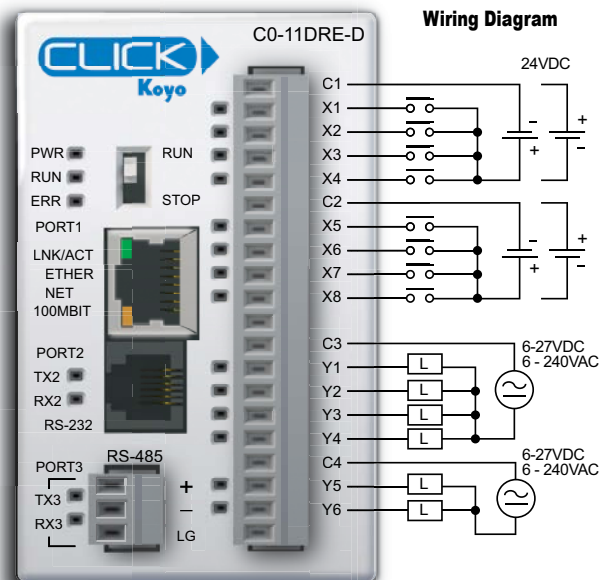


# Ethernet Standard PLC

**C0-11DRE-D \$195.00**
**8 DC Input/6 Relay Output Micro PLC**

**Wiring Diagram**
**X1-X8 Inputs High-Speed**

## Built-in I/O Specifications - Inputs

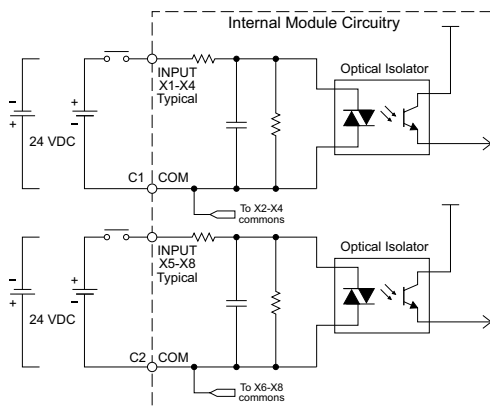
|                                |                                  |
|--------------------------------|----------------------------------|
| <b>Inputs per Module</b>       | 8 (Sink/Source)                  |
| <b>Operating Voltage Range</b> | 24VDC                            |
| <b>Input Voltage Range</b>     | 21.6–26.4 VDC                    |
| <b>Input Current</b>           | Typ 6.5 mA @ 24VDC               |
| <b>Maximum Input Current</b>   | 7.0 mA @ 26.4 VDC                |
| <b>Input Impedance</b>         | 3.9 kΩ @ 24VDC                   |
| <b>Maximum Input Frequency</b> | X1-X8: 100kHz                    |
| <b>ON Voltage Level</b>        | > 19VDC                          |
| <b>OFF Voltage Level</b>       | < 2VDC                           |
| <b>Minimum ON Current</b>      | 4.5 mA                           |
| <b>Maximum OFF Current</b>     | 0.5 mA                           |
| <b>OFF to ON Response</b>      | Typ 3μs Max 5μs                  |
| <b>ON to OFF Response</b>      | Typ 1μs Max 3μs                  |
| <b>Status Indicators</b>       | Logic Side (8 points, green LED) |
| <b>Commons</b>                 | 2 (4 points/common) Isolated     |

## Built-in I/O Specifications - Outputs

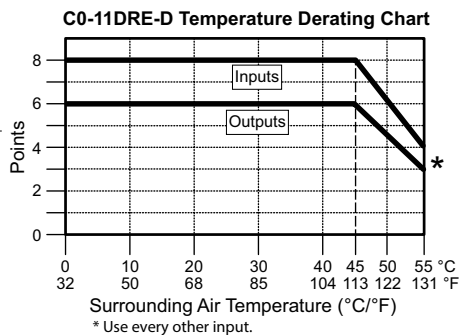
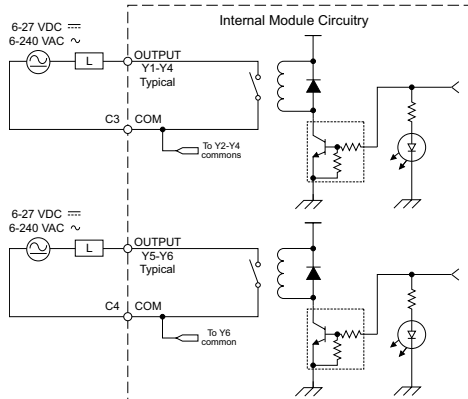
|                                |   |
|--------------------------------|---|
| <b>Outputs per Module</b>      | 6   |
| <b>Operating Voltage Range</b> | 6-240 VAC (47-63 Hz), 6-27 VDC            |
| <b>Output Voltage Range</b>    | 5-264 VAC (47-63 Hz), 5-30 VDC            |
| <b>Output Type</b>             | Relay, form A (SPST)                      |
| <b>Maximum Current</b>         | 1 A/point; C3: 4 A/common, C4: 2 A/common |
| <b>Minimum Load Current</b>    | 5mA @ 5VDC                                |
| <b>Maximum Inrush Current</b>  | 3A for 10ms                               |
| <b>OFF to ON Response</b>      | < 15ms                                    |
| <b>ON to OFF Response</b>      | < 15ms                                    |
| <b>Status Indicators</b>       | Logic Side (6 points, red LED)            |
| <b>Commons</b>                 | 2 (4 points/com & 2 points/com) Isolated  |

