

CLICK CLICK PLUS

Programmable Controllers

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Since 2008, and with over a million components sold, **CLICK** PLCs have become an industry favorite for affordable, no-nonsense control.



STARTING AT \$92.00

The original and very popular CLICK PLC series has been serving the industrial control industry for decades and has become the go-to choice for many experienced Plant Engineers, Electrical Technicians, Machine Builders, as well as, beginners and students.

CLICK PLCs were designed with simplicity in mind, providing reliable control at a low, low cost and with little to no learning curve. This simplicity makes CLICK a perfect solution for small machines, home automation projects, pneumatic applications or anywhere a simple system needs a budget-saving control solution.

For simple control with minimal cost

GO TO:

CLICK vs CLICK PLUS Comparison	AutomationDirect CLICK PLCs	AutomationDirect CLICK PLUS PLCs
Micro USB (programming port)	✗	✓
Wi-Fi/Bluetooth Capability	✗	✓ (C2-02CPU / C2-03CPU)
Data Logging (microSD port)	✗	✓ (C2-03CPU or any CPU with C2-NRED module installed)
Battery Backup and Real Time Clock	✓ (All except C0-00X model)	✓
Serial Ports	RS232 (RJ12) - All RS485 (3-Terminal) - Standard and Analog PLCs	RS232 (RJ12) - C2-01CPU / C2-03CPU RS485 (3-Terminal) - C2-03CPU <small>*C2-DCM option module adds 2 additional RS232/RS485 (6-pin terminal) ports to any CPU</small>
Ethernet (RJ45)	✓ (Ethernet Models)	✓ (C2-01CPU / C2-03CPU)
CPU Option Module Slot(s)	✗	✓
Stackable I/O Support	✓	✓
Secure Email	✗	✓
Networking Protocols	DHCP (Ethernet Models)	DHCP SNTP DNS
Mobile App (for monitoring/control)	✓ (Ethernet Models)	✓
Mobile App (for CPU provisioning)	✗	✓ (C2-02CPU / C2-03CPU)
Industrial Protocols (dependant on model)	Modbus TCP - Ethernet Models EtherNet/IP - Ethernet Models Modbus RTU - All ASCII - All	MQTT - All Modbus TCP - All EtherNet/IP - C2-01CPU / C2-03CPU Modbus RTU - C2-01CPU / C2-03CPU ASCII - C2-01CPU / C2-03CPU OPC UA® - option slot module required
High-speed Inputs	✓ (Ethernet Models)	✓
High-speed Outputs	✗	✓
Security Features (passwords, disable ping, etc.)	✓ (Ethernet Models)	✓
Intelligent Option Module Support	✗	✓ C2-NRED: Node-RED® C2-OPCUA: OPC UA C2-DCM: Serial communication
FREE Programming Software	✓	✓

microSD

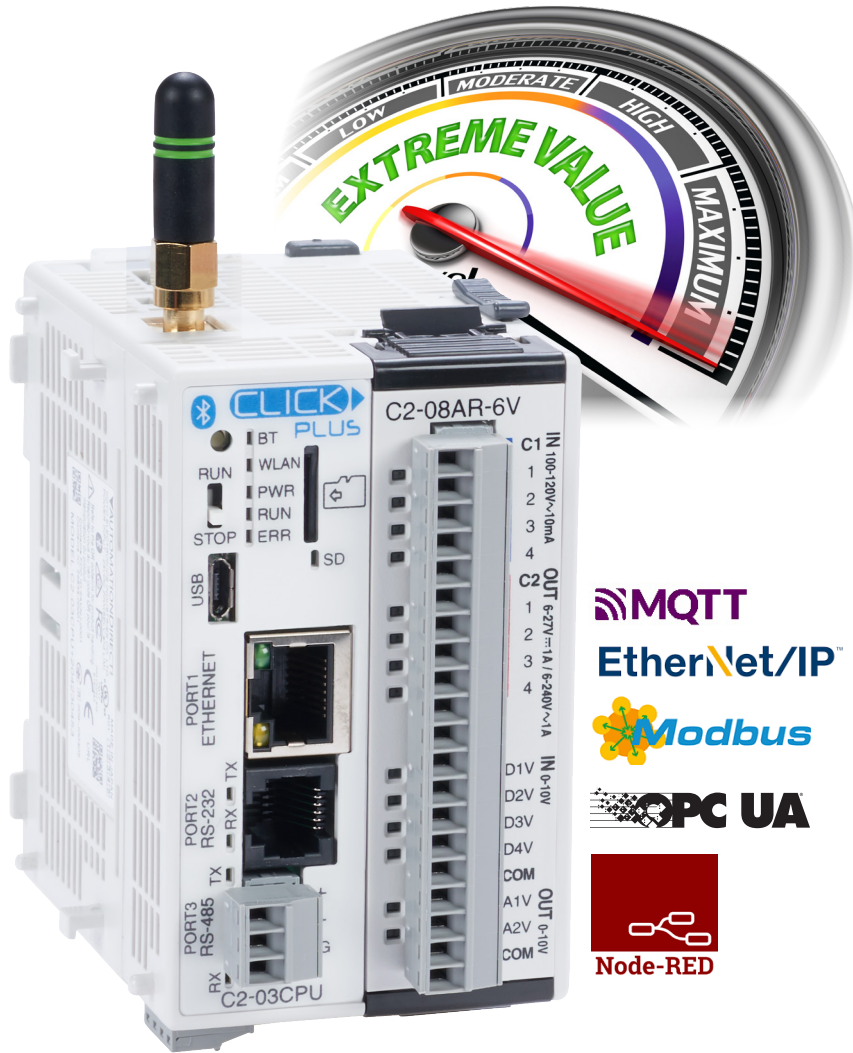
Wi-Fi

Bluetooth

USB

Ethernet

Serial (RS-232/RS-485)



VALUE OVERLOAD!

Building on the original CLICK's simple design, the 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 starting at price of just \$97.00 and with its robust, advanced feature set, the CLICK PLUS PLC line is undoubtedly the unmatched value leader!

For simple control with advanced capabilities

GO TO:

Simple control on STEROIDS!

We've taken our most practical, most popular PLC family and supercharged it with features you wouldn't expect from a simple low-cost controller. Data logging, Wi-Fi connectivity, MQTT communication and increased security measures are just a few of the impressive features offered with the CLICK PLUS PLC series. With a starting at price of only \$97.00 and free easy-peasy programming software, CLICK PLUS PLCs are a "must have" for simple, affordable control with a kick!

**CPU STARTING AT
ONLY
\$97.00**

Enhanced Security

- CLICK PLUS features a set of improved security measures including:
 - Encrypted password transfer and storage
 - Improved port management
 - Ping disable
 - Session security for connected devices
 - Secure email using TLS
 - Allow lists
 - Event records

FREE Mobile Apps

- The CLICK Plus provisioning mobile app for super convenient network configuration
- The Remote PLC mobile app for remote monitoring and editing of designated PLC registers
- Available at no cost to you, download them from the Apple App Store or Google Play today

Built-in Micro SD Port

- Supports micro SD memory cards for up to 32GB (SDHC) of data storage
- Used for data logging of PLC memory addresses
- Provides historical reference of control values - invaluable data when troubleshooting or maintaining a system
- MSD-SLC16G industrial-grade 16GB microSD card available

Micro-USB Port

- Plug and play programming or monitoring
- Connection established in an instant for fast code modifications

RJ45 Ethernet Port

- Built-in 10/100 Mbps multipurpose Ethernet port for fast networking and control
- Supports MQTT Client, EtherNet/IP and Modbus TCP Protocols

Serial Communication

- (1) RS-232 (RJ12) port and (1) RS-485 terminal port allow CPU to easily communicate with existing systems utilizing serial networks
- Supports Modbus RTU and ASCII

IIoT Ready!

- WLAN and the MQTT protocol allows simple connectivity to mobile devices and cloud database platforms
- Node-RED® programming for advanced IIoT applications (requires optional slot module)
- OPC UA® support for easy integration with OT and IT systems (requires optional slot module)



Built-in WLAN/Bluetooth

- Quick and simple wireless connections for programming, monitoring, and provisioning from PC's or mobile devices. NO CONNECTION CABLES REQUIRED
- Supports MQTT Client and Modbus TCP protocols
- Antenna sold separately (SE-ANT250 or SE-ANT210)

Stackable I/O

- Add up to 8 additional I/O modules for applications with greater I/O needs
- Up to 156 discrete I/O points or 60 analog channels possible with stackable I/O and CPU option slot(s)
- Uses the same time-tested stackable I/O modules as the original CLICK series with analog, discrete, relay, temperature, combination, and specialty modules available

CLICK PLUS PLC Overview Video



EtherNet/IP



C2-03CPU-2 shown priced at \$255.00;
C2-14TTL option module priced at \$103.00;
C2-NRED Node-RED module priced at \$118.00

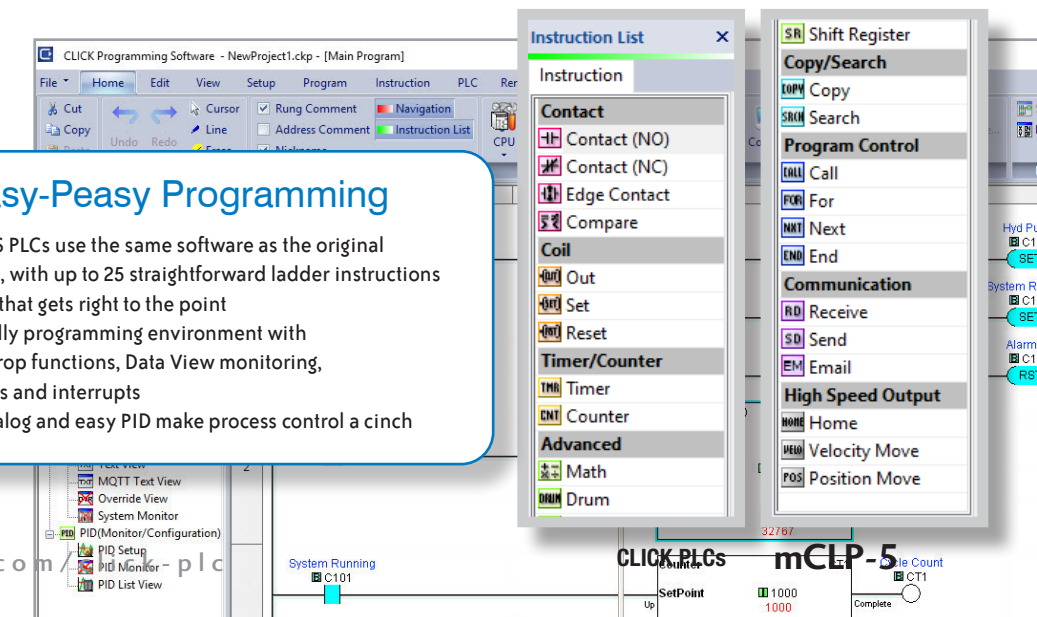
Built-in Option Module Slot(s)

- The CLICK PLUS option modules provide numerous I/O configurations to exactly match your application and can be changed as your needs change
- CPU's available with 1 or 2 option module slots
- Provides for a more versatile stand-alone controller with plenty of analog, discrete, relay, combination, and communication option modules available
- Discrete I/O option slot modules support high-speed I/O signals up to 100kHz (high-speed I/O allowed in slot 0 only)



FREE Easy-Peasy Programming

- CLICK PLUS PLCs use the same software as the original CLICK PLCs, with up to 25 straightforward ladder instructions for control that gets right to the point
- User-friendly programming environment with drag and drop functions, Data View monitoring, subroutines and interrupts
- No fuss analog and easy PID make process control a cinch



Node-RED® is a registered trademark of the OpenJS Foundation

OPC UA® is a registered trademark of the OPC Foundation

Extreme Value that's Extremely Versatile

The CLICK PLUS series of controllers offers six CPU options with varying degrees of capability so you can choose the features that best fit your application. Wi-Fi connectivity, Ethernet communication, and data logging are all available options with these low-cost CPUs. You can't find features like these for under \$250 anywhere else!

CLICK PLUS CPUs are also extremely versatile and can stand as complete PLC systems with custom analog and discrete I/O using CLICK PLUS I/O modules, and they can be expanded with up to 48 analog I/O slots.



CLICK PLUS OPTION MODULES

20 option modules are currently available to add advanced capabilities, additional communication ports, and analog or discrete I/O to any CLICK PLUS CPU. Simply insert the desired option module(s) into the built-in slot(s) of the CPU for a custom stand-alone PLC that can be reconfigured as needed.

STARTING AT \$70.00

The option modules available can be used with the appropriate CPU as a direct replacement for any of the original CLICK Ethernet PLCs. The table shows the original CLICK Ethernet PLCs and their equivalent CLICK PLUS CPU and option module.

C2-01CPU

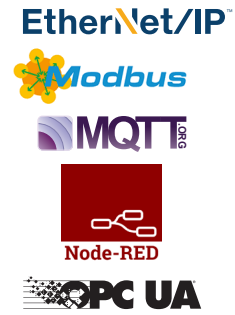
Single slot (\$97.00)

C2-01CPU-2

Double slot (\$136.00)

The lowest cost model of the CLICK PLUS CPUs with great features at a great price!

- WIRED ONLY CPU
- Modbus RTU, Modbus TCP, MQTT, and EtherNet/IP support
- Node-RED® and OPC UA® (option slot module required)
- Micro USB programming/monitoring port
- Ethernet 10/100Base-T (RJ45) port
- RS-232 (RJ12) serial port
- One or two option module slot(s)
- High-speed input and output support
- Enhanced security
- Free easy-to-use programming software
- Network Time Service (SNTP)



C2-02CPU

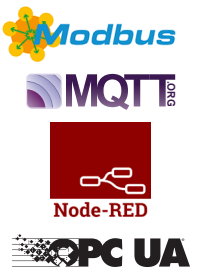
Single slot (\$151.00)

C2-02CPU-2

Double slot (\$193.00)

Our most affordable Wi-Fi/Bluetooth capable CPU. For those locations where wireless connections are preferred or whenever you want to cut out the time and expense needed for additional network cabling.

- WIRELESS ONLY CPU (antenna sold separately)
- Modbus TCP and MQTT support
- Node-RED® and OPC UA® (option slot module required)
- Wi-Fi and Bluetooth
- Micro USB programming/monitoring port
- One or two option module slot(s)
- High-speed input and output support
- Enhanced security
- Free easy-to-use programming software
- Network Time Service (SNTP)



C2-03CPU

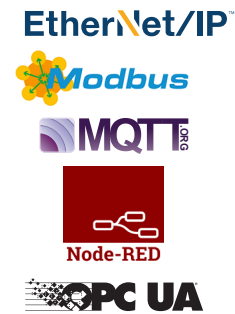
Single slot (\$205.00)

C2-03CPU-2

Double slot (\$255.00)

The top-of-the-line CPU, with all the impressive features of the C2-01 and C2-02 CPUs but with additional communication options and data logging support.

- WIRELESS/WIRED CPU (antenna sold separately)
- Data logging (microSD support)
- Modbus RTU, Modbus TCP, MQTT, and EtherNet/IP support
- Node-RED® and OPC UA® (option slot module required)
- Ethernet 10/100Base-T (RJ45) port
- RS-232 and RS485 serial ports
- Wi-Fi and Bluetooth
- Micro USB programming/monitoring port
- One or two option module slot(s)
- High-speed input and output support
- Enhanced security
- Free easy-to-use programming software
- Network Time Service (SNTP)



Who says a low-cost PLC can't have BIG FEATURES?!

As consumers we have been ingrained with the idea that anything inexpensive has to be lacking in features or quality. While that may be true for some of the other guys' controllers, CLICK PLUS CPUs offers many impressive features and options at a price point you'll find hard to believe combined with a reliability that has stood the test of time.

Date	Time	Inbound Count	Inbound Belt Speed (FPM)
9/2/2020	12:35:50	153	60
9/2/2020	12:36:50	513	61
		873	
		1233	
		1593	
		1953	
		2313	
		2673	
		3033	59
		3393	60
		3753	60

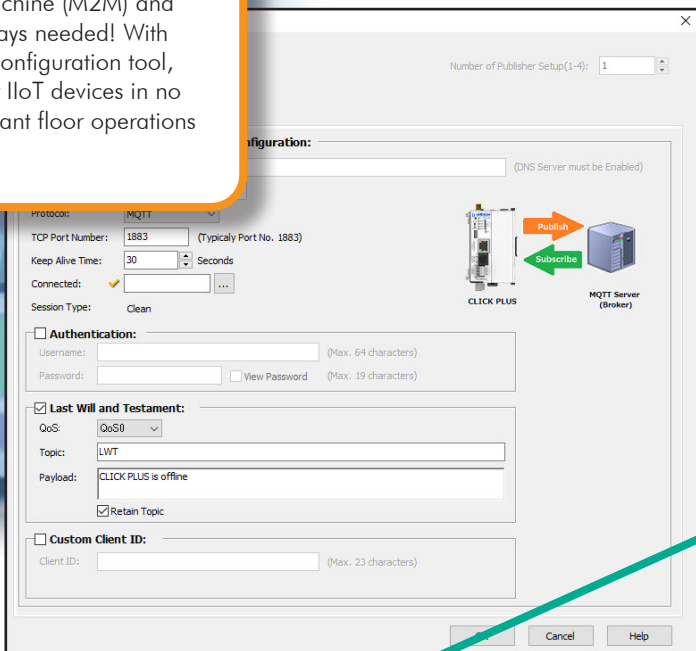
Up to
32GB
of data storage
w/microSD

See more on data logging in this video



MQTT included!

CLICK PLUS controllers support the lightweight MQTT protocol used in many machine-to-machine (M2M) and IIoT applications. No expensive gateways needed! With a user-friendly Publish and Subscribe configuration tool, CLICK PLUS can be connected to your IIoT devices in no time - providing a vital link between plant floor operations and upstream business systems.



(antenna sold separately)



microSD

Stay in the know with data logging

Track up to 16 tags at a time and save the data to the removable microSD card housed in the CPU. Capture in .CSV format up to 32GB of data either periodically (second, minute, hour, day, week, etc.) or when certain events occur. Scheduling and setup is done with the easy-to-use Data Logger configuration tool in the software.

