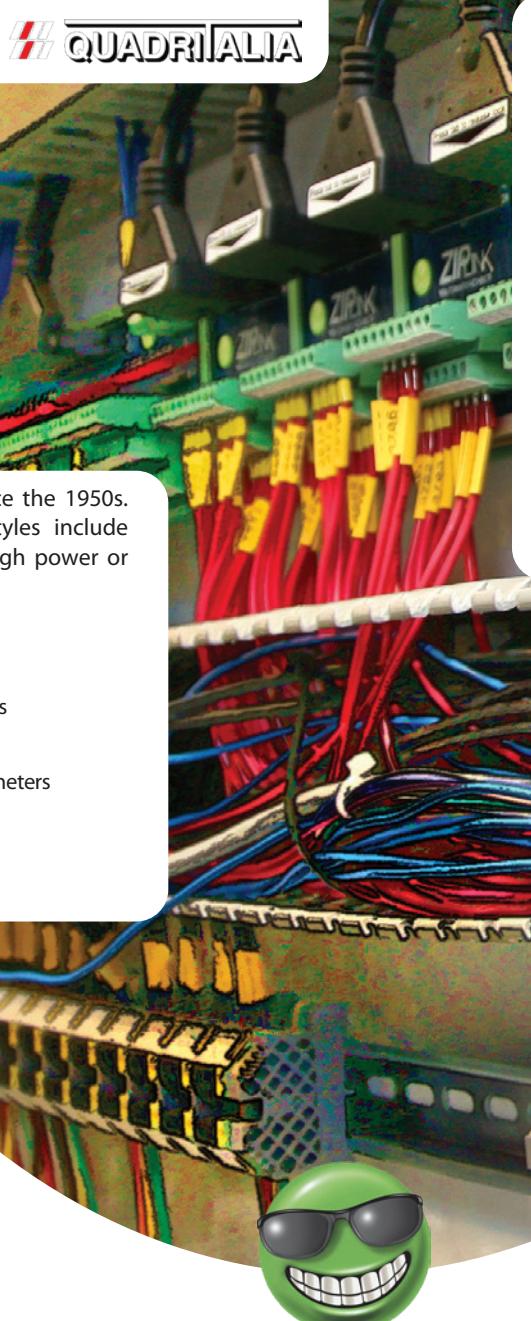


Relays and Timers

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 relays
- Timer relays
- Multi-Function Digital Counter / Timer / Tachometers
- Force-guided relays

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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!!**

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- Tray-rated cables
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- 600V control cables
- Food and beverage (FDA approved) cables
- Motor and VFD supply cables
- Data & Communication cables
- Process and instrumentation cables
- Thermocouple and RTD extension wire/cable

NO CUT CHARGES

Minimum lengths of 10ft unless otherwise indicated



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- 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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The screenshot shows the main navigation bar with links for "Login | Register", "Accounts & Orders", and "Ordering Tools". Below the navigation is a search bar and a "Recently Viewed" section. The homepage features several promotional banners for products like "Easy RIO - Rest API", "Schneider Electric Motor Controls", and "C-more for even less!". There are also sections for "New and Trending" products and "Shop All Products" for Programmable Control, Field I/O, HMI (Operator Interfaces), Communications, and Motor Control.

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Online Selector Tools

This section of the website allows users to "Configure a PLC", "Configure a Drive", "Configure a Motor", and "Configure a Power Supply". It also includes sections for "Configure a Productivity1800 PLC", "Configure a Productivity800 PLC", and "Configure a Productivity3000 PLC". Other options include "Configure a Servo Motor", "Configure a Stepper Motor", and "Configure a Linear Actuator".

The PLC Selector tool allows users to search for PLCs by various criteria such as "CPU Processor", "Programmable Logic", "Memory", "Power", "I/O", "Communication", "Programming", and "Hardwired". It also includes a "Watch the Overview Video" button.

PLC Selector

The Stepper System Selector tool allows users to choose a motor based on torque requirements and select a frame size. It also includes a "Watch the Overview Video" button.