**NOTE:** When using Ethernet Standard PLCs, you must use CLICK programming software version V2.00 or later.

### Equivalent Input Circuit



### Equivalent Output Circuit



## General Specifications

|  |                         |
|--|-------------------------|
| <b>Current Consumption at 24VDC</b>        | 140mA                   |
| <b>Terminal Block Replacement Part No.</b> | <a href="#">C0-16TB</a> |
| <b>Drawing Link</b>                        | <a href="#">PDF</a>     |
| <b>Weight</b>                              | 5.6 oz (160g)           |

## Typical Relay Life (Operations) at Room Temperature

| Voltage & Load Type        | Relay Life*    |
|----------------------------|----------------|
| <b>30VDC 1A Resistive</b>  | 300,000 cycles |
| <b>30VDC 1A Solenoid</b>   | 50,000 cycles  |
| <b>250VAC 1A Resistive</b> | 500,000 cycles |
| <b>250VAC 1A Solenoid</b>  | 200,000 cycles |

\*ON to OFF = 1 cycle

**ZIPLink Pre-Wired PLC Connection Cables and Modules for CLICK PLC**

**ZL-RTB20**  
20-pin feed-through connector module



20-pin connector cable  
**ZL-C0-CBL20** (0.5 m length)  
**ZL-C0-CBL20-1** (1.0 m length)  
**ZL-C0-CBL20-2** (2.0 m length)



# CLICK PLC Specifications

## General Specifications For All CLICK PLC Products

These general specifications apply to all CLICK PLCs and optional power supply products. Please refer to the appropriate I/O temperature derating charts under both the PLC and I/O module specifications to determine best operating conditions based on the ambient temperature of your particular application.

| General Specifications       |   |
|------------------------------|---|
| <b>Operating Temperature</b> | Analog, analog combo I/O modules only:<br>32°F to 140°F (0°C to 60°C);<br>All other modules:<br>32°F to 131°F (0°C to 55°C),<br>IEC 60068-2-14 (Test Nb, Thermal Shock)   |
| <b>Storage Temperature</b>   | -4°F to 158°F (-20°C to 70°C)<br>IEC 60068-2-1 (Test Ab, Cold)<br>IEC 60068-2-2 (Test Bb, Dry Heat)<br>IEC 60068-2-14 (Test Na, Thermal Shock)  |
| <b>Ambient Humidity</b>      | 30% to 95% relative humidity (non-condensing)   |
| <b>Environmental Air</b>     | No corrosive gases. Environmental pollution level is 2 (UL840)  |
| <b>Vibration</b>             | MIL STD 810C, Method 514.2, EC60068-2-27, Category [f],<br>Procedure[VIII]<br>JIS C60068-2-27 (Sine wave vibration test)  |
| <b>Shock</b>                 | MIL STD 810C, Method 516.2, IEC60068-2-27,<br>JIS C60068-2-27, Category [f], Procedure[VIII]  |
| <b>Noise Immunity</b>        | <EN61131-2><br>EN61000-4-2 (ESD)<br>EN61000-4-3 (RFI)<br>EN61000-4-4 (FTB)<br>EN61000-4-5 (Surge)<br>EN61000-4-6 (Conducted)<br>EN61000-4-8 (Power frequency magnetic field immunity)<br><br><Local Test><br>Impulse noise 1µs, 1000V<br>RFI: No interference measured at 150 and 450 MHz (5w/15cm) |
| <b>Emissions</b>             | EN55011:1998 Class A; EN61000-6-4:2007+A1:2011  |
| <b>Agency Approvals</b>      | UL508, UL61010-2-201 (File No. E157382, E316037); CE (EN61131-2); CUL Canadian C22.2  |
| <b>Other</b>                 | RoHS 2011/65/EU Amendment (EU)2015/863  |