- Track efficiency and performance
- Troubleshoot reoccurring or intermittent faults
- Predict future breakdowns
- Record runtimes, shutdowns, power consumption, environmental conditions, production quantities, or any value of importance

The PLC Error History and the Failed Password Entry Record are also stored on the removable microSD card in .CSV format.

Serial communication for easy integration

Serial communication has survived through the years due to its reliability and inexpensiveness. Although slower than newer transmission methods, serial is still a trusted and viable option for new systems and a must when integrating with older systems.



RS-232

ASCII

REMOVABLE
INTERCHANGEABLE
MODULE SLOT



Modbus TCP and EtherNet/IP are two of the leading industrial protocols in the US and are widely used in a range of industries. CLICK PLUS systems with Ethernet capability come with Modbus TCP and EtherNet/IP protocols standard so they can be installed in existing networks with no problem.

VFD
Part#
GS21-20P2
w/ optional
Modbus TCP card



Free straightforward software

The CLICK PLUS controller is programmed using the same simple software as the original CLICK PLCs. This software features a practical set of up to 25 instructions. You'll know exactly which instruction you need and avoid all the confusion that comes with controller overkill. Even the PID function has been streamlined to focus on the loop parameters programmers use the most, getting rid of unneeded complications.

The CLICK PLUS USB programming port allows instant connections for "in a hurry" logic changes.



USB



Ethernet

To get the job done quick, get it done with CLICK...PLUS

Installing a new system or machine at a job site can be a painstaking process and just running cable to the new install can be an arduous task. I don't think anyone looks forward to bending and installing long conduit runs overhead, or worse, underground. Going wireless allows you to bypass new cabling issues and CLICK PLUS can help you get there easily. The CLICK PLUS C2-02CPU/C2-02CPU-2 and C2-03CPU/C2-03CPU-2 controllers have Bluetooth enabled by default and allow the CLICK PLUS Provisioning App to connect and quickly configure the needed Wi-Fi settings. Provisioning is usually done once and involves the process of preparing and equipping the CLICK PLUS PLC network settings to allow a temporary connection to the user's network. This removes the need for network cables and the headaches involved with new cable runs. Not only do select CLICK PLUS CPUs provide Wi-Fi capability, but with Bluetooth provisioning your system/machine will be on the wireless network and communicating in less than 30 seconds!

Antenna sold separately
(SE-ANT250/
SE-ANT210)

After your Wi-Fi capable
CLICK PLUS CPU and
antenna of your choice
(sold separately) arrive,
install the controller and
and/or power it up with
the required 24VDC.

STEP
1

Bluetooth

Using the FREE CLICK
PLUS mobile app
(available for both
Android and Apple
devices) connect over
Bluetooth to the CPU.

STEP
2

Complete the
setup for the
CPU's Wireless-
LAN (WLAN)
and join your
wireless network.

STEP
3

Using a PC/
laptop, connect
over the wireless
network to your
CLICK PLUS CPU
and download
your program.

STEP
4

Wi-Fi
Out of the box
and on the
network in
4 easy steps

GET IT ON
Google Play

Download on the
App Store

4 simple steps and you're all set!
Now you can start up your
system ahead of schedule, do
some extra code verification,
move on to another project or
head to the break room, either
way you've got time to spare with
CLICK PLUS.



Click the screen
on robot Smiley's
chest to see a
demo of just how
fast setup can be

CLICK PLUS

CLICK PLUS
Connect to WiFi
in less than
30 Seconds

Why Wi-Fi?

If your facility or customer's job-site has segmented systems or control functions that are spread out across a wide area, like water treatment plants, wireless CLICK PLUS controllers can be used to quickly link new additions, or isolated operations, to the main control network without the hassles or money lost with new network cabling.

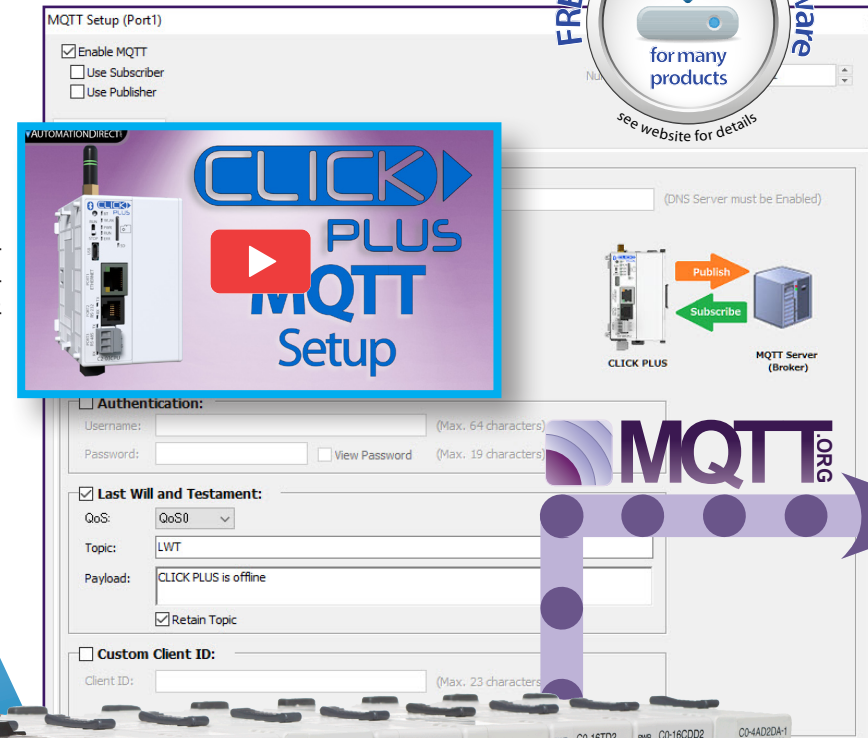
Wi-Fi CPU starting at \$151.00



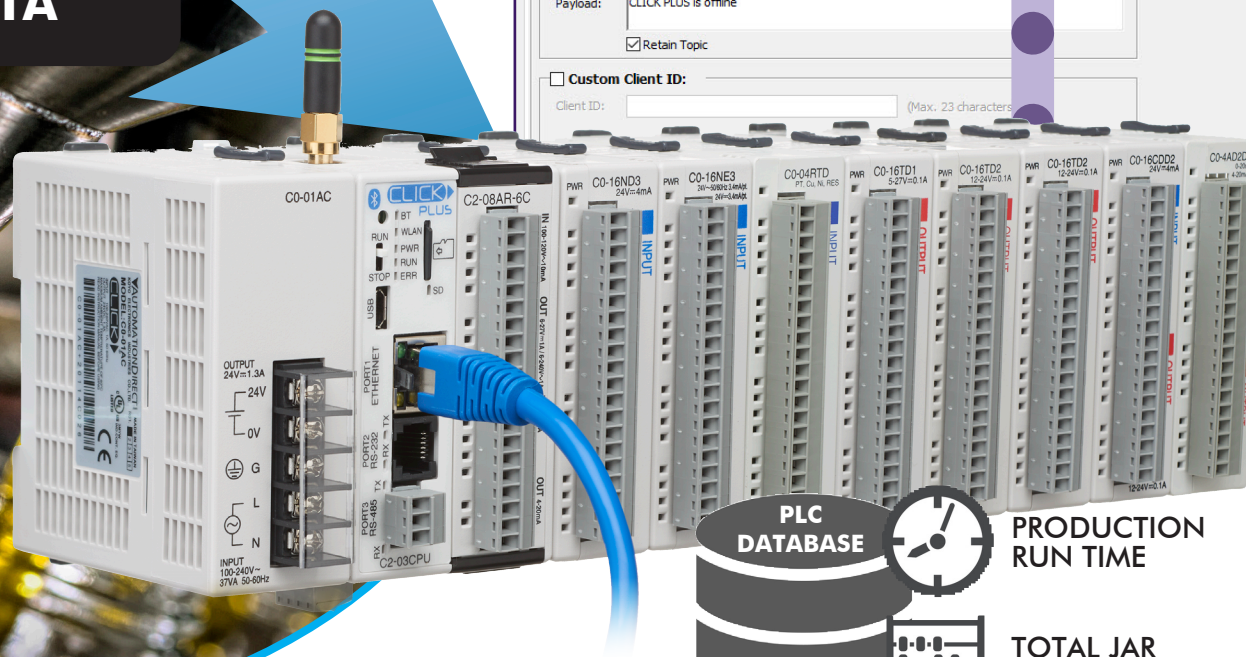
For easy IIoT, CLICK PLUS is a must!

The IIoT (Industrial Internet of Things) has taken plant-floor data to new frontiers. But it all starts with the sensor, transducer, or I/O device that is detecting process information and the controller that is gathering this information, refining it as needed, and transmitting it for upstream analysis or to remote access platforms. While some IIoT capable systems can be quite costly and complex, CLICK PLUS provides the needed data gathering, data refining and protocols for IIoT applications but with simplicity and at a minimal cost to you.

Quick video on
using MQTT with
CLICK PLUS

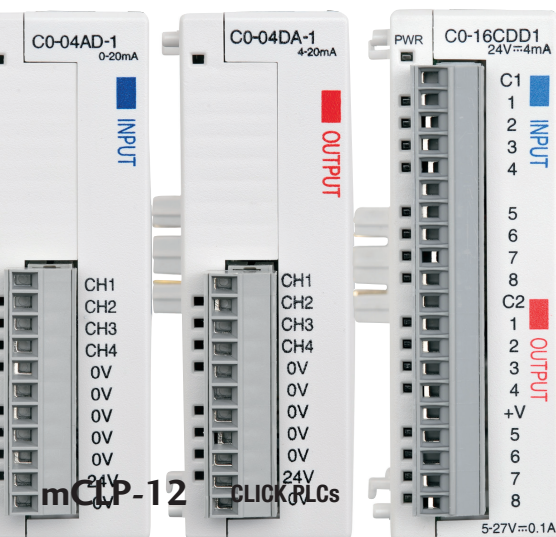
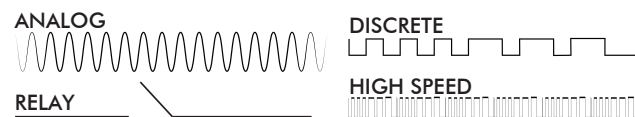


RAW SYSTEM
DATA



Multiple data gathering options

CLICK PLUS offers many I/O options to choose from for your system data collection. The CPU option slot(s) and the numerous stackable I/O modules, available in analog, discrete, high-speed, relay, temperature, and combination modules, provide for many custom I/O configurations. And with Modbus RTU, Modbus TCP and EtherNet/IP protocol support, CLICK PLUS can easily gather raw data from a variety of VFDs, sensors, switches, encoders, pilot devices, or almost any other control component your system may have.



REFINED SYSTEM DATA

Refining data into something meaningful

The CLICK programming software makes refining raw data into a meaningful metric a cinch. From CLICK's simple scaling function for analog signals, to streamlined PID loops with easy step-by-step configurations, to the super simple instructions, CLICK will easily transform a raw process signal, like 4-20mA, into a consumption rate, an energy efficiency score, a rejection percentage, or any other metric that's vital to you.

Make your system IIoT capable for only \$97.00!

With the explosion of Ethernet connectivity in the industrial realm and the resulting expansion of smart devices, cloud platforms and mobile networking, modern-day controllers are expected to support the protocols needed for these new technologies. The MQTT protocol has become the frontrunner for many of these machine-to-machine (M2M) and IIoT/cloud applications, due to its lightweight overhead and reduced bandwidth consumption. All of the low-cost CLICK PLUS CPUs (starting at \$97.00) provide MQTT communication, via Ethernet or wireless means, allowing even the simplest, most inexpensive systems to become IIoT capable.

IIoT/Cloud
platforms



3rd party cloud
dashboards



INDUSTRY
IIoT
4.0

CLICK PLUS and Node-RED® for Industry 4."WHOA!"

Industry 4.0 is the term used for the 4th industrial revolution that will bring about more intelligent machines, more connected devices (IIoT), and provide for better informed, data-driven decisions. It is projected to revolutionize several factors of standard business operations including supply chain management and eliminate many boundaries that exist between Operational Technology (OT) i.e. factory floor systems, and Information Technology (IT) i.e. business applications.

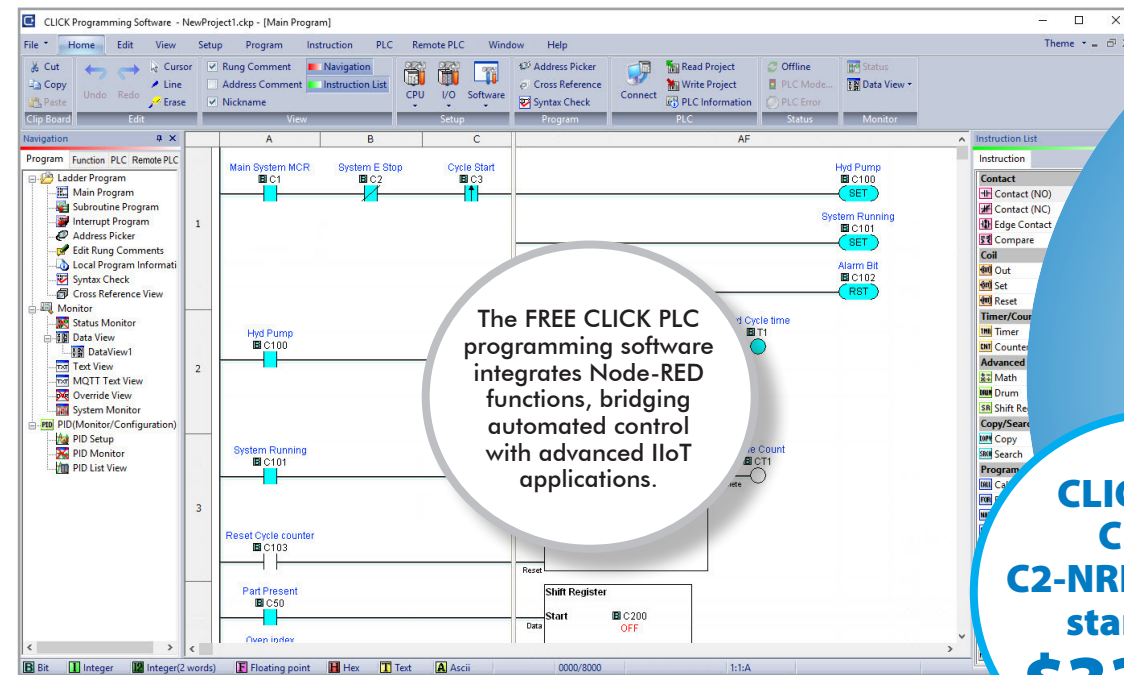
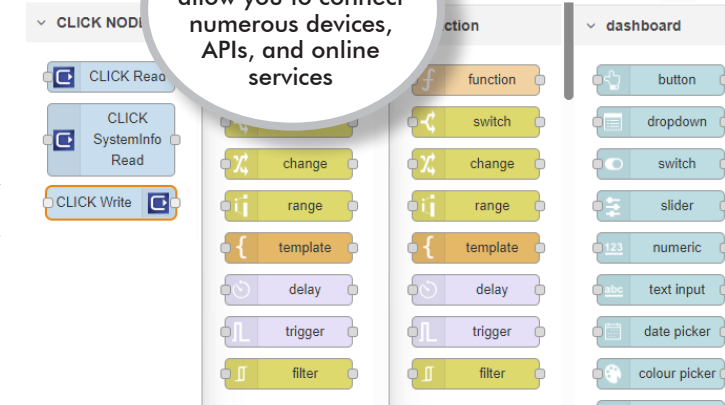
By combining the most affordable and user-friendly PLC in the industry, with one of the most popular open-source software tools in the industrial sector for developing IIoT applications, the CLICK PLUS CPU paired with the C2 Node-RED module can easily supercharge your OT/IT convergence and turn Industry "4 point oh" into Industry "4 point WHOA!"

INDUSTRY 4.0
WHOA!

What is Node-RED?

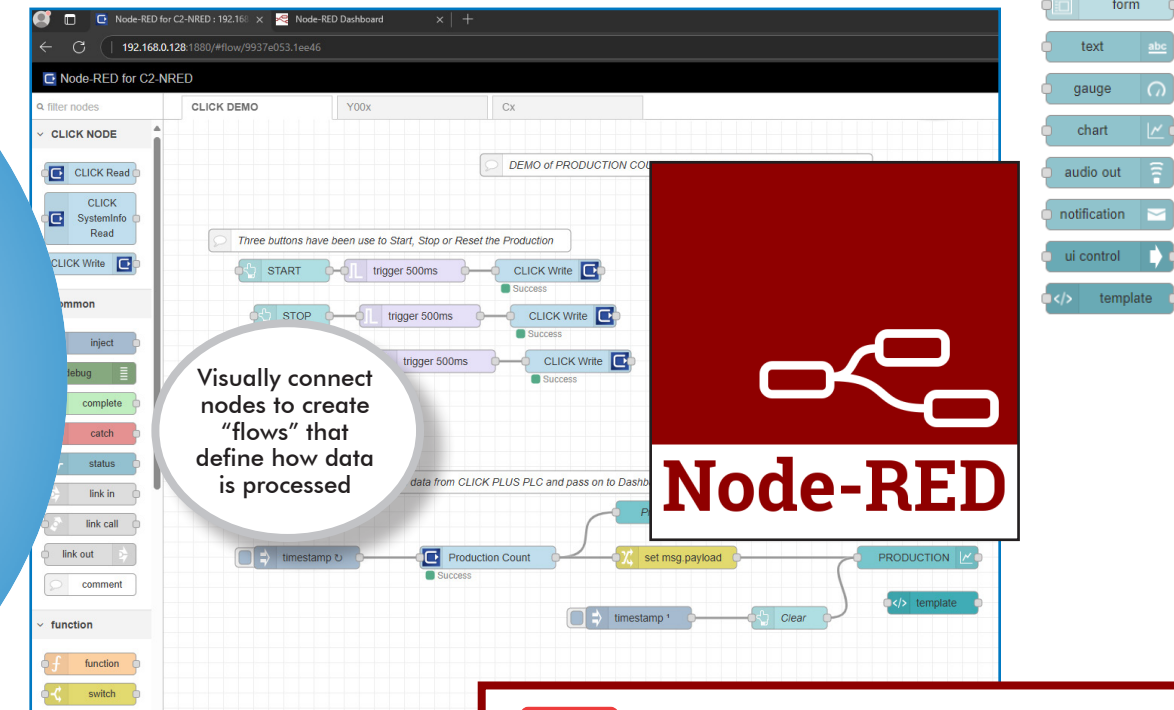
Node-RED is a visual programming tool for connecting physical hardware devices, APIs, and online services together as part of the Internet of Things. Node-RED's low-code, drag-and-drop interface makes it easy to create complex flows without writing code. Node-RED has a large library of built-in nodes for various tasks, including input/output, data processing, logic, and social media functions. Node-RED is an open source tool and there is a huge assortment of downloadable nodes available online at <https://flows.nodered.org/> including those designed to work with the C2-NRED module. Users can also write custom JavaScript to meet unique requirements, extending the platform's functionality.