Stepper System Selector

The WERMA Stack Light Configurator tool allows users to select various options for stack lights, including "Select Light Type", "Select Voltage", and "Select Color". It also includes a "Watch the Overview Video" button.

WERMA Stack Light Configurator

The Gear Box Selector tool allows users to enter torque and speed requirements and select a gear ratio. It also includes a "Watch the Overview Video" button.

Gear Box Selector

- Show:
- ALL Videos (Random Search)
 - Newest on Top
 - Oldest on Top
 - By Topic (Pre-sorted by subject)

Filter Videos by Product

- Programmable Controllers
- Drives
- HMI
- Process Control & Measurement
- Motion Control
- Motors
- Motor Controls
- Field I/O
- Cables
- Sensors / Encoders
- Communications
- Pneumatic Components
- Relays / Timers
- Stacklights
- Power Products
- Pushbuttons / Switches / Indicators
- Circuit Protection
- Safety
- Wiring Solutions
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Fuses or Circuit Breakers: Which should you use?

Circuit Protection

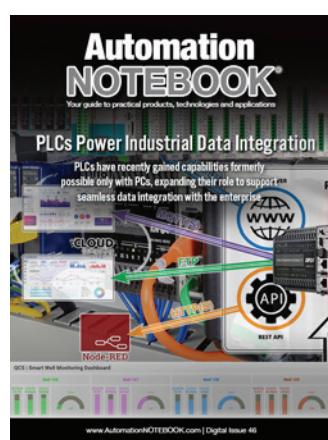
One of the first steps in the electrical design field is the selection of circuit protection to safeguard the equipment. There are a variety of circuit protection devices available, each with its own unique characteristics and benefits. Fuses and circuit breakers are two of the most common types of circuit protection used in electrical systems. While they both serve the same basic purpose of protecting equipment from damage, there are significant differences between them. Fuses are typically used for short-term protection against overcurrent conditions, while circuit breakers are designed for both short-term and long-term protection. Fuses are relatively inexpensive and easy to install, but they can be difficult to replace if they blow. Circuit breakers, on the other hand, are more expensive than fuses but offer faster protection and easier replacement. Both have their own unique advantages and disadvantages, so it's important to understand the specific needs of your application before selecting the right type of protection.

Circuit Breakers

Circuit breakers are designed to protect the safety of the electrical system. They are used to detect faults and trip the circuit breaker to prevent damage to the system. Circuit breakers come in many different types, such as thermal, magnetic, and electronic. Thermal circuit breakers use a bimetallic strip to detect temperature changes and trip the breaker when it reaches a certain threshold. Magnetic circuit breakers use a coil of wire around a core to detect changes in magnetic flux and trip the breaker when it reaches a certain threshold. Electronic circuit breakers use microprocessors to detect faults and trip the breaker. Circuit breakers are often used in conjunction with fuses to provide additional protection. They are also used in power distribution systems to protect against overcurrent conditions.

Fuses

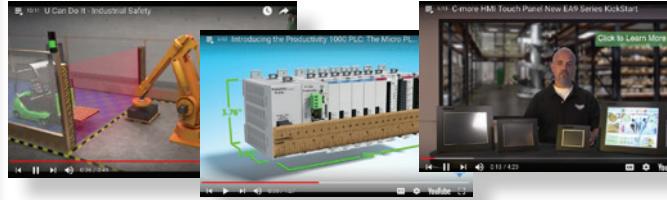
Fuses are small devices that are used to protect electrical circuits. They are typically connected in series with the load being protected. When a fault occurs, the fuse will melt and open the circuit, preventing damage to the load. Fuses are relatively inexpensive and easy to replace. They are often used in conjunction with circuit breakers to provide additional protection. Fuses are also used in power distribution systems to protect against overcurrent conditions.



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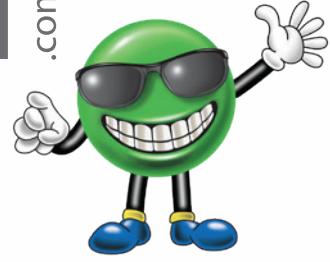
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