# CLICK PLC Specifications

## PLC Unit Specifications

| Basic, Standard and Analog PLC Unit Specifications         |   |   |   |
|--|---|---|---|
|  | Basic PLC   | Standard PLC  | Analog PLC  |
| <b>Control Method</b>                                      | Stored Program/Cyclic execution method                  | Stored Program/Cyclic execution method                          | Stored Program/Cyclic execution method                          |
| <b>I/O Numbering System</b>                                | Fixed in Decimal  | Fixed in Decimal  | Fixed in Decimal  |
| <b>Ladder Memory (steps)</b>                               | 8000  | 8000  | 8000  |
| <b>Total Data Memory (words)</b>                           | 8000  | 8000  | 8000  |
| <b>Contact Execution (Boolean)</b>                         | < 0.6 us  | < 0.6 us  | < 0.6 us  |
| <b>Typical Scan (1K Boolean)</b>                           | 1-2 ms  | 1-2 ms  | 1-2 ms  |
| <b>RLL Ladder Style Programming</b>                        | Yes   | Yes   | Yes   |
| <b>Run Time Edits</b>                                      | No  | No  | No  |
| <b>Scan</b>  | Variable / fixed  | Variable / fixed  | Variable / fixed  |
| <b>CLICK Programming Software for Windows</b>              | Yes   | Yes   | Yes   |
| <b>Built-in Communication Ports</b>                        | Yes (two RS-232 ports)                                  | Yes (two RS-232 ports and one RS-485 port)                      | Yes (two RS-232 ports and one RS-485 port)                      |
| <b>Protocols</b>   | Protocols: Modbus RTU (master/slave) and ASCII (in/out) |   |   |
| <b>FLASH Memory</b>  | Standard on PLC   | Standard on PLC   | Standard on PLC   |
| <b>Built-in Discrete I/O points</b>                        | 8 inputs, 6 outputs                                     | 8 inputs, 6 outputs   | 4 inputs, 4 outputs   |
| <b>Built-in Analog I/O Channels</b>                        | No  | No  | 2 inputs, 2 outputs   |
| <b>Number of Instructions Available</b>                    | 21  | 21  | 21  |
| <b>Control Relays</b>                                      | 2000  | 2000  | 2000  |
| <b>System Control Relays</b>                               | 1000  | 1000  | 1000  |
| <b>Timers</b>  | 500   | 500   | 500   |
| <b>Counters</b>  | 250   | 250   | 250   |
| <b>Interrupts</b>  | Yes (external: 8 / timed: 4)                            | Yes (external: 8 / timed: 4)                                    | Yes (external: 4 / timed: 4)                                    |
| <b>Subroutines</b>   | Yes   | Yes   | Yes   |
| <b>For/Next Loops</b>                                      | Yes   | Yes   | Yes   |
| <b>Math (Integer and Hex)</b>                              | Yes   | Yes   | Yes   |
| <b>Drum Sequencer Instruction</b>                          | Yes   | Yes   | Yes   |
| <b>Internal Diagnostics</b>                                | Yes   | Yes   | Yes   |
| <b>Password Security</b>                                   | Yes   | Yes   | Yes   |
| <b>System Error Log</b>                                    | Yes   | Yes   | Yes   |
| <b>User Error Log</b>                                      | No  | No  | No  |
| <b>Memory Backup</b>                                       | Super Capacitor   | Super Capacitor + Battery                                       | Super Capacitor + Battery                                       |
| <b>Battery Backup</b>                                      | No  | Yes (battery sold separately; part # <a href="#">D2-BAT-1</a> ) | Yes (battery sold separately; part # <a href="#">D2-BAT-1</a> ) |
| <b>Calendar/Clock</b>                                      | No  | Yes   | Yes   |
| <b>I/O Terminal Block Replacement</b>                      | AutomationDirect p/n <a href="#">C0-16TB</a>            | AutomationDirect p/n <a href="#">C0-16TB</a>                    | AutomationDirect p/n <a href="#">C0-16TB</a>                    |
| <b>Communication Port &amp; Terminal Block Replacement</b> | N/A   | AutomationDirect p/n <a href="#">C0-3TB</a>                     | AutomationDirect p/n <a href="#">C0-3TB</a>                     |
| <b>24VDC Power Terminal Block Replacement</b>              | AutomationDirect p/n <a href="#">C0-4TB</a>             | AutomationDirect p/n <a href="#">C0-4TB</a>                     | AutomationDirect p/n <a href="#">C0-4TB</a>                     |