A vast collection of pre-built nodes allow you to connect numerous devices, APIs, and online services



The FREE CLICK PLC programming software integrates Node-RED functions, bridging automated control with advanced IIoT applications.

CLICK PLUS CPU w/ C2-NRED module starting at \$332.00



Visually connect nodes to create "flows" that define how data is processed

Node-RED

No Risk, All Reward

Many Node-RED applications in industrial automation utilize off-the-shelf micro-controllers paired with industrial PLCs. This combination is not only susceptible to failure due to non-industrialized micro-controller boards but can be a pain when configuring the PLC and micro controller to communicate and share data. Using the C2-NRED slot module with the CLICK PLUS CPU eliminates the need for external micro-controllers and simplifies communications/data sharing.

The C2-NRED module has its own processor ensuring the main CPU remains unburdened but has direct access to the memory of the PLC and all the statuses needed to easily create a working application. The user can even determine which controller (PLC or C2-NRED or both) will control the process and several Node-RED nodes are available for working specifically with the CLICK PLUS PLC.

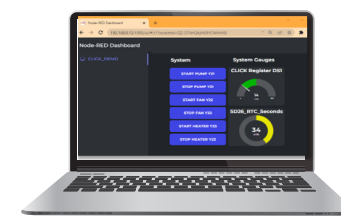
Adding the C2-NRED module to your CLICK PLUS controller will guarantee long lasting access to the Node-RED user friendly flow-based interface and extensive node library for your Industrial IIoT applications.



Node-RED® is a registered trademark of the OpenJS Foundation

What can Node-RED do?

Node-RED has had millions of downloads and is being applied in many applications, both commercial and industrial. One example is an OEM who makes cotton gins. This OEM used low-code Node-RED programming to connect weather data with their machinery's operations. Their system adjusted processes based on real-time humidity and rain forecasts vital to the cotton industry and even sent text alerts to operators. The Node-RED platform is extremely flexible and offers virtually unlimited possibilities, whether used for simple communication or for complex data analysis.



- Create interactive and customer-specific HMI dashboards that can be accessed with any browser.

- Easily integrate plant-floor data into existing business systems/databases, e.g., MES or ERP systems like SAP or Oracle.

- Access cloud-based services or website APIs for a wealth of information (weather reports, energy/raw material costs, etc.) that can be used to optimize your processes.

Incredible Integration with OPC UA®

OPC UA (Open Platform Communications Unified Architecture) is a long-standing communication protocol used throughout industry and provides a standardized way for industrial systems, regardless of manufacturer, to communicate and share data. OPC UA provides several benefits, including:

- Scalability - capable of large amounts of data transfer no matter the application
- Enhanced security - featuring authentication, authorization, and encryption methods
- Easier installation - provides seamless integration with existing systems containing various manufacturers' products
- Better efficiency - real-time data exchange for process optimization

The C2-OPCUA module when added to a CLICK PLUS CPU allows the simplicity and reliability of CLICK PLCs to be deployed in many more applications. This module integrates the CLICK PLUS CPU seamlessly into an OPC UA network, exposing all of the CLICK I/O and internal registers, making the entire CLICK system an intelligent remote I/O rack. With over 158 I/O, that makes the CLICK PLUS with this module one of the lowest cost OPC UA systems available. The industrial rated on-board C2-OPCUA module also improves reliability and reduces overall system costs by eliminating the need for an external OPC UA server device.

The FREE CLICK programming software stores the C2-OPCUA module configuration into the PLC project for simple project management. Rely on the proven CLICK CPU logic to control the operation, while making use of the C2-OPCUA for connectivity to advanced IT platforms. This combination makes CLICK PLUS a smart and simple solution for plant floor and business system integration.

**CLICK PLUS
Stackable I/O
starting at
\$58.00**

OPC UA®

**CLICK PLUS
CPU w/
C2-OPCUA module
starting at
\$292.00**

CONTROL & I/O NETWORK

ENTERPRISE
DATABASES

IT
Information Technology

With OPC UA support, the CLICK PLUS can work seamlessly with numerous 3rd party control platforms, business/IT systems, cloud networks, etc. including:

- PLCs (Programmable Logic Controllers): TIA Portal by Siemens, Studio 5000 by Rockwell Automation, EcoStruxure Control Expert by Schneider Electric, etc.
- HMI (Human Machine Interface) software: FactoryTalk View SE by Rockwell Automation, Proficy Machine Edition by GE Digital, zenon by Copra-Data, etc.
- SCADA (Supervisory Control and Data Acquisition) systems: Ignition by Inductive Automation, WinCC by Siemens, iFIX by GE Digital, etc.
- MES (Manufacturing Execution Systems): Oracle, GE Digital's Proficy, etc.
- IoT platforms: Microsoft Azure IoT, AWS IoT, IBM Watson IoT, etc.
- Data analytics and visualization tools: Tableau, Power BI, Grafana, and more

CLOUD
NETWORKS

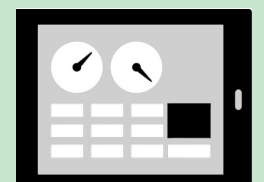
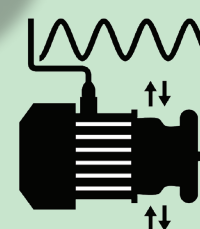
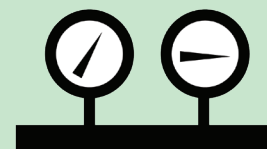
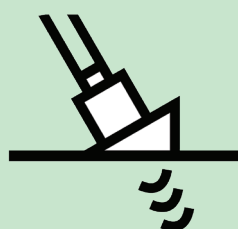
SECURE

Supports connectivity
between IT and OT systems
with the international
OPC UA communication
standard.

SCADA SYSTEMS

The C2-OPCUA module converts standard I/O signals into secure OPC UA data, providing the lowest-cost I/O available for an OPC UA network.

OT
Operational Technology

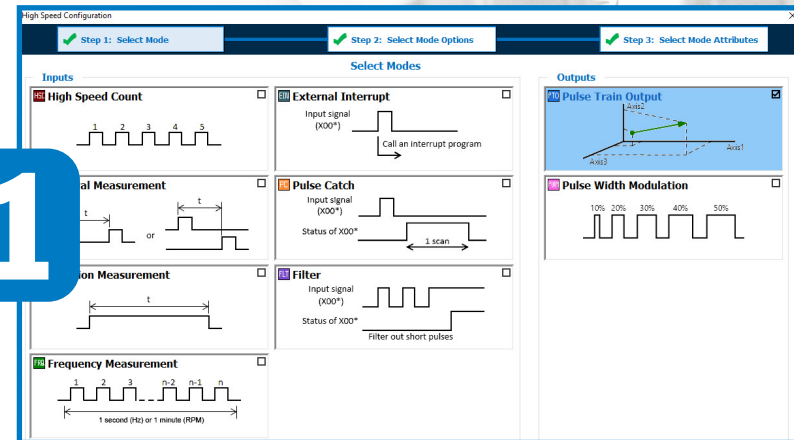


OPC UA® is a registered trademark of the OPC Foundation

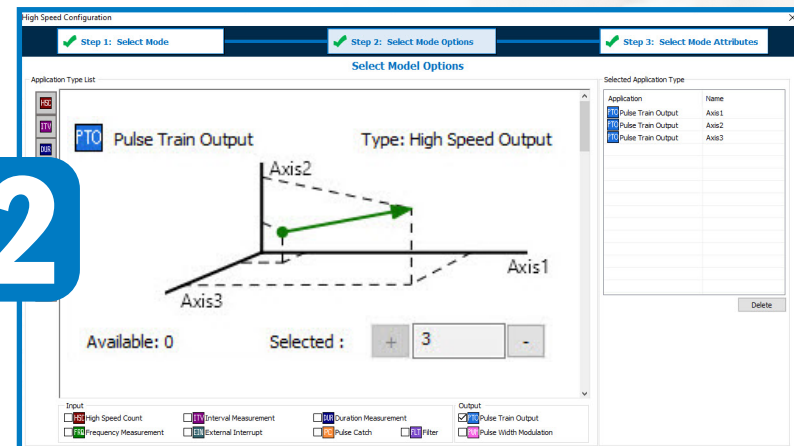
Motion this easy and affordable is soooo sweet!

CLICK PLUS is designed to make difficult tasks a cinch and every new feature must adhere to this design principle. Adding motion control to the CLICK PLUS PLC meant that it had to be simple to configure and program. First, we created an easy-to-use interface for configuring high-speed I/O. Using this interface, it only takes three steps to turn a CLICK PLUS PLC into a 3-axis motion controller:

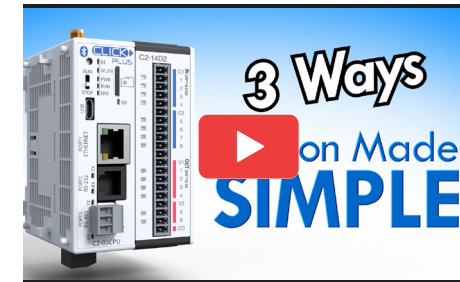
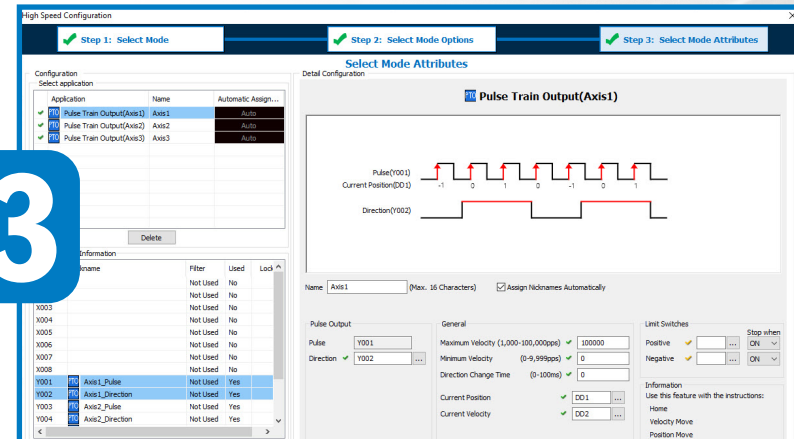
1) From the High-speed Configuration GUI, select your high-speed input and/or output modes.



2) If your mode selection in Step 1 has more than one option (ex: up, down, up and down, and quadrature options for high-speed counters), choose which option you need and assign the number of axis required.

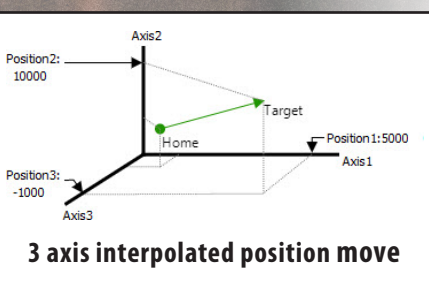
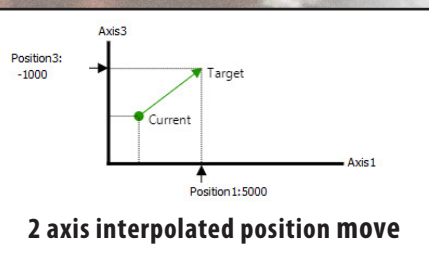
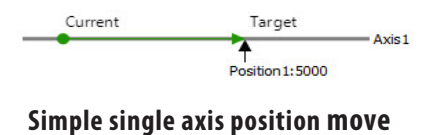
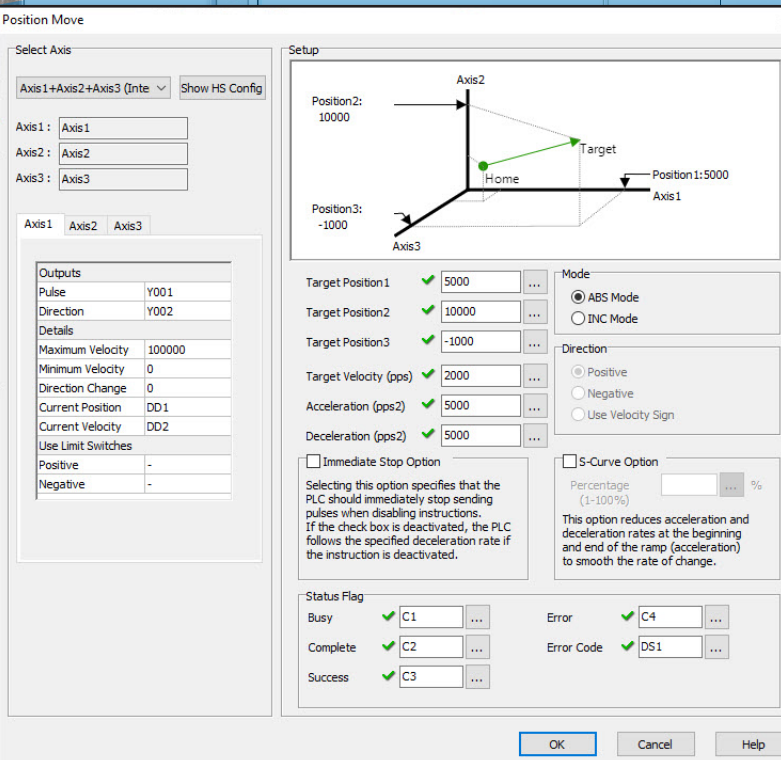
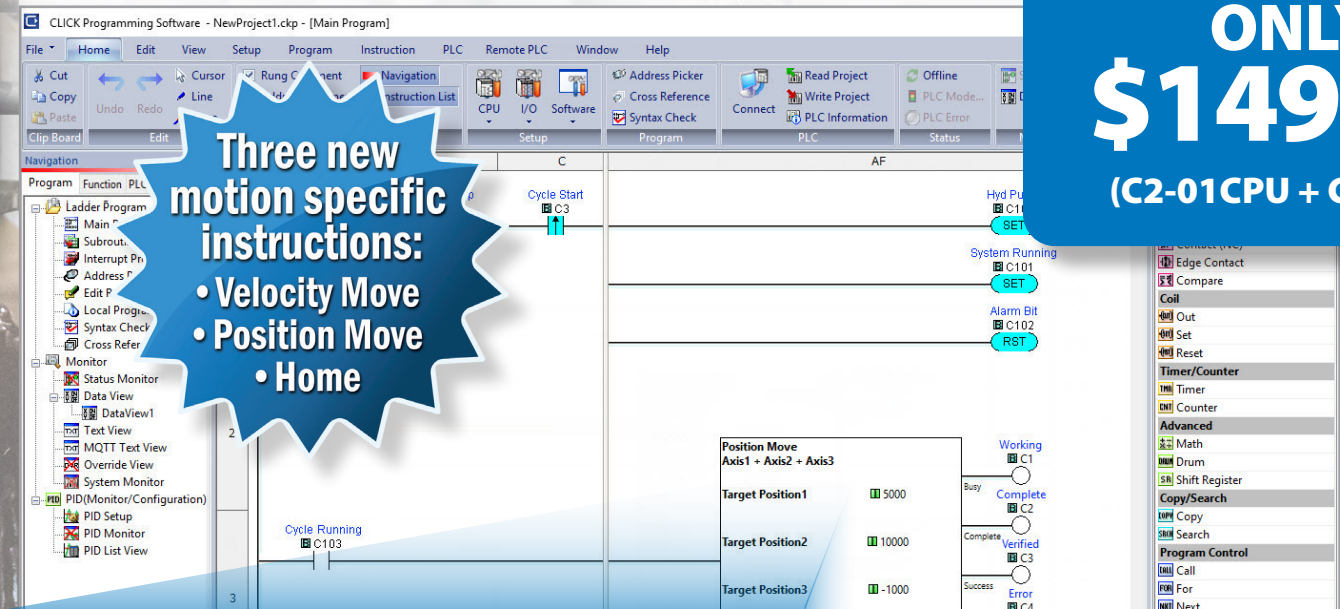


3) Assign your attributes to the selected mode. This includes settings like maximum velocity, pulse output address, and filtering parameters (if enabled). Once you have those set, you are ready to program.



Click the video for a short introduction to CLICK motion control.

The FREE CLICK PLUS programming software provides three motion instructions for building your profiles. Velocity Move, Position Move and Home instructions cover a majority of simple motion control applications that this controller is geared for. Each instruction has detailed information on the profile's parameters and even provides a graphical view of the configured profile. The Position Move instruction will also allow the use of interpolation with 2 or more axis.



Add the C2-14TTL module to your CLICK PLUS CPU for low-voltage (~5VDC), high-speed motion control signals.

OUTPUT PULSE MODES:

- Up to 3 axis
- Up to 3 PTO linear step/direction outputs
- Up to 3 PWM pulse width modulation outputs

AXIS PROFILES:

- Relative/absolute positioning
- Velocity mode
- Trapezoid
- S-Curve
- Registration
- Homing
- Jogging
- Linear mode

**3-AXIS
PTO/PWM
MOTION CONTROLLER**
**STARTING AT
ONLY
\$149.00**
(C2-01CPU + C2-14D1)

On the PLUS side, you're more secure than ever before

With increasing concern and interest for the security of PLC's, there is a growing need to integrate security directly into the PLC itself. The CLICK PLUS offers many different security features designed to minimize PLC vulnerabilities.