# CLICK PLC Specifications

## PLC Unit Specifications (continued)

| Ethernet Basic, Standard and Analog PLC Unit Specifications |  |  |  |
|---|--|--|--|
|   | <i>Ethernet Basic PLC</i>  | <i>Ethernet Standard PLC</i>                                 | <i>Ethernet Analog PLC</i>                                   |
| <b>Control Method</b>                                       | Stored Program/Cyclic execution method   | Stored Program/Cyclic execution method                       | Stored Program/Cyclic execution method                       |
| <b>I/O Numbering System</b>                                 | Fixed in Decimal   | Fixed in Decimal   | Fixed in Decimal   |
| <b>Ladder Memory (steps)</b>                                | 8000   | 8000   | 8000   |
| <b>Total Data Memory (words)</b>                            | 8000   | 8000   | 8000   |
| <b>Contact Execution (Boolean)</b>                          | < 0.2 $\mu$ s  | < 0.2 $\mu$ s  | < 0.2 $\mu$ s  |
| <b>Typical Scan (1K Boolean)</b>                            | < 1ms  | < 1ms  | < 1ms  |
| <b>RLL Ladder Style Programming</b>                         | Yes  | Yes  | Yes  |
| <b>Run Time Edits</b>                                       | Yes  | Yes  | Yes  |
| <b>Scan</b>   | Variable / fixed   | Variable / fixed   | Variable / fixed   |
| <b>CLICK Programming Software for Windows</b>               | Yes  | Yes  | Yes  |
| <b>Built-in Communication Ports</b>                         | Yes (one Ethernet port and one RS-232 port)  | Yes (one Ethernet port, one RS-232 port and one RS-485 port) | Yes (one Ethernet port, one RS-232 port and one RS-485 port) |
| <b>Protocols</b>  | Modbus RTU (master/slave) and ASCII (in/out), Modbus TCP (client/server), EtherNet/IP Implicit and Explicit (adapter server) |  |  |
| <b>FLASH Memory</b>   | Standard on PLC  | Standard on PLC  | Standard on PLC  |
| <b>Built-in Discrete I/O points</b>                         | 8 inputs, 6 outputs  | 8 inputs, 6 outputs  | 4 inputs, 4 outputs  |
| <b>Built-in Analog I/O Channels</b>                         | No   | No   | 2 or 4 inputs; 2 outputs                                     |
| <b>Number of High-Speed Input Points</b>                    | 4  | 8  | 4  |
| <b>Number of High-Speed Counters</b>                        | 4  | 6  | 4  |
| <b>PID Control Loops</b>                                    | 8  | 8  | 8  |
| <b>Number of Instructions Available</b>                     | 21   | 21   | 21   |
| <b>Control Relays</b>                                       | 2000   | 2000   | 2000   |
| <b>System Control Relays</b>                                | 1000   | 1000   | 1000   |
| <b>Timers</b>   | 500  | 500  | 500  |
| <b>Counters</b>   | 250  | 250  | 250  |
| <b>Interrupts</b>   | Yes (external: 8 / timed: 4)   | Yes (external: 8 / timed: 4)                                 | Yes (external: 4 / timed: 4)                                 |
| <b>Subroutines</b>  | Yes  | Yes  | Yes  |
| <b>For/Next Loops</b>                                       | Yes  | Yes  | Yes  |
| <b>Math (Integer and Hex)</b>                               | Yes  | Yes  | Yes  |
| <b>Drum Sequencer Instruction</b>                           | Yes  | Yes  | Yes  |
| <b>Internal Diagnostics</b>                                 | Yes  | Yes  | Yes  |
| <b>Password Security</b>                                    | Yes  | Yes  | Yes  |
| <b>System Error Log</b>                                     | Yes  | Yes  | Yes  |
| <b>User Error Log</b>                                       | No   | No   | No   |
| <b>Memory Backup</b>  | Super Capacitor + Battery  | Super Capacitor + Battery                                    | Super Capacitor + Battery                                    |
| <b>Battery Backup</b>                                       | Yes (battery part # <a href="#">D2-BAT-1</a> )   | Yes (battery part # <a href="#">D2-BAT-1</a> )               | Yes (battery part # <a href="#">D2-BAT-1</a> )               |
| <b>Calendar/Clock</b>                                       | Yes  | Yes  | Yes  |
| <b>I/O Terminal Block Replacement</b>                       | AutomationDirect p/n <a href="#">C0-16TB</a>   | AutomationDirect p/n <a href="#">C0-16TB</a>                 | AutomationDirect p/n <a href="#">C0-16TB</a>                 |
| <b>Communication Port &amp; Terminal Block Replacement</b>  | N/A  | AutomationDirect p/n <a href="#">C0-3TB</a>                  | AutomationDirect p/n <a href="#">C0-3TB</a>                  |
| <b>24VDC Power Terminal Block Replacement</b>               | AutomationDirect p/n <a href="#">C0-4TB</a>  | AutomationDirect p/n <a href="#">C0-4TB</a>                  | AutomationDirect p/n <a href="#">C0-4TB</a>                  |

# CLICK Specifications

## CLICK PLC Hardware/Software Compatibility

CLICK PLCs require a minimum software version of v2.50 for the PID function. The table below shows the most recent software and hardware versions required for the High-Speed input operation capability to be accessible.

| CLICK PLC Features Software Compatibility                  |  |                                |                   |             |       |       |       |
|--|--|--------------------------------|-------------------|-------------|-------|-------|-------|
| CPU Type   | Part Number                                      | Minimum CLICK Software Version |                   |             |       |       |       |
|  |  | Hardware                       | High-Speed Inputs | EtherNet/IP | PID   | DHCP  |       |
| Basic  | <a href="#">C0-00DD1-D</a>                       | v1.00                          | N/A               | N/A         | N/A   | N/A   |       |
|  | <a href="#">C0-00DD2-D</a>                       |                                |                   |             |       |       |       |
|  | <a href="#">C0-00DR-D</a>                        |                                |                   |             |       |       |       |
|  | <a href="#">C0-00AR-D</a>                        |                                |                   |             |       |       |       |
| Standard   | <a href="#">C0-01DD1-D</a>                       | v1.20                          | N/A               | N/A         | N/A   | N/A   |       |
|  | <a href="#">C0-01DD2-D</a>                       |                                |                   |             |       |       |       |
|  | <a href="#">C0-01DR-D</a>                        |                                |                   |             |       |       |       |
|  | <a href="#">C0-01AR-D</a>                        |                                |                   |             |       |       |       |
| Analog   | <a href="#">C0-02DD1-D</a> (before SN 171208001) | v1.12                          | N/A               | N/A         | N/A   | N/A   |       |
|  | <a href="#">C0-02DD1-D</a> (after SN 171208001)  | v2.10                          |                   |             |       |       |       |
|  | <a href="#">C0-02DD2-D</a> (before SN 174018001) | v1.12                          |                   |             |       |       |       |
|  | <a href="#">C0-02DD2-D</a> (after SN 174018001)  | v2.10                          |                   |             |       |       |       |
|  | <a href="#">C0-02DR-D</a> (before SN 173158001)  | v1.12                          |                   |             |       |       |       |
|  | <a href="#">C0-02DR-D</a> (after SN 173158001)   | v2.10                          |                   |             |       |       |       |
| Ethernet CPUs require v2.40 for EtherNet/IP communications |  |                                |                   |             |       |       |       |
| Ethernet Basic   | <a href="#">C0-10DD1E-D</a>                      | v2.00                          | v2.30             | v2.40       | v2.50 | v3.00 |       |
|  | <a href="#">C0-10DD2E-D</a>                      |                                | N/A               |             |       |       |       |
|  | <a href="#">C0-10DRE-D</a>                       |                                |                   |             |       |       |       |
|  | <a href="#">C0-10ARE-D</a>                       |                                |                   |             |       |       |       |
| Ethernet Standard  | <a href="#">C0-11DD1E-D</a>                      | v2.00                          | v2.30             | v2.40       | v2.50 | v3.00 |       |
|  | <a href="#">C0-11DD2E-D</a>                      |                                | N/A               |             |       |       |       |
|  | <a href="#">C0-11DRE-D</a>                       |                                |                   |             |       |       |       |
|  | <a href="#">C0-11ARE-D</a>                       |                                |                   |             |       |       |       |
| Ethernet Analog  | <a href="#">C0-12DD1E-D</a>                      | v2.20                          | v2.30             | v2.40       | v2.50 | v3.00 |       |
|  | <a href="#">C0-12DD2E-D</a>                      |                                | N/A               |             |       |       |       |
|  | <a href="#">C0-12DRE-D</a>                       |                                |                   |             |       |       |       |
|  | <a href="#">C0-12ARE-D</a>                       |                                |                   |             |       |       | v2.30 |
|  | <a href="#">C0-12DD1E-1-D</a>                    |                                | N/A               |             |       |       |       |
|  | <a href="#">C0-12DD2E-1-D</a>                    |                                |                   |             |       |       |       |
|  | <a href="#">C0-12DRE-1-D</a>                     |                                |                   |             |       |       | v2.30 |
|  | <a href="#">C0-12ARE-1-D</a>                     |                                | N/A               |             |       |       |       |
|  | <a href="#">C0-12DD1E-2-D</a>                    |                                |                   |             |       |       |       |
|  | <a href="#">C0-12DD2E-2-D</a>                    |                                |                   |             |       |       | N/A   |
|  | <a href="#">C0-12DRE-2-D</a>                     |                                |                   |             |       |       |       |
|  | <a href="#">C0-12ARE-2-D</a>                     |                                |                   |             |       |       |       |
| I/O Modules  | <a href="#">C0-08NE3</a>                         | v1.20                          | N/A               | N/A         | N/A   | N/A   |       |
|  | <a href="#">C0-16NE3</a>                         |                                |                   |             |       |       |       |
|  | <a href="#">C0-04AD-1</a>                        | v1.40                          |                   |             |       |       |       |
|  | <a href="#">C0-04AD-2</a>                        |                                |                   |             |       |       |       |
|  | <a href="#">C0-04DA-1</a>                        |                                |                   |             |       |       |       |
|  | <a href="#">C0-04DA-2</a>                        |                                |                   |             |       |       |       |
|  | <a href="#">C0-4AD2DA-1</a>                      |                                |                   |             |       |       |       |
|  | <a href="#">C0-4AD2DA-2</a>                      |                                |                   |             |       |       |       |
|  | <a href="#">C0-04RTD</a>                         |                                |                   |             |       |       |       |
|  | <a href="#">C0-04THM</a>                         |                                |                   |             |       |       |       |
|  | <a href="#">C0-08CDR</a>                         |                                |                   |             |       |       |       |
|  | <a href="#">C0-16CDD1</a>                        |                                |                   |             |       |       |       |
|  | <a href="#">C0-16CDD2</a>                        |                                |                   |             |       |       |       |
|  | Other modules                                    |                                |                   |             |       |       | v1.00 |

# CLICK PLC Family Overview

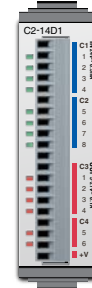
## What you'll need

Of course, what you'll need for your system depends on your particular application, but this overview shows you what you'll need for a simple system.