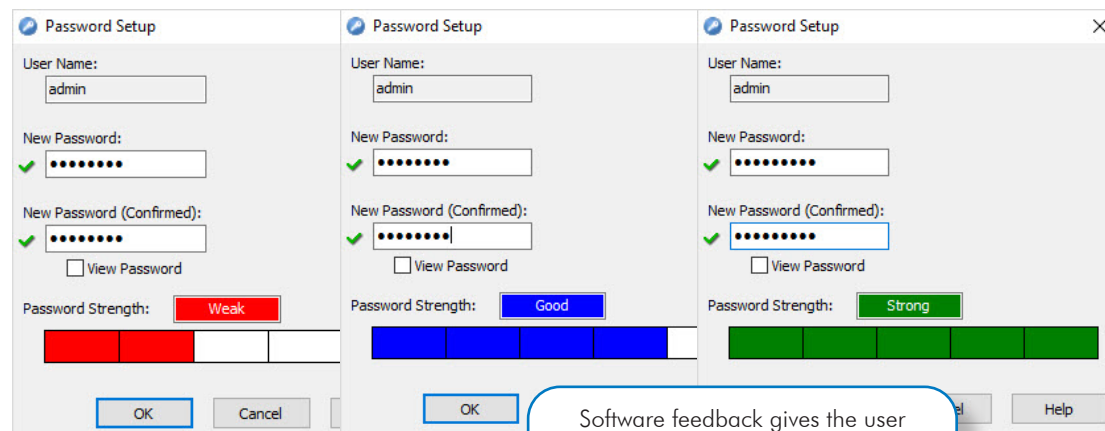
1 Secure PLC access

The CLICK PLUS PLC ships from the factory with a default username and password, however the first time a user connects to the PLC, they will be required to input a unique password or disable the PLC login password if desired. Forcing this change helps greatly reduce the chances of malicious software taking control of the PLC with easy-to-guess or publicly disclosed default login credentials.



2 Strong password support

The CLICK PLUS PLC supports strong passwords to allow for more secure PLC projects and data files. Only qualified passwords are allowed, and the software offers feedback on the strength of the password while the User account is being configured.



Software feedback gives the user feedback on the strength of the password they are selecting

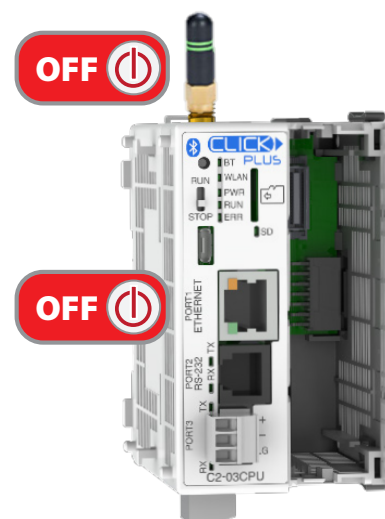
3 Disable PING response

Users can configure the PLC Ethernet RJ45 and Wi-Fi network ports to ignore PING requests from other devices. This makes the PLC invisible to pings and thus reduces the vulnerability to deliberate denial of service (DoS) attacks.



4 Improved port management

Users can disable all non-essential RJ45, Wi-Fi and Bluetooth ports as needed to reduce the vulnerability of unauthorized access.



5

Encrypted password transfer/storage

Encryption helps to protect project sensitive passwords from being hacked while being transferred over the network or stored in the PLC.



6

Secure email with TLS

Send secure emails with the CLICK PLUS Email instruction. This instruction allows for multiple recipients and customizable messages capable of sending dynamic data. The Email command utilizes Transport Layer Security (TLS) which is a cryptographic protocol that secures communication over a network by encrypting the connection between computers.

7

Allow List

The Allow List is used to explicitly allow certain other devices to communicate with the CLICK/CLICK PLUS CPU. This feature is supported by CLICK Ethernet (C0-1x) and CLICK PLUS (C2-x) CPUs.

8

Event Records

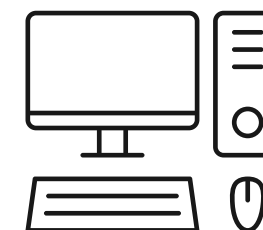
Logging the connection activity of the CLICK/CLICK PLUS CPU allows you to monitor for suspicious activity. Event records are stored for password attempts, Allow List rejections, and email activity (CLICK PLUS only).

9

Session-based software connections

The CLICK PLUS PLC platform utilizes session-based communication on the Wi-Fi and Ethernet ports. By using sessions, each initiated communication request must contain a unique ID. If the ID is missing, the CLICK PLUS PLC will discard the request. This allows only authorized access and helps prevent PCs from accessing the wrong PLC. Sessions will also time out if not utilized, closing the idle link between the programming software and the PLC which must be reestablished if needed.

The session ID is also used to limit the software session to only one simultaneous session at a time which removes the chances of multiple remote users making changes to the PLC project at the same time. If someone tries to log into a PLC that already has an active session, the software will notify the user that there is an existing software connection currently logged in.



UNIQUE SESSION KEY



CLICK PLCs

mCLP-21

mCLP-20

CLICK PLCs

AUTOMATIONDIRECT

1-800-633-0405

www.automationdirect.com/click-plc

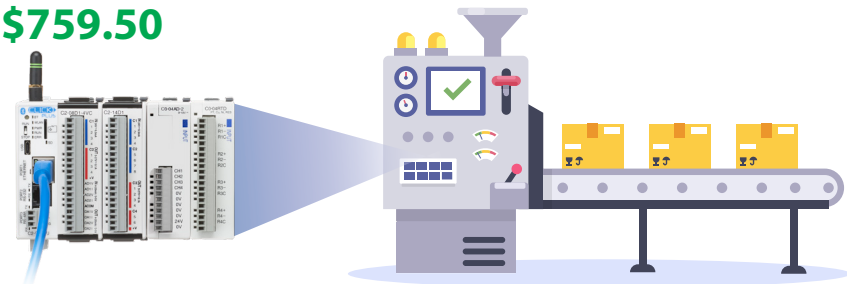
CLICK PLUS turns low budget...into mo' budget!

Let's face it, there are some systems that require controllers capable of extremely complex logic operations, but there are also times when these controllers are way over advanced and way over budget for the job at hand. When you just need a simple control solution to get the job done quickly, don't pay thousands for a controller with features you'll never use. Instead, save those thousands and get a controller designed with simplicity in mind, one that's one-quarter the price of other PLCs, and one that comes with some surprising capabilities you wouldn't expect at this price range including Wi-Fi connectivity, high-speed I/O, data logging and more!

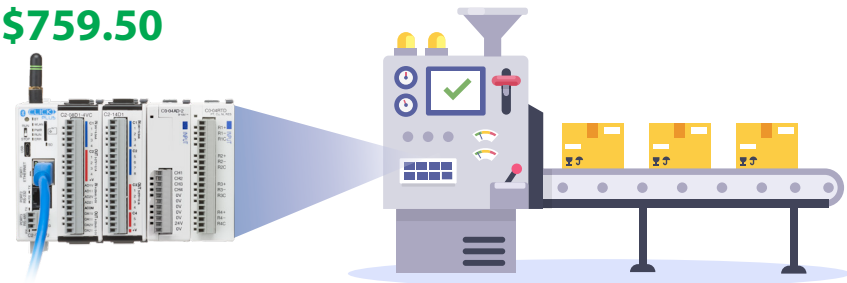


For less cost, you can easily control 4 machines with CLICK PLUS or...

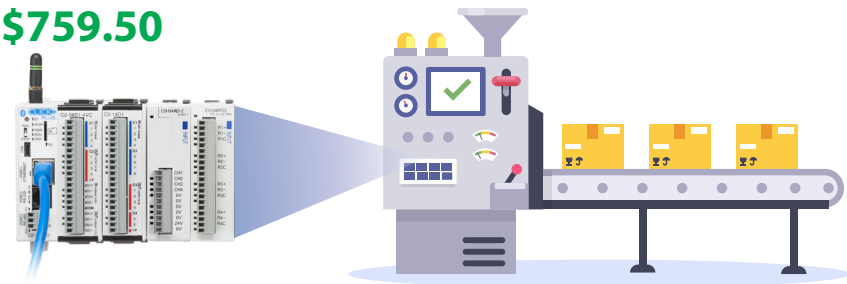
\$759.50



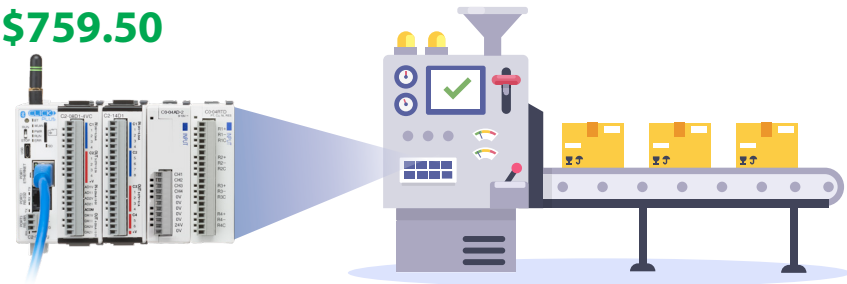
\$759.50



\$759.50



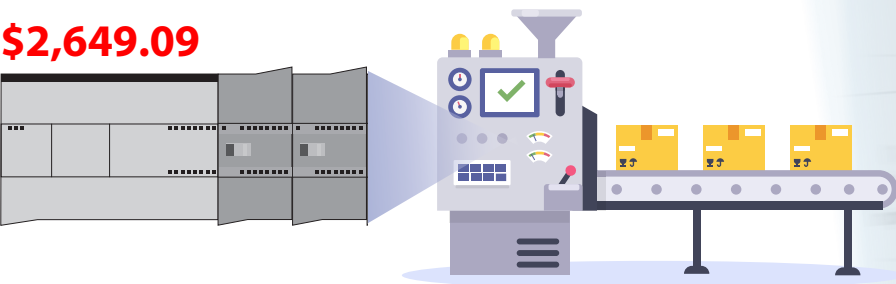
\$759.50



\$3,038.00 + FREE Software = **\$3,038.00 Total!**

...only 1 machine with an over-priced controller.

\$2,649.09



\$2,649.09 + \$814.50 Software = **\$3,463.59 Total**



Give your budget a boost and kick production into high gear with **CLICK PLUS!**

CPU and I/O Comparison

AutomationDirect CLICK PLUS

VS.

SIEMENS SIMATIC S7-1200

CPU

\$255.00

- C2-03CPU-2
 - Built-in I/O: None
 - CPU option I/O slots:
 - Add up to 2 option slot I/O modules for custom discrete, high-speed, and analog I/O, or add an additional 2 serial ports
 - Stackable I/O options:
 - Up to 8 I/O modules for an additional 128 discrete or 32 analog I/O

\$1,596.31

- 6ES7217-1AG40-0XB0
 - Built-in I/O:
 - 14 discrete inputs
 - 10 discrete outputs
 - 2 analog inputs (0-10V)
 - 2 analog outputs (0-20mA)
 - Expansion I/O options:
 - 1 signal board (4 I/O)
 - Up to 8 I/O modules for an additional 128 I/O
 - 3 comm modules

(8) 24VDC Discrete Inputs

\$58.00

C2-14D1 - discrete I/O option slot module

\$0.00

Included w/ CPU

(4) High-Speed Counter Inputs

\$90.00

C2-08D1-4VC - combination discrete/analog option slot module w/ high-speed I/O capability (100kHz)

\$0.00

Included w/ CPU (1MHz)

(2) High-Speed Pulse Outputs

\$0.00

Included w/ C2-08D1-4VC (100kHz)

\$0.00

Included w/ CPU (1MHz)

(6) Analog Input Channels (Voltage)

\$129.00

2 included w/ C2-08D1-4VC; C0-04AD-2 stackable module adds 4 more

\$538.69

2 included w/ CPU and 6ES7234-4HE32-0XB0 expansion module adds 4 more

(2) Analog Output Channels (Voltage)

\$0.00

Included w/ C2-08D1-4VC

\$0.00

Included w/ 6ES7234-4HE32-0XB0

(4) RTD Inputs

\$217.00

C0-04RTD

\$514.03

6ES7231-5PD32-0XB0

Wi-Fi Antenna (Optional)

\$10.50

SE-ANT210

N/A

Built-In Communication Options (Wired)

Ethernet, serial RS-232/485, micro USB

Ethernet

Built-In Communication Options (Wireless)

Wi-Fi (802.11b,g,n), Bluetooth (used with Mobile app to provision network settings)

None

SD Card Support



PID Control



Programming Software

FREE

C0-PGMSW

\$814.50

6ES78220AE050YA5

Total Cost

\$759.50



\$3,463.59

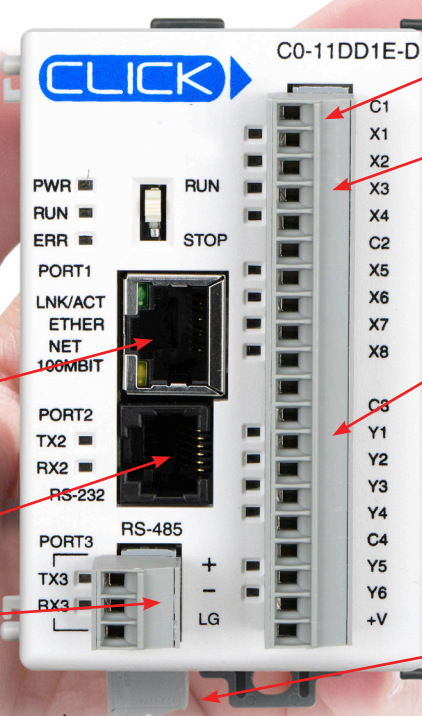


All prices are U.S. published estimated retail prices. AutomationDirect prices as of 2/10/2025. Siemens prices taken from www.alliedelec.com on 2/10/2025.

Just CLICK! for simple, affordable control



Unit shown actual size



Removable terminal block

Eight built-in discrete inputs

* High-speed input support on select CPU units

Six built-in discrete outputs

* Analog PLC units also available

Just add 24 VDC to get running

Or, add a CLICK 110 VAC to 24VDC power supply



10/100 Mbps Ethernet port (on select models) for Modbus TCP (client/server) and EtherNet/IP Implicit and Explicit (adapter server) communication

Up to two serial communication ports (RS-232 and RS-485) for operator interfaces, PC programmers or any Modbus RTU/ASCII device

* CLICK Basic PLC units starting at \$92.00, Ethernet PLC unit (shown) starting at \$212.00

Just CLICK for quality

The multibillion dollar JTEKT group of companies primarily provides components to automotive manufacturers such as Toyota.

With their extensive engineering and manufacturing background, we expected nothing but the best, and JTEKT delivered! While development focused on building a reliable product, they were also able to deliver a product that offers the best combination of price, ease of use, and features.

Mighty as a stand-alone unit, or expand to 142 total I/O!

Just CLICK to get started

The CLICK™ family is an easy-to-use controller that is cost-effective even in applications that would require just a few relays, and more flexible to boot.

With a starting price of \$92.00 for a basic discrete controller offering eight built-in digital inputs and six built-in digital outputs, this stand alone micro brick PLC is by far the most practical choice for the money.

Just CLICK to get FREE Software

The CLICK PLC programming software is available as a FREE download from our Web site.

Unlike many "FREE" programming packages you may be familiar with, this software is packed with features that simplify your learning curve and shorten your programming time.

CPU and I/O Comparison	AutomationDirect CLICK	VS. Schneider Electric Modicon
Power Supply	\$51.00 C0-00AC	\$0.00 No external power supply required
CPU	\$269.00 C0-12DRE-2-D • 4) Discrete Inputs • 4) Relay Outputs • 4) Analog (0-10V) Inputs • 2) Analog (0-10V) Outputs	\$446.27 TM221CE16R • 9) Discrete Inputs • 7) Relay Outputs • 2) Analog Inputs (0-10V)
(8) 24VDC Discrete Inputs	\$73.00 C0-08CDB (with the CPU's built-in I/O, this module provides the needed 4 discrete inputs and 3 relay outputs)	\$0.00 Included with CPU
(7) Relay Outputs		
(4) Analog Input Channels (0-10V)	\$0.00 Included with CPU	\$349.52 TM3A12H (with CPU's built-in I/O, this module adds the needed 2 analog inputs)
(2) Analog Output Channels (0-10V)	\$0.00 Included with CPU	\$301.44 TM3A02
(4) Thermocouple Inputs	\$217.00 C0-04THM	\$406.41 TM3T14
Ethernet	✓ 1) 10/100 Mbps port	✓ 1) 10/100 Mbps port
Serial	✓ 1) RS-232 port and 1) RS-485 port	✓ 1) RS-232 port and 1) RS-232/RS-485 port
Local Expansion I/O	✓ Up to 8 modules with up to 16 pts per module	✓ Up to 7 modules with up to 32 pts per module
SD Card Support	✗	✓
USB Programming	✗	✓
Programming Software	FREE C0-PGMSW	FREE EcoStruxure Machine Expert Basic
Total Cost	\$610.00	\$1,503.64

All prices are U.S. published estimated retail prices. AutomationDirect prices as of 2/10/2025. Schneider Electric prices taken from www.alldataelec.com 2/10/2025.

1-800-633-0405

Simply CLICK to get started

What is it?

CLICK micro-brick PLCs, starting at \$92.00, offer stackable I/O modules and free programming software for a low-cost and easy-to-use high-quality machine controller. It is designed for first-time PLC customers as well as experienced users.

What's it got?