### 1. Select your **CLICK** or **CLICK PLUS** PLC unit.



### 2. If using a **CLICK PLUS** PLC, select an Option Slot Module if desired.



### 3. If you need additional I/O, select from 24 different types of Stackable I/O modules.



### 4. Select a 24VDC power supply.



or



### 5. Download the **FREE CLICK** programming software. [support.automationdirect.com/products/clickplcs.html](http://support.automationdirect.com/products/clickplcs.html)



### 6. Download the **FREE CLICK** mobile app. The **CLICK** mobile app is available for **iOS** and **Android**. It can connect to your **C2-02CPU** or **C2-03CPU** over **Bluetooth** to provision the PLC onto a **Wi-Fi** network. (PLC requires an external antenna)



# CLICK PLC Family Overview

## What you'll need (continued)

### 7. Select your PC-to-PLC programming cable.

If your PC has a USB port, use cable [EA-MG-PGM-CBL](#) to connect to the PLC port. If your PC has a 9-pin serial communications port, use programming cable [D2-DSCBL](#). If your PC has an Ethernet port, use [C5E-STPYL-C3](#) (crossover) or [C5E-STPYL-S3](#) (straight through) Ethernet cable. If your PC is on a network with a wireless access point, you can connect using one of our Wi-Fi antennas.

**[USB-CBL-AMICB6](#)**



**USB A to USB microB  
Programming Cable Assembly  
(CLICK PLUS Only)**

**[C5E-STPYL-C3](#) (crossover)  
[C5E-STPYL-S3](#) (straight through)**



**For Ethernet PLC Unit**

**or**

**[SE-ANT250](#)  
Wi-Fi/Bluetooth Dome Antenna  
([C2-02CPU](#) & [C2-03CPU](#) only)**



**or**

**[SE-ANT210](#)  
Wi-Fi/Bluetooth Whip Antenna  
([C2-02CPU](#) & [C2-03CPU](#) only)  
(nonmetal enclosure only)**



**[D2-DSCBL](#)**



**(PC requires RS-232 port  
to use this cable)**

**or**

**[EA-MG-PGM-CBL](#)**



**Connects to PC USB Port**

### 8. Select tools, wire, and provide power.

**Screwdriver  
[TW-SD-MSL-2](#)**



**Wire Strippers  
[DN-WS](#)**



**Hookup Wire**





# Power Supplies

## Power Supplies

The CLICK PLC family offers two 24VDC power supplies. They are identical except for the output current.

It is not mandatory to use one of these CLICK power supplies for the CLICK/CLICK PLUS PLC system. You can use any other 24VDC power supply that [Automationdirect.com](http://Automationdirect.com) offers, including the PSP24-DC12-1 12 to 24 VDC converter shown below.

### CO-00AC Power Supply

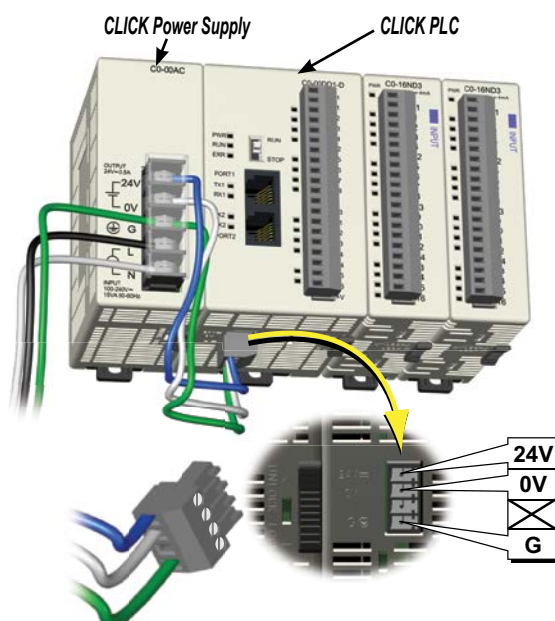
Limited auxiliary AC power supply allows you to power the 24VDC CLICK C0 and C2 series PLCs with 100–240 VAC supply power. The 0.5 A DC power supply is capable of controlling the PLC plus a limited configuration based on the power budget of each I/O module. The CO-00AC is a low-cost solution for applications requiring only minimal I/O and power consumption. This power supply will not support a fully-populated CLICK PLC system with all possible I/O module combinations.

### CO-01AC Power Supply

Expanded auxiliary AC power supply allows you to power the 24VDC CLICK C0 and C2 series PLCs with 100–240 VAC supply power. The 1.3 A DC power supply is capable of supporting a fully-populated CLICK PLC system with all possible I/O module combinations, with no concerns for exceeding the power budget.

### PSP24-DC12-1 DC-DC Converter

With this DC-DC converter you can operate the CLICK/CLICK PLUS PLC with 12VDC input power.



24VDC power is supplied to the PLC unit through wiring connected from the power supply output to the 4-pin 24VDC input connector located on the bottom of the PLC unit.