• Thirty-one stand-alone DIN-rail mount DC-powered PLC combinations, including:

- 8 DC In / 6 DC Out (sinking)
- 8 DC In / 6 DC Out (sourcing)
- 8 DC In / 6 Relay Out
- 4 DC In / 4 DC Out (sinking), 2 analog in, 2 analog out (current / voltage selectable)
- 4 DC In / 4 DC Out (sourcing), 2 analog in, 2 analog out (current / voltage selectable)
- 4 DC In / 4 Relay Out, 2 analog in, 2 analog out (current / voltage selectable)
- 4 AC In / 4 Relay Out, 2 analog in, 2 analog out (current / voltage selectable)
- 4 DC In / 4 DC Out (sinking), 4 analog in, 2 analog out (current only or voltage only)
- 4 DC In / 4 DC Out (sourcing), 4 analog in, 2 analog out (current only or voltage only)
- 4 DC In / 4 Relay Out, 4 analog in, 2 analog out (current only or voltage only)
- 4 AC In / 4 Relay Out, 4 analog in, 2 analog out (current only or voltage only)

- Built-in communication ports (both Ethernet and serial communication options are available)
- High-speed input support on select CPU units
- Real-time clock and battery back-up in standard, analog and Ethernet PLCs
- Removable terminal blocks
- 28 stackable, I/O option modules
- Program AND documentation stored in PLC
- FREE, high-feature programming software

What can it do?

Replace even just a few relays cost-effectively and gain a world of flexibility. Interface to any Modbus RTU enabled device with the RS-232 port (on all PLCs) and/or RS-485 port (on standard, analog, Ethernet standard and Ethernet analog PLCs) or use the Ethernet port for Modbus TCP (client/server) or EtherNet/IP Implicit and Explicit (adapter server) connections (on all Ethernet PLCs)

What does it take to get started?

- 1: Click on our Web site at www.clickplcs.com to view all the latest detailed product information.
- 2: Click <http://support.automationdirect.com/demos.html> to download free software and take a test drive.
- 3: Click on our store www.automationdirect.com and get a CLICK shipped fast!



BASIC PLC UNITS

- Two RS-232 comm ports
- Super Capacitor

C0-00DD1-D
\$92.00

8 DC sink/source inputs, 6 DC sinking outputs

C0-00DD2-D
\$92.00

8 DC sink/source inputs, 6 DC sourcing outputs

C0-00DR-D
\$118.00

8 DC sink/source inputs, 6 Relay outputs

C0-00AR-D
\$128.00

8 AC inputs, 6 relay outputs

STANDARD PLC UNITS

- Two RS-232 comm ports
- One RS-485 comm port
- Super Capacitor plus battery
- Real-time clock

C0-01DD1-D
\$139.00

8 DC sink/source inputs, 6 DC sinking outputs

C0-01DD2-D
\$139.00

8 DC sink/source inputs, 6 DC sourcing outputs

C0-01DR-D
\$156.00

8 DC sink/source inputs, 6 Relay outputs

C0-01AR-D
\$156.00

8 AC inputs, 6 relay outputs

ANALOG PLC UNITS

- Two RS-232 comm ports
- One RS-485 comm port
- Super Capacitor plus battery
- Real-time clock

C0-02DD1-D
\$192.00

4 DC inputs, 4 DC sinking outputs, 2 Analog inputs, 2 Analog outputs

C0-02DD2-D
\$195.00

4 DC inputs, 4 DC sourcing outputs, 2 Analog inputs, 2 Analog outputs

C0-02DR-D
\$204.00

4 DC inputs, 4 Relay outputs, 2 Analog inputs, 2 Analog outputs

Get connected fast with just a simple CLICK

Low-cost Ethernet!

CLICK Ethernet PLC units come with a 10/100 Mbps multi-purpose Ethernet port for faster networking and control. Use the built-in Ethernet port to program your system, network your CLICK, or control Ethernet-enabled end devices. Using Modbus TCP or EtherNet/IP protocols, the CLICK Ethernet PLCs will easily integrate into existing networks and provide a simple, cost effective solution for your application.

Check out how easy EtherNet/IP is with CLICK, in this quick how-to video.

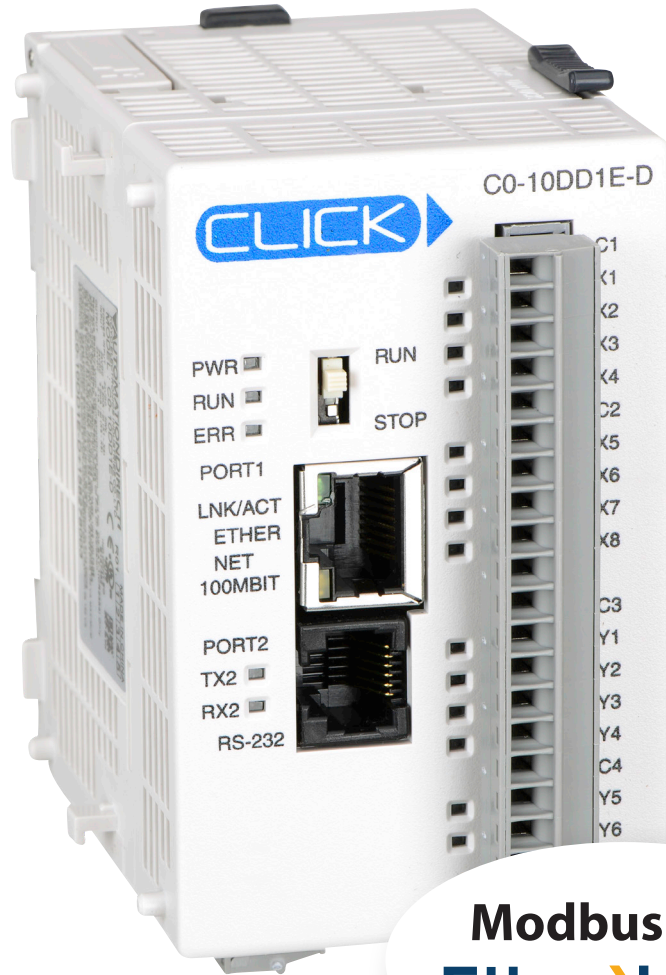


Run Time Edits

The CLICK Ethernet PLCs not only allow for faster connections but they also come with more memory. The added memory size gives CLICK the ability to perform run-time edits on live machinery and/or processes. This feature can greatly reduce unnecessary downtime and is an important addition to an already extremely practical PLC.

Faster Execution

Along with improved communication speed, CLICK Ethernet PLCs are capable of executing logic 3 to 10 times faster than before. Nowhere else will you find this level of performance at this low of a price!



Modbus[®] TCP
EtherNet/IP[™]

CLICK with Ethernet

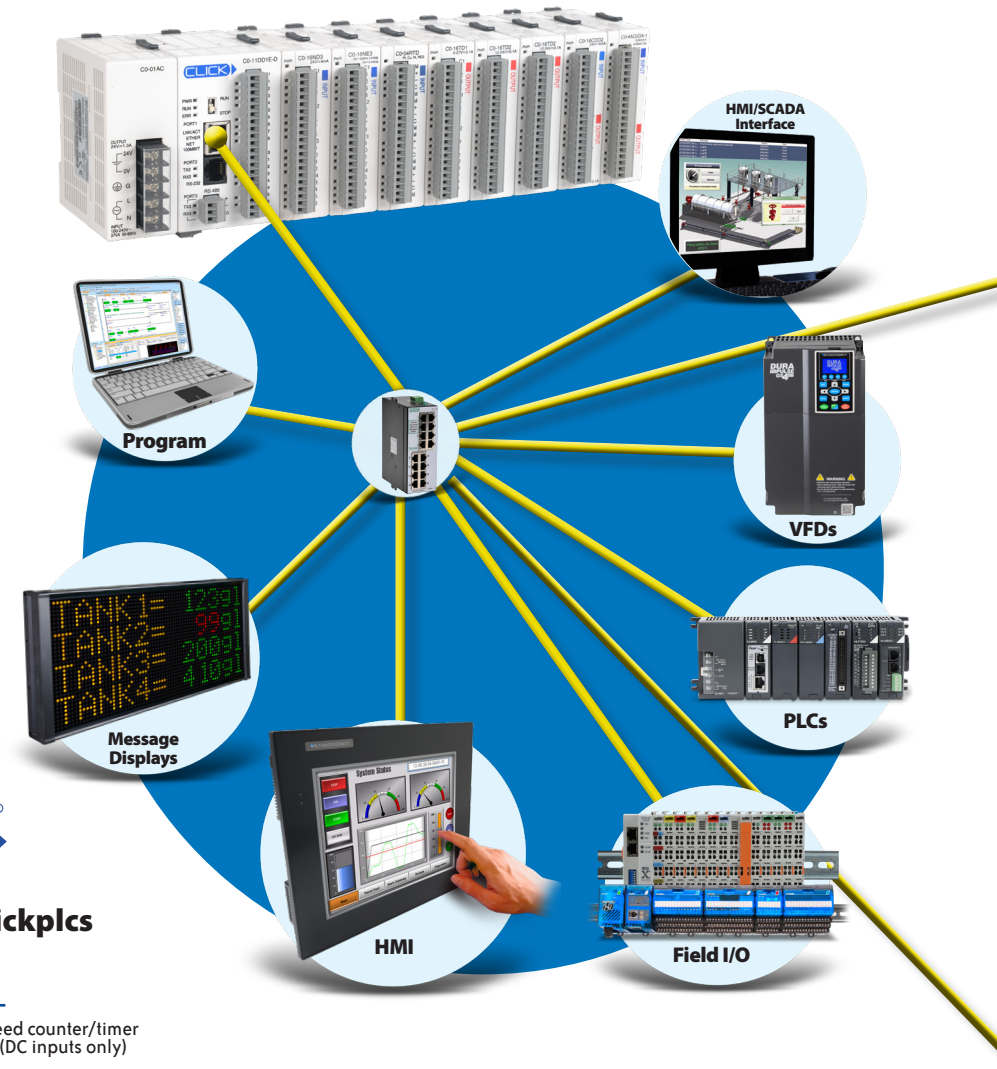
The added Ethernet capability gives this mighty micro the versatility needed in today's industrial environment. Connect multiple Modbus TCP servers/clients as well as up to two EtherNet/IP connections to the CLICK Ethernet PLC models. These models also offer a serial port that can be used for Modbus RTU connections. Making this a perfect unit for a low-cost, highly capable control system.

High-speed Counter/Timer Inputs

CLICK Ethernet PLC units with DC inputs also offer high-speed functionality capable of handling input pulse frequencies up to 100kHz. Easily count and/or calculate pulse rates from dedicated inputs or encoder signals that are used in many applications including package tracking and picking systems.



www.automationdirect.com/clickplcs



ETHERNET BASIC PLC UNITS

- One 10/100 Mbps Ethernet comm port
- One RS-232 comm port
- High-speed counter/timer support (DC inputs only)
- Super Capacitor plus battery
- Real-time clock

C0-10DD1E-D \$183.00 8 DC sink/source inputs, 6 DC sinking outputs	C0-10DD2E-D \$183.00 8 DC sink/source inputs, 6 DC sourcing outputs
C0-10DRE-D \$196.00 8 DC sink/source inputs, 6 relay outputs	C0-10ARE-D \$197.00 8 AC inputs, 6 relay outputs

ETHERNET STANDARD PLC UNITS

- One 10/100 Mbps Ethernet comm port
- One RS-232 comm port
- One RS-485 comm port
- High-speed counter/timer support (DC inputs only)
- Super Capacitor plus battery
- Real-time clock

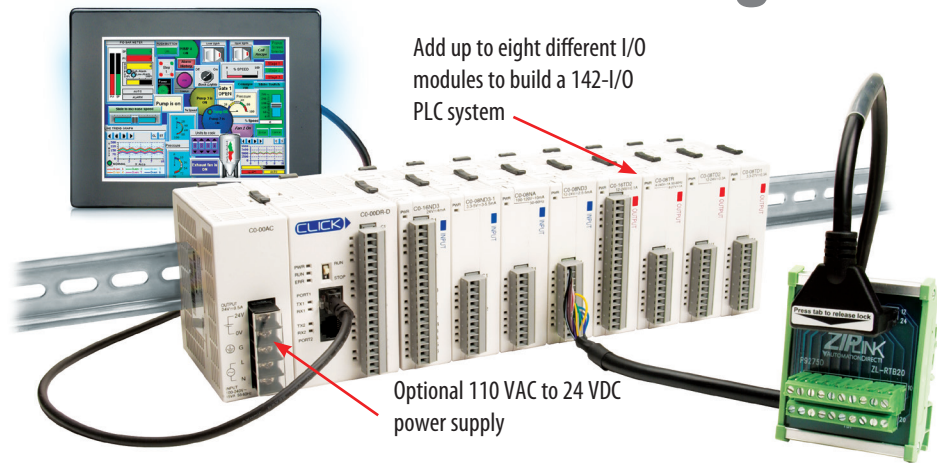
C0-11DD1E-D \$212.00 8 DC sink/source inputs, 6 DC sinking outputs	C0-11DD2E-D \$212.00 8 DC sink/source inputs, 6 DC sourcing outputs
C0-11DRE-D \$226.00 8 DC sink/source inputs, 6 relay outputs	C0-11ARE-D \$226.00 8 AC inputs, 6 relay outputs

ETHERNET ANALOG PLC UNITS

- One 10/100 Mbps Ethernet comm port
- One RS-232 comm port
- One RS-485 comm port
- High-speed counter/timer support (DC inputs only)
- Super Capacitor plus battery
- Real-time clock

C0-12DD1E-D \$253.00 4 DC inputs, 4 DC sinking outputs, 2 Analog inputs, 2 Analog outputs (current/voltage)	C0-12DD2E-D \$253.00 4 DC inputs, 4 DC sourcing outputs, 2 Analog inputs, 2 Analog outputs (current/voltage)	C0-12DRE-D \$269.00 4 DC inputs, 4 relay outputs, 2 Analog inputs, 2 Analog outputs (current/voltage)	C0-12ARE-D \$269.00 4 AC inputs, 4 relay outputs, 2 Analog inputs, 2 Analog outputs (current/voltage)
C0-12DD1E-1-D \$253.00 4 DC inputs, 4 DC sinking outputs, 4 Analog inputs, 2 Analog outputs (current)	C0-12DD2E-1-D \$253.00 4 DC inputs, 4 DC sourcing outputs, 4 Analog inputs, 2 Analog outputs (current)	C0-12DRE-1-D \$269.00 4 DC inputs, 4 relay outputs, 4 Analog inputs, 2 Analog outputs (current)	C0-12ARE-1-D \$269.00 4 AC inputs, 4 relay outputs, 4 Analog inputs, 2 Analog outputs (current)
C0-12DD1E-2-D \$253.00 4 DC inputs, 4 DC sinking outputs, 4 Analog inputs, 2 Analog outputs (voltage)	C0-12DD2E-2-D \$253.00 4 DC inputs, 4 DC sourcing outputs, 4 Analog inputs, 2 Analog outputs (voltage)	C0-12DRE-2-D \$269.00 4 DC inputs, 4 relay outputs, 4 Analog inputs, 2 Analog outputs (voltage)	C0-12ARE-2-D \$269.00 4 AC inputs, 4 relay outputs, 4 Analog inputs, 2 Analog outputs (voltage)

Just CLICK to make a larger PLC



Add up to eight different I/O modules to build a 142-I/O PLC system

Optional 110 VAC to 24 VDC power supply

Expandable to 142 I/O

At \$92.00, you get a ton of application control for your automation buck. The CLICK PLC offers you many options for your discrete and simple analog control applications.

The basic, standard, Ethernet basic and Ethernet standard PLCs offer, built in, eight discrete inputs and six discrete outputs; the analog and Ethernet analog PLCs include four discrete inputs, four discrete outputs, two or four analog inputs and two analog outputs. These DC-powered PLCs are a mighty controller as a stand alone unit, or expand your I/O with up to eight of the 28 available option modules for up to 142 total discrete I/O. The I/O lineup offers you 24 VAC input, both sinking and sourcing 24 VDC input and output options, 120 VAC input and output modules, and relay modules up to 10 amps for your discrete applications; analog modules support 4-20 mA or 0-10 VDC input and output options for simple process measurement and control. An 8-point discrete input simulator module and 4-channel analog POT module are also available.

With multiple options for main input power, you decide what best fits into your control panel. Use your existing 24 VDC power supply (if applicable), select one of our low-cost CLICK PLC power supplies (based on your system power budget

requirements) or select one of AutomationDirect's rugged Rhino power supplies.

RS-232 communications ports supporting industry standard Modbus RTU protocol are included on all units. These ports are suitable for connection to a PC for programming, networking PLCs, C-more/C-more Micro operator interface panels, variable frequency drives, servos, steppers, and other Modbus RTU enabled devices. The standard, analog, Ethernet standard and Ethernet analog PLCs also include one RS-485 port.

The Ethernet versions incorporate a 10/100 Mbps multipurpose Ethernet port to communicate with Modbus TCP and EtherNet/IP enabled devices, in addition to the RS-232 and optional RS-485 ports. Ethernet PLC units with DC inputs are also capable of tracking high-speed inputs up to 100kHz.

Simple to learn ... easy to use

The CLICK PLC programming software is based on the C-more and C-more Micro programming environments. We leveraged these two great programming packages developed by JTEK to create CLICK's intuitive programming tool, and then made it a FREE download from our Web site. So you now have free software for your practically free PLC! But don't let the \$0 price tag fool you - you'll find this software loaded with options that you would normally expect to pay extra for!

DISCRETE OUTPUT MODULES

C0-08TD1 \$50.00 8 DC Outputs (Sinking) 3.3-27 VDC 0.3A/pt	C0-04TRS \$62.00 4 Relay Outputs 6-240 VAC or 6-27 VDC 7A/pt
C0-08TD2 \$51.00 8 DC Outputs (Sourcing) 12-24 VDC 0.3A/pt	C0-04TRS-10 \$70.00 4 Relay Outputs 6-240 VAC or 6-24 VDC 10A/pt
C0-16TD1 \$64.00 16 DC Outputs (Sinking) 5-27 VDC 0.1A/pt	C0-08TR \$57.00 8 Relay Outputs 6-240 VAC or 6-27 VDC 1A/pt
C0-16TD2 \$63.00 16 DC Outputs (Sourcing) 12-24 VDC 0.1A/pt	C0-08TR-3 \$61.00 8 Relay Outputs 6-240 VAC or 6-27 VDC 3A/pt
C0-08TA \$72.00 8 AC Outputs 17-240 VAC triac 0.3A/pt	

CLICK to add Analog I/O



Add up to eight Analog I/O modules and interface with over 50 analog channels!

Prices start at \$27.50 per channel (4-channel module). Thermocouple (or RTD) channels are \$46.75 each. Can your current PLC match that?

Measure Temperature (with RTDs or Thermocouples)...



...Measure Current Usage (with Current Transducers)...



...detect tank levels (with Level Sensors)...



...Provide Speed Control for AC Drives...

...Connect to any Analog Device that You Need to Control!

Add analog I/O modules

If the CLICK analog or Ethernet analog PLCs don't provide enough analog channels, you can add channels with our 4-channel input and/or 4-channel output modules, OR check out the combo modules with 4-channels IN and 2 channels OUT. Each style is available in either current or voltage flavors.

Connect to all your analog devices: pressure and level transmitters, current transducers, proportional valves, AC drives, panel meters, etc.

These high-resolution modules offer fast setup (no DIP switches) with software scaling to make your life (and your ladder code) easier.

ANALOG INPUT MODULES

C0-04AD-1 \$128.00 4 Channel Current Inputs 0-20mA 13 Bit Resolution	C0-04AD-2 \$129.00 4 Channel Voltage Inputs 0-10VDC 13 Bit Resolution
C0-04RTD \$217.00 4 Channel RTD Inputs (0.1 degree) or Resistive Inputs	C0-04THM \$217.00 4 Channel Thermocouple Inputs (0.1 degree) or Voltage Inputs

ANALOG OUTPUT MODULES

C0-04DA-1 \$175.00 4 Channel Current Outputs 4-20mA Source 12 Bit Resolution	C0-04DA-2 \$175.00 4 Channel Voltage Outputs 0-10 VDC 12 Bit Resolution
--	---

ANALOG COMBO MODULES

C0-4AD2DA-1 \$226.00 4 CH Current Inputs 0-20mA (13 bit) 2 CH Current Outputs 4-20mA (12 bit)	C0-4AD2DA-2 \$217.00 4 CH Voltage Inputs 0-10 VDC (13 bit) 2 CH Voltage Outputs 0-10 VDC (12 bit)
--	--

Setup couldn't be any easier

Using the programming software, set your preferred scaling range, and assign a data register address to store the scaled analog value. The 'real world' resolution is calculated automatically.

Input Range	Scaled Range	Data Register
Max 20.0 mA	→ 1750.0	DF2
Min 4.0 mA	→ 0.0	Resolution 0.427350
<input checked="" type="checkbox"/> Enable Range Limiter		

Double CLICK to add Discrete COMBO Modules

DISCRETE COMBO MODULES

C0-16CDD1 \$82.00 8 Inputs (24V) (Sink/Source) PLUS 8 Outputs 5-27VDC (Sink)	C0-16CDD2 \$82.00 8 Inputs (24V) (Sink/Source) PLUS 8 Outputs 12-24VDC (Source)	C0-08CDR \$73.00 4 Inputs (12-24VDC) (Sink/Source) PLUS 4 Relay Outputs 1.0A AC/DC
---	--	---

Double up and save...

Need a few extra Inputs and outputs? Use these combo modules to expand your CLICK system AND save money.

DISCRETE INPUT MODULES

C0-08ND3 \$48.00 8 DC Inputs (Sink/Source) 12-24 VDC	C0-08ND3-1 \$48.00 8 DC Inputs (Sink/Source) 3.3-5 VDC	C0-16ND3 \$63.00 16 DC Inputs (Sink/Source) 24 VDC	C0-08NA \$57.00 8 AC Inputs 100-120 VAC	C0-08NE3 \$50.00 8 AC/DC Inputs (Sink/Source) 24 VAC/VDC	C0-16NE3 \$70.00 16 AC/DC Inputs (Sink/Source) 24 VAC/VDC
---	---	---	--	---	--

SPECIALTY MODULES

C0-08SIM \$51.00 8 point simulator input module	C0-04POT \$68.00 4-channel potentiometer analog simulator input module
---	--



www.automationdirect.com/clickplcs

CLICK for convenient PLC monitoring and control

FREE CLICK Remote PLC Mobile App

The CLICK Remote PLC mobile app offers a convenient way to view and edit values in select CLICK Ethernet or CLICK PLUS PLC registers. With the mobile app, you can also check PLC project/status information, including data stored in error logs.

Features:

- Multiple level user accounts - once connected, the authorized users can view and edit PLC values based on their permission levels set up in the project file.
- Custom Monitor windows can be created and stored to the PLC using the CLICK programming software version 3.60 or later.
- Monitor and edit designated discrete and numeric values within the PLC. For example, timer/counter presets can easily be viewed and edited.
- PLC status information, such as PLC error logs, scan times (min and max), as well as project file information can also be viewed.



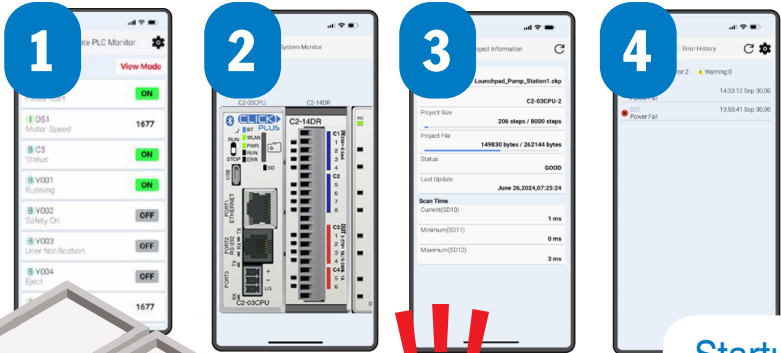
OR

Use the CLICK Remote PLC Mobile App with:

- CLICK Ethernet PLCs or CLICK PLUS PLCs and a WiFi router
- CLICK PLUS PLCs using Bluetooth

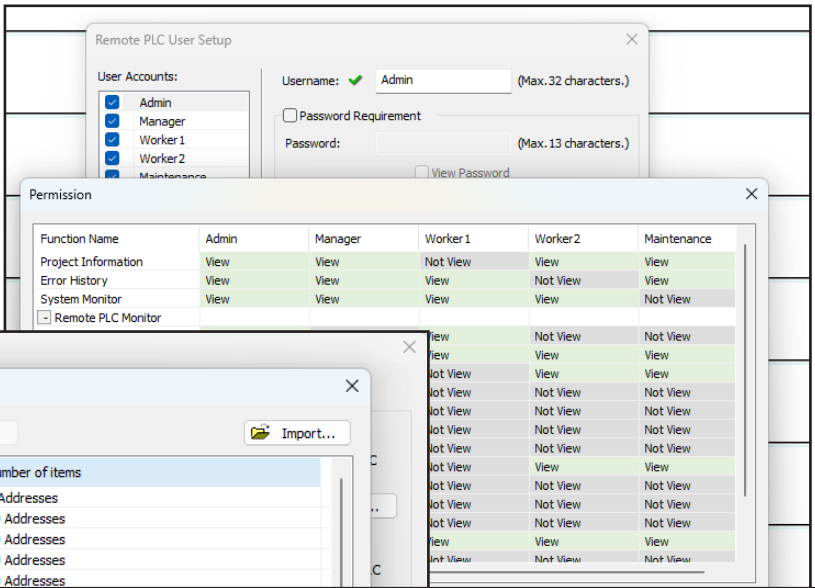
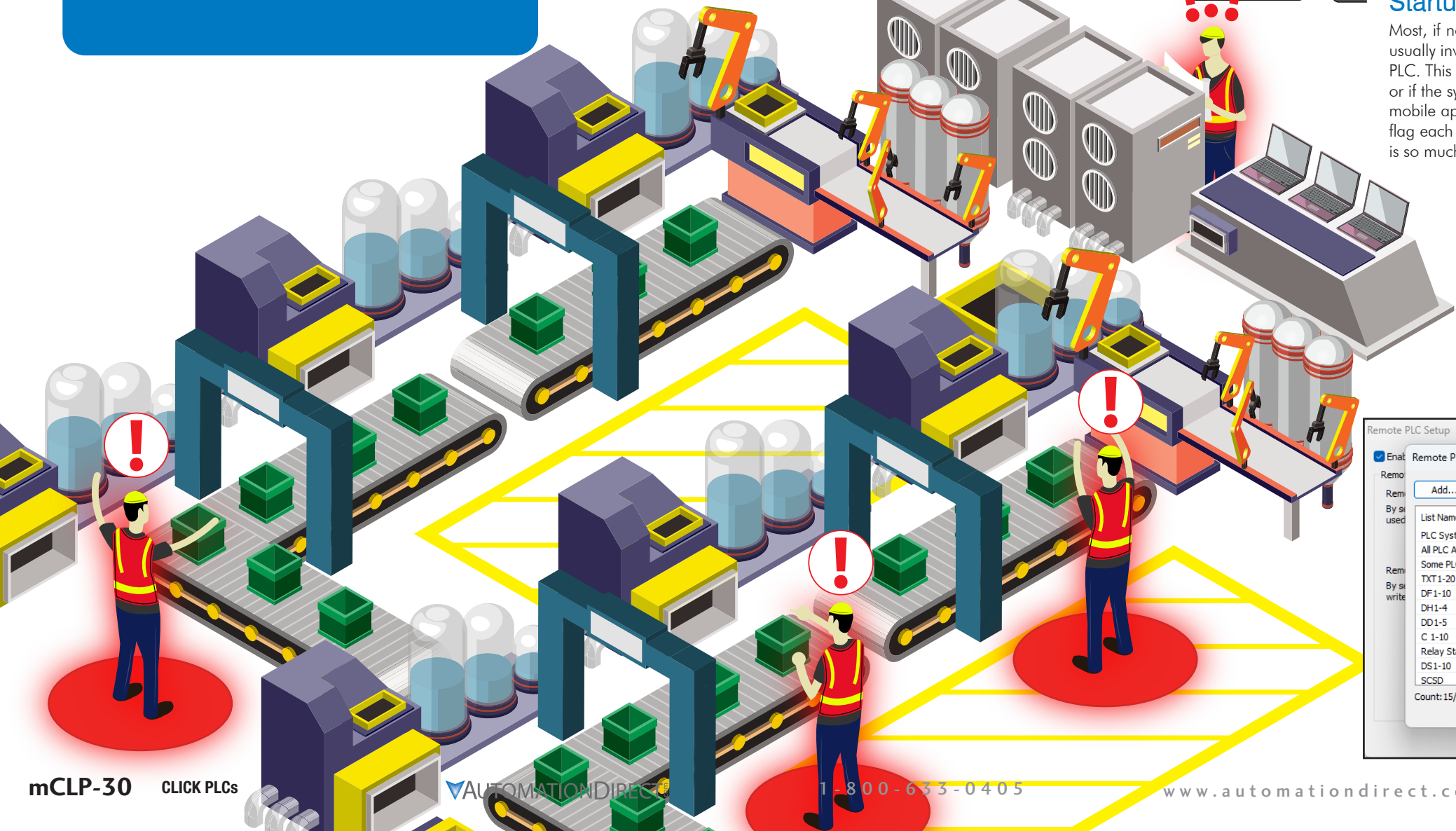
Use the CLICK Remote PLC Mobile App to:

1. View and edit values in the PLC registers
2. Use the System Monitor to see LED status and analog data
3. Check the PLC project information
4. See the PLC error log data



Startups made easier!

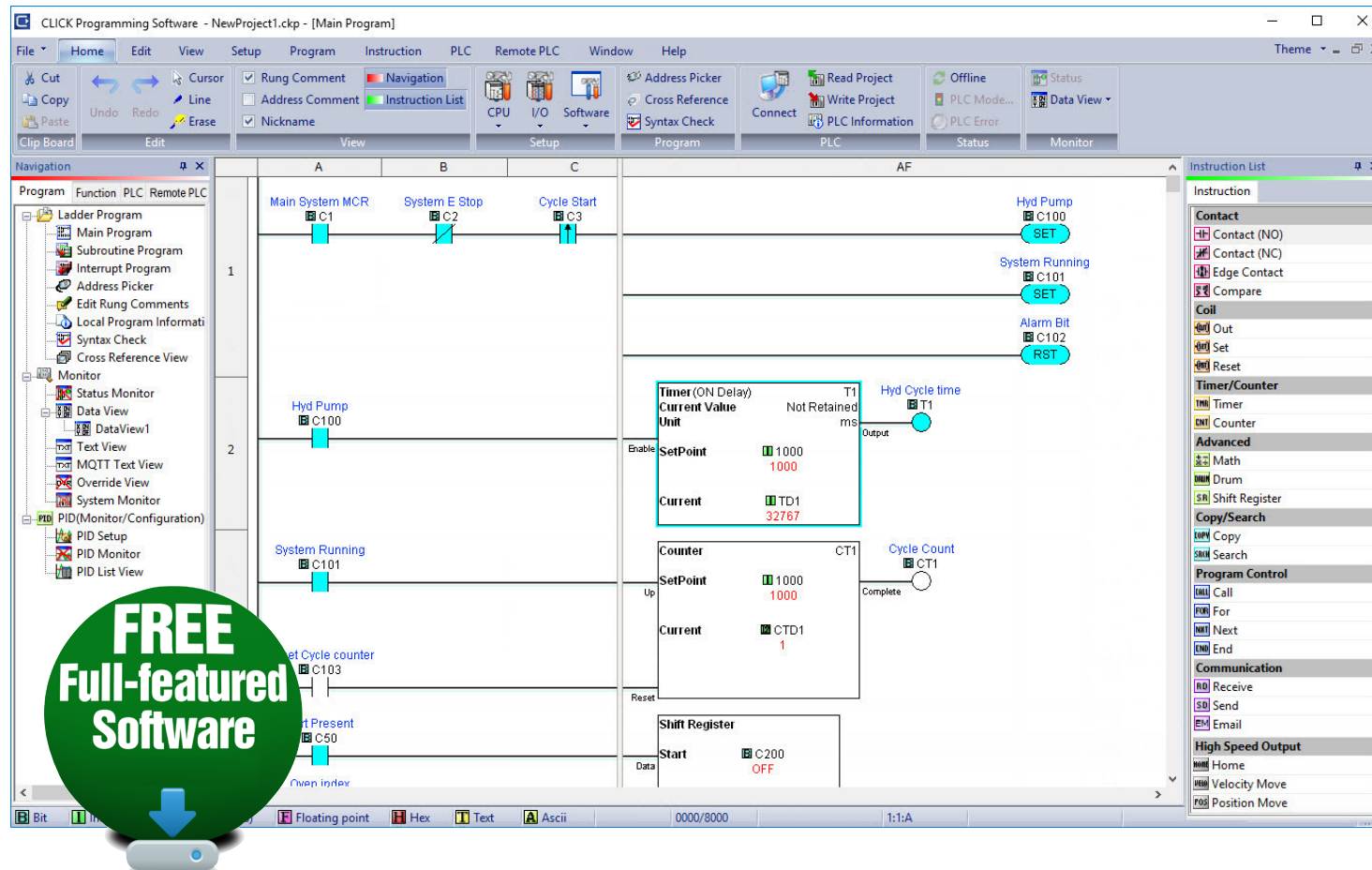
Most, if not all, of us have been on startups, testing the numerous inputs wired to the main PLC cabinet. This usually involves two or more people - one to flag the sensor in the field and the other to watch the input on the PLC. This can be a real headache especially when there are multiple sensors scattered all throughout the facility or if the system is located in a noisy environment where it's hard to communicate. With the CLICK Remote PLC mobile app, only one person is needed to check each input. Simply open the app, connect to the CLICK PLC, flag each sensor, and watch the input change remotely on your mobile device. With the app, input verification is so much quicker and easier!



Configure what can be seen and by whom

All of the PLC values that will be available through the app and who gets to view and edit them, are configured in the user-friendly CLICK PLC programming software. There you will find convenient dialogs for adding PLC values to the remote monitor list and for adding several users, each with their own permission levels and allowed actions.

CLICK to get FREE Programming Software!



Simple to learn

The CLICK PLC programming tool was designed with the user in mind. We have simplified the programming process to make it easier to learn, faster to program, and capable of completing most of your application needs with only 25 instructions!

This combination of RLL (Relay Ladder Logic) and Function block programming offers you a comprehensive programming environment with easy navigation and a familiar Windows look and feel.

Simply download your free software at:
www.clickplcs.com

Easy to use

We listened to our customers and tried to address what they felt were the inhibitors to a simplistic programming environment. This includes more intuitive instructions that are not only easier to use but also offer more functionality at the same time. We also worked to create one of the best help files of any software in the industry and we added a convenient menu ribbon so you can find what you are looking for in a flash.

The software provides enough options to easily address the majority of your needs during all phases of programming (learning, coding, commissioning, troubleshooting), while keeping it structured enough to make the basic operations obvious.

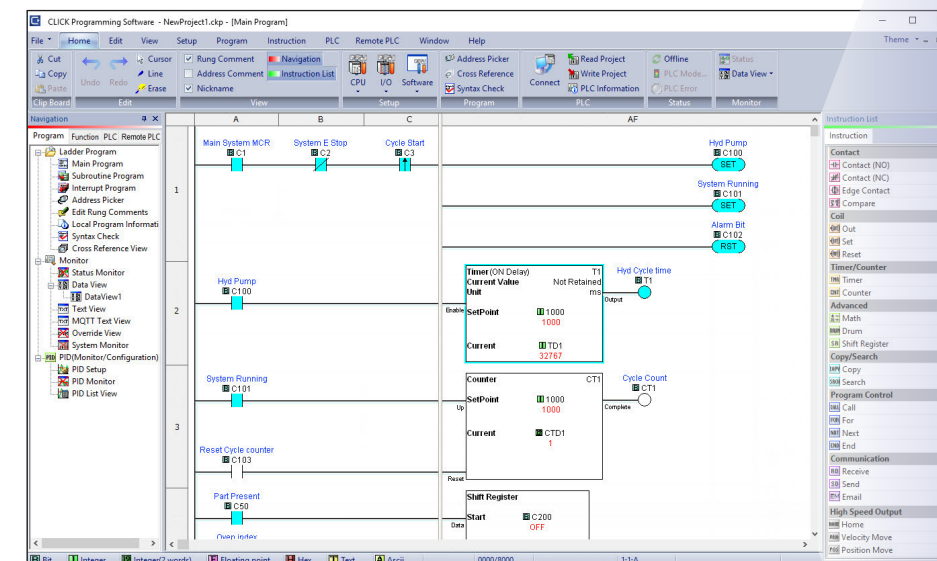
The CLICK PLC Programming tool allows each individual to set up their programming environment to suit their needs. Beginners may choose to program almost exclusively via the mouse by clicking on icons, instructions, drop-down menus, and selecting PLC addresses from the "Address Picker". As programmers become more experienced, the time-saving keyboard shortcuts can greatly enhance productivity, and speed development/debug times. Many of the instruction entry shortcuts are even the same as those used in our DirectLOGIC PLC software.