CO-00AC



CO-01AC



## CLICK 24VDC Power Supply Ratings

| Part Number             | Output Current | Price   |
|-------------------------|----------------|---------|
| <a href="#">CO-00AC</a> | 0.5 A          | \$35.50 |
| <a href="#">CO-01AC</a> | 1.3 A          | \$48.50 |

## CO-00AC Power Supply Input Specifications

| Part Number             | CO-00AC                           | CO-01AC                           |
|-------------------------|-----------------------------------|-----------------------------------|
| Input Voltage Range     | 85–264 VAC                        |                                   |
| Input Frequency         | 47–63 Hz                          |                                   |
| Input Current (typical) | 0.3 A @ 100VAC,<br>0.2 A @ 200VAC | 0.9 A @ 100VAC,<br>0.6 A @ 200VAC |
| Inrush Current          | 30A                               |                                   |
| Efficiency              | 80% typical                       |                                   |

## CO-00AC Power Supply Output Specs

| Part Number             | CO-00AC                            | CO-01AC                         |
|-------------------------|------------------------------------|---------------------------------|
| Output Voltage Range    | 23–25 VDC                          |                                 |
| Output Current          | 0.5 A                              | 1.3 A                           |
| Ripple                  | 200mV p-p max (0–55°C)             |                                 |
| Ripple Noise            | 300mV p-p max (0–55°C)             |                                 |
| Over Current Protection | @ 0.65 A<br>(automatic recovery)   | @ 1.6 A<br>(automatic recovery) |
| Over Voltage Protection | @ 27.6 V (clamped by Zener diode)  |                                 |
| Start-up Time           | 1000ms max at rated input and load |                                 |
| Hold-up Time            | 10ms minimum at 85VAC, I=max       |                                 |

## CO-00AC Power Supply General Specs

| Part Number                   | CO-00AC  | CO-01AC             |
|-------------------------------|--|---------------------|
| Ambient Operating Temperature | 32–131°F [0–55°C]  |                     |
| Storage Temperature           | –4–158°F [–20–70°C]  |                     |
| Humidity                      | 30–95%, non-condensing   |                     |
| Vibration Resistance          | JIS C60068-2-6, sine wave vibration                                    |                     |
| Shock Resistance              | JIS C60068-2-27  |                     |
| Voltage Withstand             | 1500VAC, 5mA cutoff current  |                     |
| Input-Output                  | 1500VAC, 5mA cutoff current  |                     |
| Input-Ground                  | 500VAC, 5mA cutoff current   |                     |
| Output-Ground                 | 500VAC, 5mA cutoff current   |                     |
| Insulation Resistance         | 10MΩ minimum, 500VDC   |                     |
| Input-Output                  | 10MΩ minimum, 500VDC   |                     |
| Input-Ground                  | 5MΩ minimum, 500VDC  |                     |
| Output-Ground                 | 5MΩ minimum, 500VDC  |                     |
| Noise Immunity                | FCC Class A, EN55022:1998 Class A                                      |                     |
| Input/Output Interface        | 5P terminal block, Fujicon UF2362AX series or equivalent               |                     |
| Agency Approvals              | UL508, UL1604, EN61010-1 (IEC 1010-1), CAN/CSA E60079-15:02, JIS C0025 |                     |
| Drawing Link                  | <a href="#">PDF</a>  | <a href="#">PDF</a> |
| Weight                        | 5.3 oz [150g]  | 6.0 oz [170g]       |

## PSP24-DC12-1 DC-DC Converter Specs

|                          |                                 |
|--------------------------|---------------------------------|
| Input Voltage Range      | 9.5–18 VDC                      |
| Input Power (no load)    | 1.0 W max.                      |
| Startup Voltage          | 8.4 VDC                         |
| Undervoltage Shutdown    | 7.6 VDC                         |
| Output Voltage Range     | 24–28 VDC (adjustable)          |
| Output Current           | 1.0 A                           |
| Short Circuit Protection | Current limited at 110% typical |
| Drawing Link             | <a href="#">PDF</a>             |
| Weight                   | 7.5 oz (213g)                   |



PSP24-DC12-1





# Wiring System for CLICK PLC Family

## Wiring Solutions using the ZIPLink Wiring System

**ZIPLinks** eliminate the normally tedious process of wiring between devices by utilizing prewired cables and DIN rail mount connector modules. It's as simple as plugging in a cable connector at either end or terminating wires at only one end. Prewired cables keep installation clean and efficient, using half the space at a fraction of the cost of standard terminal blocks.



**ZIPLinks** are available in a variety of styles to suit your needs, including feedthrough connector module. **ZIPLinks** are available for all Basic, Standard and Ethernet CLICK PLC units, select CLICK PLUS option slot modules, and most discrete and analog stackable I/O modules. Pre-printed I/O-specific adhesive label strips for quick marking of **ZIPLink** modules are provided with **ZIPLink** cables.

### **Solution 1: CLICK PLC, CLICK PLUS PLC with Option Slot Module, and Stackable I/O Modules to ZIPLink Connector Modules**

When looking for quick and easy I/O-to-field termination, a **ZIPLink** connector module used in conjunction with a prewired **ZIPLink** cable, consisting of an I/O terminal block at one end and a multi-pin connector at the other end, is the best solution.