Either way, you can select the option that suits your style of programming.

Simplified instruction set reduces your programming time

Instruction List

The CLICK PLC programming software offers up to 25 extremely easy-to-use instructions! This instruction set offers the same flexible control you might expect from over 150 instructions in a traditional controller. Simply drag and drop these instructions onto the ladder view (the center section of the screen), and a helpful dialog box will guide you through each instruction's configuration.



What's included?

The 25 CLICK PLUS PLC instructions or the 21 CLICK PLC instructions include everything you would typically expect:

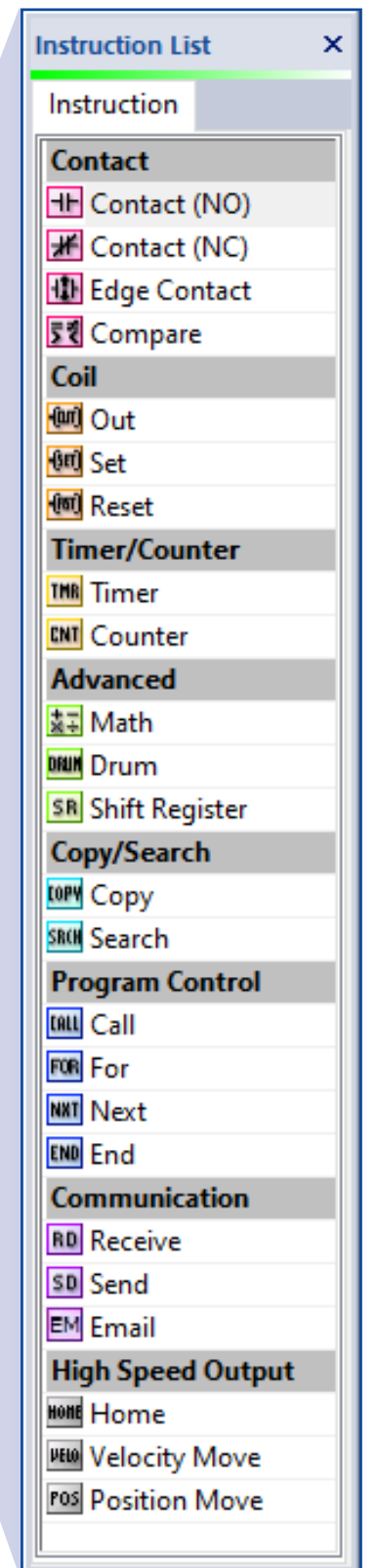
- Contacts*
- Coils
- Set/Reset
- Timer
- Counter
- Math**

Then there are some advanced instructions you might not expect:

- Drum
- Receive/Send
- Shift Register
- Call/Return (Subroutine)
- Search
- For/Next
- Email (CLICK PLUS only)
- Home (CLICK PLUS only)
- Velocity Move (CLICK PLUS only)
- Position Move (CLICK PLUS only)

* Contacts include Normally Open, Normally Closed, Edge-triggered and Compare

** Math includes Decimal, Floating Point and HEX math. Supports free-form formula entry.



Note: High Speed Output and Email commands are only supported by CLICK PLUS CPUs

Note: The RETURN instruction is not shown since it is used in the Subroutine and Interrupt programs only



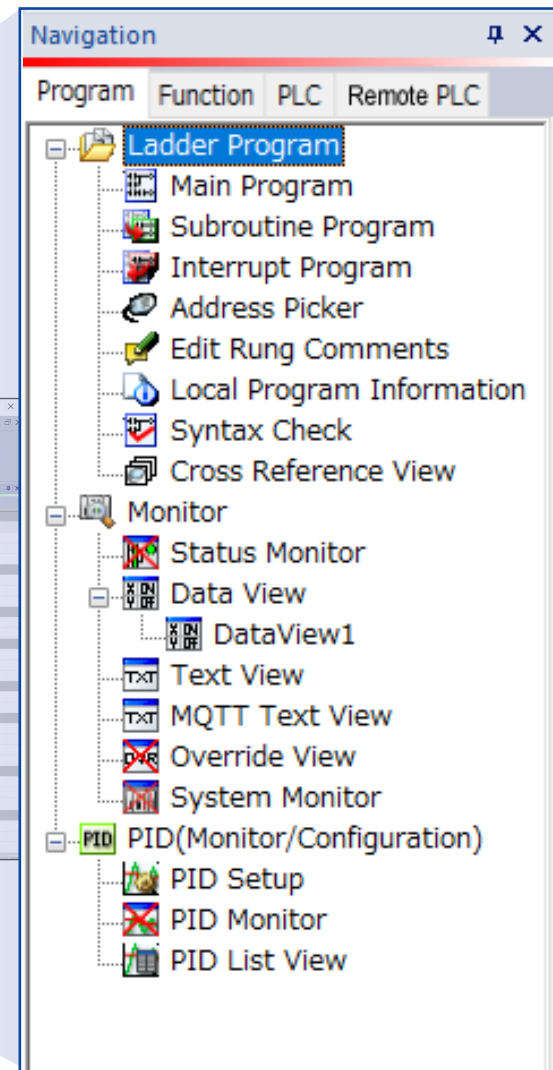
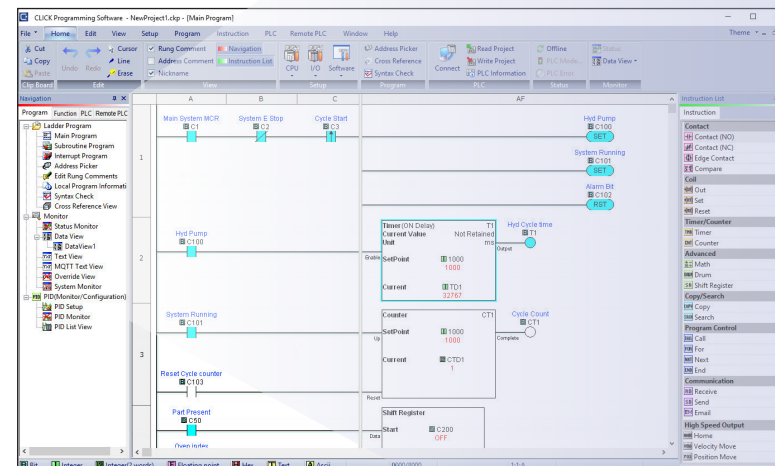
Free Online PLC Training

As the world around us becomes more and more automated, an understanding of electrical control systems becomes more and more vital. To better serve our customers and the industry we rely on, we offer absolutely free online training to anyone looking to learn PLCs. No purchase necessary! Check out this free training [here](http://www.clickplcs.com).

CLICK offers intuitive navigation

Navigation Pane

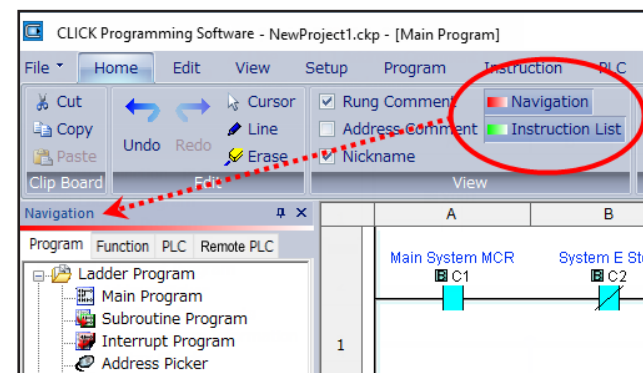
The CLICK PLC programming software offers an easy-to-view Navigation Pane which places program controls at your fingertips. Quickly toggle between your main program, Subroutines, Interrupts, Data Views, Rung Comments Editor and more.



At your fingertips

The Navigation Pane puts many practical and frequently used functions within one CLICK of your mouse during configuration, commissioning and troubleshooting. Quickly move between your Main Ladder Program and Subroutines and Interrupt routines within your project. Access frequently used system functions such as System Setup, Password utility, Comm Port Configuration, PLC Connection, Data and Project Transfer, Firmware Update and many more. Many of these functions are also available via drop-down menus. It's your choice!

Use the color-coded Window Control Toolbar to quickly and easily hide the navigation (and/or instruction) pane to maximize your ladder programming work space.

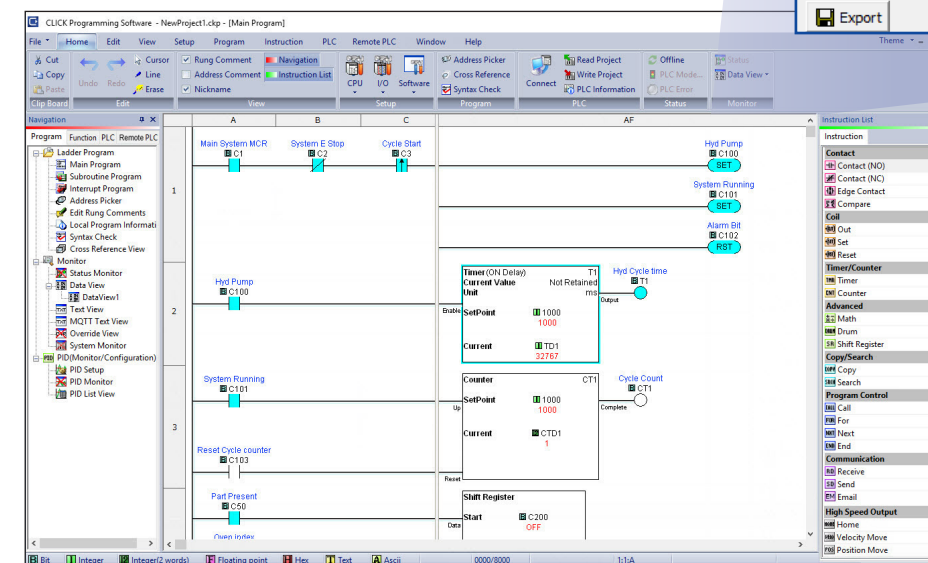


Monitor your program with a CLICK



Data View Window

The Data View allows you to monitor real time values in your process directly from the PLC while monitoring the system with the programming software. You can view up-to-date data, write new variable data, and even force overrides in the processor from this one window.



No.	Address	Nickname	Current Value	New Value	Write	Viewing Format	Address Comment
001	B SC3	SCAN ClocOn				Bit	
002	B SC4	10ms ClocOff				Bit	
003	B SC5	100ms ClocOn				Bit	
004	B SC6	500ms ClocOff				Bit	
005	B SC7	1sec. ClocOff				Bit	
006	I TD2		0			Integer	
007	I TD4		29			Integer	
008	F DF14		123.40000153	123.40000153		Real	
009	F DF59		100.00000000			Real	
010	I DD319		345	345		Integer	
011	B Y501		Off	On Off		Bit	
012	B Y502		On	On Off		Bit	
013	B Y503		On	On Off		Bit	
014	B Y504		Off	On Off		Bit	
015	B Y505		On	On Off		Bit	
016	B Y506		On	On Off		Bit	
017	B Y507		Off	On Off		Bit	
018	B Y508		On	On Off		Bit	
019							
020							
021							
022							

What is included?

The Data View allows you to monitor data as you would expect ... but what else can you do?

- Auto Fill Down feature allows you to quickly populate your addresses.
- View data types as either Integer, Real (floating point), Exponential or Hex.
- Force values with the Override feature.
- Import/Export your Data View to exchange the setup.
- Save and create multiple Data View files for separate process applications.
- Data types are easily identified by the Data Type icons on the Status Bar.

Software Status Bar

The Status Bar is located at the bottom of the CLICK PLC programming application. The left side provides a handy legend that explains the meaning of the data type symbols. The right side of the Status Bar contains four important pieces of information about the current project:

- Connection Status/PLC Modes
- Memory Usage
- CPU Type
- Current Cursor Position in the Ladder Editor

In addition to the information provided by the right side of the Status Bar, the Connection Status/PLC Modes serves as a button to initiate connection or mode changes. Click on the Connection Status/PLC Modes to open the Connect dialog or the PLC Modes dialog.

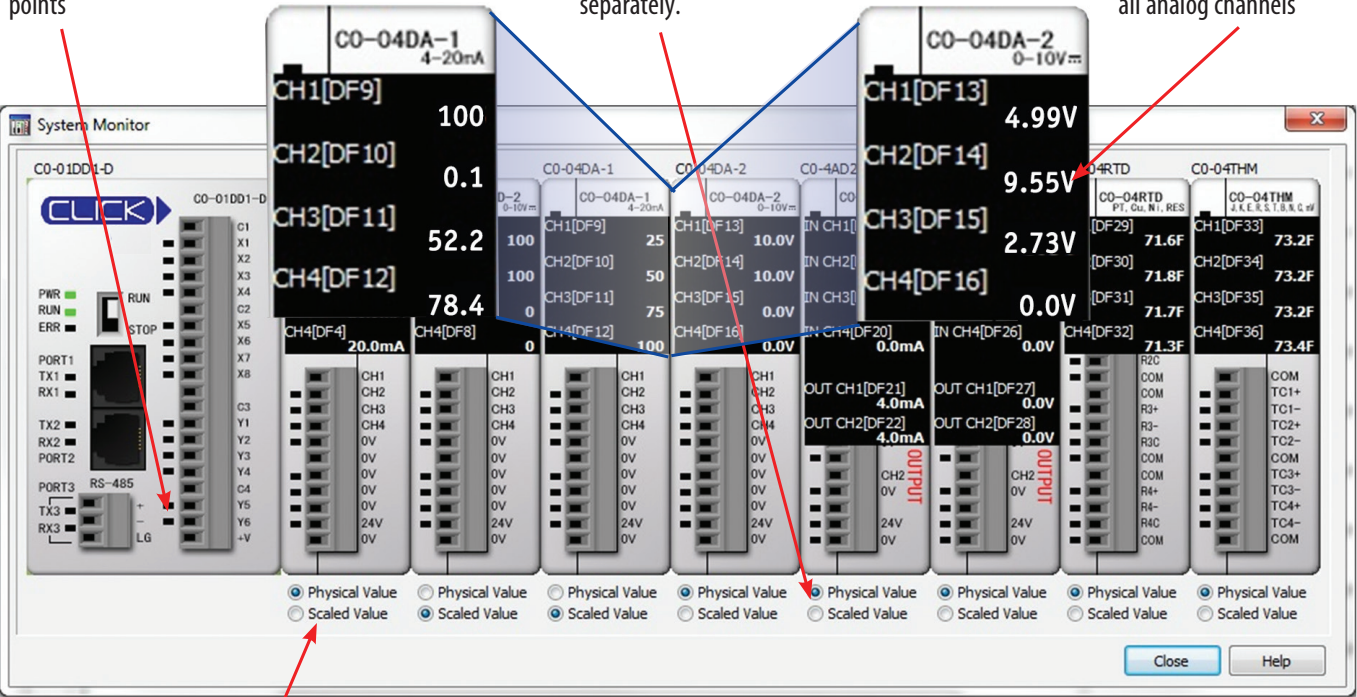
Check I/O status with a CLICK

The System Monitor window displays the LED indicator status and analog I/O values in real time. You can use this to check if the CLICK PLC is functioning correctly.

Displays the current LED indicator status for all I/O points

Select the display type for each analog module separately.

View the Physical Values or the Scaled Values for all analog channels



Physical Value/Scaled Value:

You can select the display of the analog I/O values between the Physical Values that the analog I/Os receive/output actually and the Scaled Values stored in the DF memory addresses.



CLICK on a practical instruction

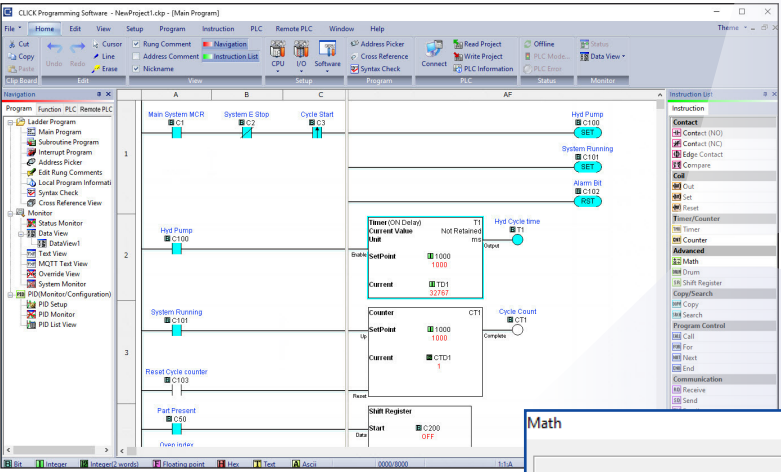
For example ...

Timer Instruction

The Timer Instructions are typically some of the more basic instructions in a control environment, so how could we possibly make them any better? We listened to you ...

Instead of having multiple timer instructions with different functions and features, we created a single timer instruction with simple selections to allow programming of the precise timer function needed for your application. Select from On-delay or Off-delay timing and retentive or non-retentive current values.

Just CLICK ... It's that easy.

The 'Timer' dialog box is shown, allowing configuration of a timer instruction. It includes fields for 'Timer Number' (T12), 'Set Point' (DS320), and 'Unit' (ms). The 'Current Value' is set to 'TD12'. Under 'Delay Setting', the 'ON Delay timer' option is selected, with a visual representation of the timing logic. The 'OFF Delay timer' option is also shown. Under 'Current Value Option', the 'Current value will not be retained while this timer is disabled' option is selected.

Math Instruction

Performing mathematical calculations in a PLC typically requires a complicated set of instructions and programming gymnastics. From mixing process variable data with constants in multiple formats, to calculating complex logarithmic formulas, math computations in ladder logic can be complex, so how could we possibly make it any better? We listened to you...

Instead of having a full set of various math instructions you string together to perform complex mathematical equations, we created a single instruction that allows you to enter formulas directly or select from the familiar calculator style layout to create your formula.

Just CLICK ... It's that easy.

The 'Math' dialog box is shown, allowing configuration of a math instruction. It includes a 'Result' field (DS30) and a 'Formula' field (2 * PI / (3 - DS109) + 100). The 'Type' is set to 'Decimal'. The 'Option' section has 'One Shot (Execute one time)' checked. The 'About Error Flags' section lists SC40: Division Error, SC43: Out of Range, and SC46: Math Error.

Visit www.automationdirect.com/click-plc for all the latest information, including FREE software downloads, how-to videos and much more

CLICK for great help!

Detailed Help Files

We wanted your programming experience to be the easiest and most productive of any PLC you have ever programmed. So we spent a lot of time creating the content for the help file that gives you clear and concise definitions of the features and functionality for each instruction and the operation of the software.

Just CLICK Help ... It's that easy.

CLICK Help Version 2.50

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CLICK Project Load

Topic: CL170

CLICK

Math (Decimal)

Description

The **Math** instruction solves a user-defined formula during the execution of the **Ladder Program**. The formula is developed on the **Math** dialog using the on-screen keypad, the computer keyboard, and **Address Picker**. Two sets of mathematical operators are available. One set is appropriate for use with decimal values, and the other is for use with hexadecimal values. Also see **Math (Hex)**. Parenthetical expressions can be nested up to eight levels deep. If the **Floating Point Data Type** is used in any operation, then all operations will be based on **Floating Point** math. The solution will be stored in the data format selected for the **Result**.

Decimal Setup

Math

Result

DF1 1

Type

Decimal

Option

One Shot

About Error Flags

SC40 : Division Error

SC43 : Out of Range

SC46 : Math Error

Formula

(PI*DS2^2)+(DS3*SQRT(DF5))+(DSZ MOD DS8)

Address 5

Nickname

6

7

OK

Cancel

Help

Entry required or invalid entry

Valid entry

1 Result: Assign a Memory Address where the Result will be stored. The Result value will be adjusted to the data type of the Memory Address. Click the Browse Button to open Address Picker.

2 Type: Selecting Decimal or Hex determines the mathematical operations that are available on the Math instruction dialog. Most of the operators are unique to either Decimal or Hex math.

Note: Changing this selection after beginning to develop the Formula will erase the Formula.

3 One Shot: Select One Shot to solve the formula only once after each OFF-to-ON transition of the enabling rung.

4 Error Flags: These System Bits turn ON when the specified condition has occurred.

5 Address or Nickname: Data Registers can be identified in the Formula by the Memory Address or the Nickname.

CLICK to configure the hardware

System Configuration

The CLICK software includes a configuration tool that helps you configure a CLICK PLC quickly and easily. Select the CPU, power supply, and modules you need - the software calculates your I/O count, address list, and Power Budget automatically.

System Configuration

PLC Name MyCLICK (Max: 24 characters)

Start-up I/O Config Check

CD-01AC CD-12DD3E-1-D CD-08ND3 CD-08NE3 CD-16NE3 CD-16TD1 CD-04TRS CD-08TR

System

Table with 7 columns: Name, P/S, CPU, Slot0, I/O 1, I/O 2, I/O 3, I/O 4, I/O 5

Assign Nicknames & Comments when Analog I/O Used

View I/O MODBUS Address

High Speed Configuration

Step 1: Select Mode

Step 2: Select Mode Options

Step 3: Select Mode Attributes

Select Mode Attributes

Pulse Train Output(Axis1)

Axis1

Axis2

Axis3

Axis1_Pulse

Axis1_Direction

Axis2_Pulse

Axis2_Direction

Axis3_Pulse

Axis3_Direction

General

Maximum Velocity (1,000-100,000pps)

Minimum Velocity (0-9,999pps)

Direction Change Time (0-100ms)

Current Position

Current Velocity

Limit Switches

Positive

Negative

Stop when

ON

OFF

Information

Use this feature with the instructions:

Velocity Move

Position Move

CLICK to configure the PLC tags

Address Picker : Edit Mode

Fill Down (Nickname) Find: Exact Match Find

Table with 8 columns: Address, Data Type, MODBUS Address (Function code), Nickname, Used, Initial Value, Retentive, Address Com

Address Picker

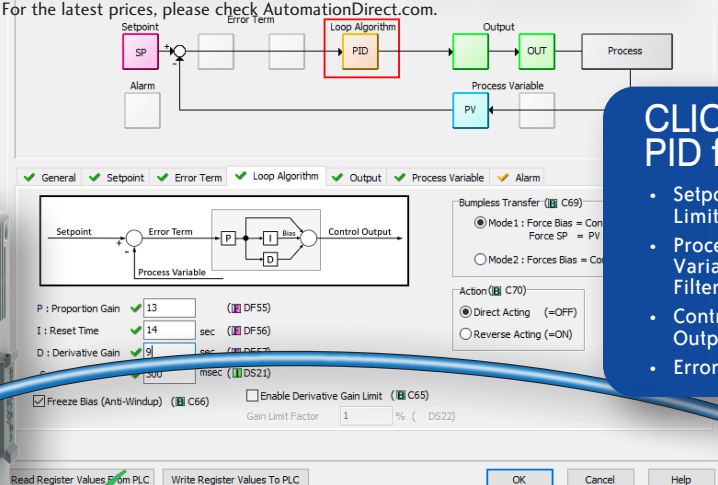
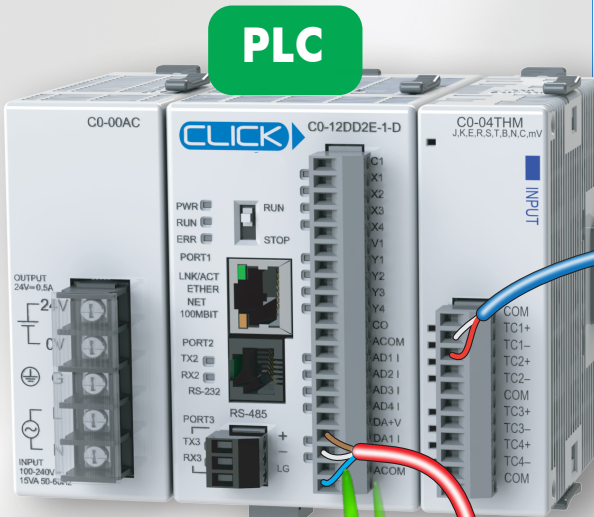
- Assign nicknames (use autofill for sequential names)
- Create address comments
- Powerful search, sort, filter, and categorize options
- Modbus addresses (HEX or 984 style)
- Establish initial values for specific memory locations
- Make memory locations retentive (during power outages)

CLICK for a simpler PID!

Process control built with ease

The CLICK PLC family is the lowest cost, easiest to use PLC in the market today and now we've added to it the most user-friendly PID process control. We streamlined CLICK's PID control and included only the features that most users need. We also made the PID configuration more visual with easy to follow steps to help guide you and get your parameters set quickly.

Not only is the CLICK PID simple, but with the ability to configure up to 8 PID control loops executing every 100ms, CLICK provides the most affordable PID available.



CLICK PID comes with all the basic PID functions plus these advanced options:

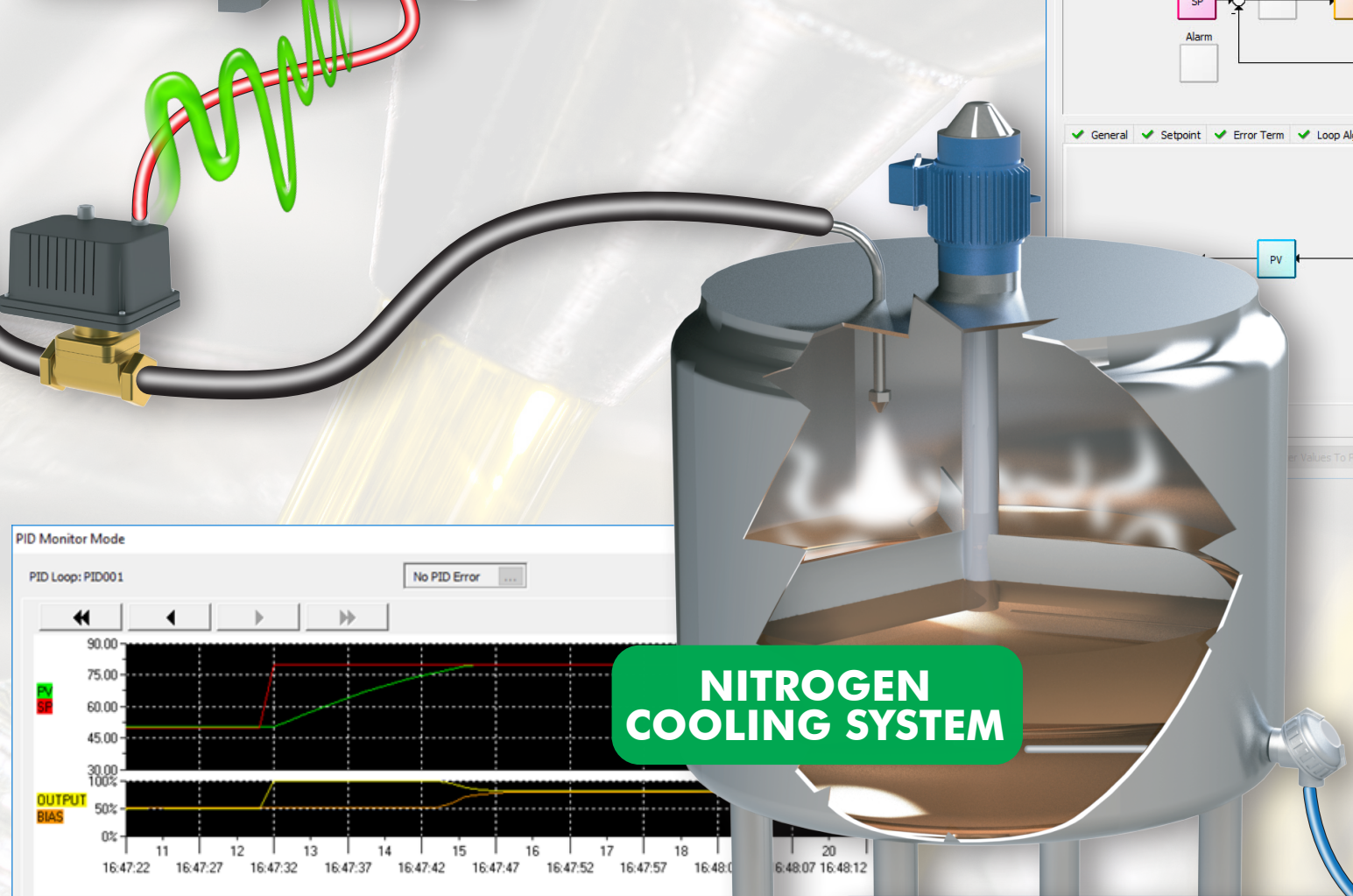
- Setpoint Limits
- Process Variable Filter
- Control Output Limits
- Error Squared
- Error Deadband
- Anti-windup
- Derivative Gain Limit
- Bumpless Transfer
- Autotuning
- Direct or Reverse Acting
- Pulse width modulated Control Output
- Process Variable Alarms
- PID Monitor

PID CONTROL ALGORITHM SETUP

A screenshot of the 'PID Loop Setup' screen in the CLICK PLC software. It shows various configuration options for a PID loop, including the loop name, setpoint, error term, loop algorithm, output, and process variable. There are checkboxes for 'Assign Nicknames Automatically' and 'Find Available Address'. A green checkmark is visible in the bottom left corner.

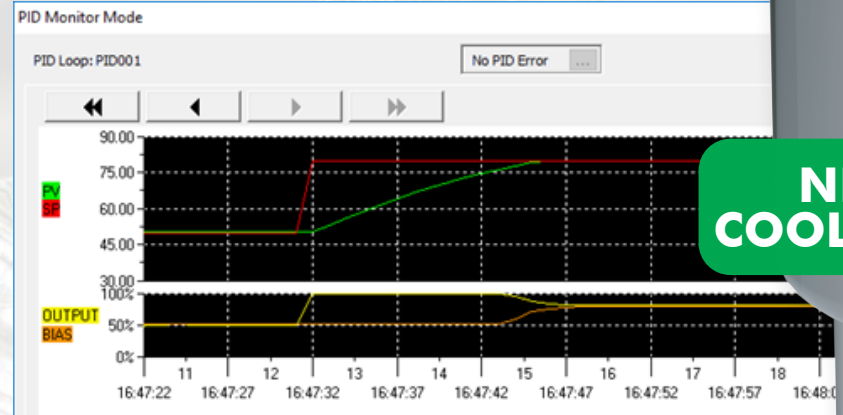
PID LOOP SETUP

LIQUID NITROGEN N₂



NITROGEN COOLING SYSTEM

PID PV SETUP



A screenshot of the 'PID Control' screen. It shows the current PID mode (Auto) and the PID parameters. The parameters include Proportional Gain (17.0159), Integral Gain (2.34999), and Derivative Gain (0). There are also checkboxes for 'Autotune' and 'Control'. A green checkmark is visible in the bottom left corner.

PID monitoring and auto-tuning

The CLICK PID Monitor is a very useful tool which can be used to help test and tune your PID loops. The PID Monitor gives access to all the PID parameters necessary for tuning a PID Loop. There is a PID chart that displays the SP, PV's, CO and Bias. There is also an auto-tune interface that allows you to set up and initiate auto-tuning.

We do most of the work for you

From the first (General) tab we make it easy by giving you the option to automatically reserve the addresses needed for the configuration and operation of the PID loop. Intuitive Nicknames are also created automatically for you so that selecting the address you need in your code is quick and simple.

Throughout the configuration, we guide you to the parameters that need to be set using red checkmarks, green checkmarks are ready to go, and yellow are optional parameters.

All	Address	Data Type	Nickname	Used	Initial Value	Retentive	Address Comment
	C1	RW BIT	PID001_EN_SP_LimitLower	Yes	Disable	Yes	SP Lower Limit Enable
	C2	RW BIT	PID001_EN_SP_LimitUpper	Yes	Disable	Yes	SP Upper Limit Enable
	C3	RW BIT	PID001_SEL_ErrorSquared	Yes	Disable	Yes	Error Term Selection (Linear / Squared)
	C4	RW BIT	PID001_EN_ErrorDeadband	Yes	Disable	Yes	Error Deadband Enable
	C5	RW BIT	PID001_EN_DerivativeLmt	Yes	Disable	Yes	Derivative Gain Limit Enable
	C6	RW BIT	PID001_EN_AntiWindup	Yes	Disable	Yes	Anti-Windup Enable (Bias Freeze)
	C7	RW BIT	PID001_C_Reserved_01	Yes	Disable	Yes	Reserved
	C8	RW BIT	PID001_SEL_AutoTunePID	Yes	Disable	Yes	Autotune Algorithm Selection (PID or P1)
	C9	RW BIT	PID001_SEL_BumplessMode	Yes	Disable	Yes	Bumpless Transfer (1/Mode 2)
	C10	RW BIT	PID001_SEL_DirectReverse	Yes	Disable	Yes	Loop Action Selection (Forward or Reverse)

CLICK has practical accessories



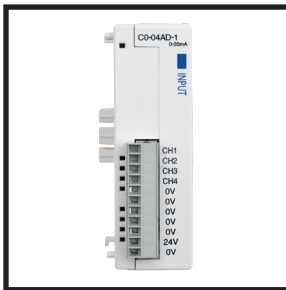
The ZIPLink wiring system eliminates the normally tedious process of wiring PLC I/O to terminal blocks. Simply plug one end of a ZIPLink pre-wired terminal block cable into your I/O module and the other end into a ZIPLink connector module. It's that easy. ZIPLinks use half the space, at a fraction of the total cost of terminal blocks.

Use the convenient ZIPLink selector tool to help you find the right ZIPLink modules and cables for your I/O connections.

ZIPLink

Other accessories include a hardware manual, programming cables, spare terminal blocks, and replacement batteries.

I/O Module



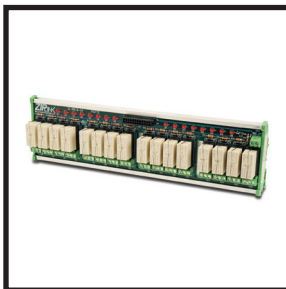
ZIPLink Cable



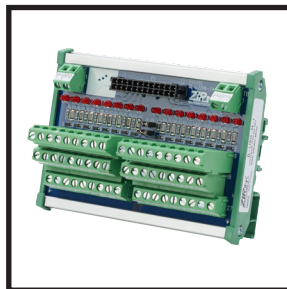
ZIPLink Connector Module



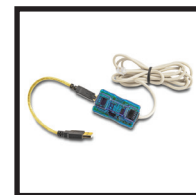
ZIPLink Relay Output Module



ZIPLink Sensor Input Module



Programming Cables



EA-MG-PGM-CBL
\$71.50

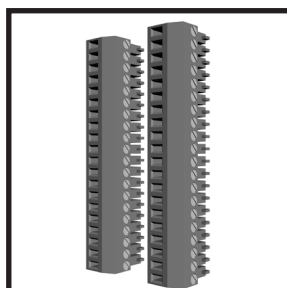


D2-DSCBL
\$41.50

Antennas



Spare Terminal Blocks



Replacement Battery