Use the "CLICK PLC PLC Unit **ZIPLink** Selector" table and CLICK I/O **ZIPLink** selector tables located in this section:

- Locate your PLC or I/O module.
- Select a **ZIPLink** Module.
- Select a corresponding **ZIPLink** Cable.

### **Solution 2: CLICK/CLICK PLUS PLC I/O to 3rd Party Devices**

When wanting to connect PLC I/O (built-in, option slot module, or stackable) to another device within close proximity, no extra terminal blocks are necessary when using the **ZIPLink** Pigtail Cables. **ZIPLink** Pigtail Cables are prewired to an I/O terminal block with color-coded pigtail with soldered-tip wires on the other end.

Use the I/O Modules to 3rd Party Devices selector tables located in the **ZIPLink** section:

- Locate your PLC or I/O module.
- Select a **ZIPLink** Pigtail Cable that is compatible with your 3rd party device



### **Solution 3: GS Series and DuraPulse Drives Communication Cables**

Need to communicate via Modbus RTU to a drive or a network of drives?

**ZIPLink** cables are available in a wide range of configurations for connecting to PLCs and SureServo, SureStep, Stellar Soft Starter and AC drives. Add a **ZIPLink** communications module to quickly and easily set up a multi-device network.

Use the Drives Communication selector tables located in the **ZIPLink** section:

- Locate your Drive and type of communications.
- Select a **ZIPLink** cable and other associated hardware.



### **Solution 4: Serial Communications Cables**

**ZIPLink** offers communications cables for use with CLICK PLCs and select CLICK PLUS PLCs that can also be used with other communications devices. Connections include a 6-pin RJ12 connector which can be used in conjunction with the RJ12 Feedthrough module.

Use the Serial Communications Cables selector table located in the **ZIPLink** section:

- Locate your connector type
- Select a cable.





# Wiring System for CLICK PLC Family

## CLICK PLC & CLICK PLUS Option Slot ZIPLink Selector

| PLC or Option Slot Module     |                               | ZiPLink  |             |  |                                  |
|-------------------------------|-------------------------------|--|-------------|--|----------------------------------|
| CLICK PLC Unit                | CLICK PLUS Option Slot Module | # of Terms   | Component   | Module Part No.  | Cable Part No.                   |
| <a href="#">C0-00DD1-D</a>    | NA                            | 20   | Feedthrough | <a href="#">ZL-RTB20</a> ,<br><a href="#">ZL-RTB20-1</a> | <a href="#">ZL-C0-CBL20</a><br>* |
| <a href="#">C0-00DD2-D</a>    | NA                            |  |             |  |                                  |
| <a href="#">C0-00DR-D</a>     | NA                            |  |             |  |                                  |
| <a href="#">C0-00AR-D</a>     | NA                            |  |             |  |                                  |
| <a href="#">C0-01DD1-D</a>    | NA                            |  |             |  |                                  |
| <a href="#">C0-01DD2-D</a>    | NA                            |  |             |  |                                  |
| <a href="#">C0-01DR-D</a>     | NA                            |  |             |  |                                  |
| <a href="#">C0-01AR-D</a>     | NA                            |  |             |  |                                  |
| <a href="#">C0-02DD1-D</a>    | NA                            | No ZiPLinks are available for CLICK Analog PLC units.  |             |  |                                  |
| <a href="#">C0-02DD2-D</a>    | NA                            |  |             |  |                                  |
| <a href="#">C0-02DR-D</a>     | NA                            |  |             |  |                                  |
| <a href="#">C0-10DD1E-D</a>   | NA                            | 20   | Feedthrough | <a href="#">ZL-RTB20</a> ,<br><a href="#">ZL-RTB20-1</a> | <a href="#">ZL-C0-CBL20</a><br>* |
| <a href="#">C0-10DD2E-D</a>   | NA                            |  |             |  |                                  |
| <a href="#">C0-10DRE-D</a>    | NA                            |  |             |  |                                  |
| <a href="#">C0-10ARE-D</a>    | NA                            |  |             |  |                                  |
| <a href="#">C0-11DD1E-D</a>   | <a href="#">C2-14D1</a>       |  |             |  |                                  |
| <a href="#">C0-11DD2E-D</a>   | <a href="#">C2-14D2</a>       |  |             |  |                                  |
| <a href="#">C0-11DRE-D</a>    | <a href="#">C2-14DR</a>       |  |             |  |                                  |
| <a href="#">C0-11ARE-D</a>    | <a href="#">C2-14AR</a>       |  |             |  |                                  |
| <a href="#">C0-12DD1E-D</a>   | <a href="#">C2-08D1-4VC</a>   | No ZiPLinks are available for CLICK Ethernet Analog PLC units or CLICK PLUS Option Slot Modules with analog I/O. |             |  |                                  |
| <a href="#">C0-12DD2E-D</a>   | <a href="#">C2-08D2-4VC</a>   |  |             |  |                                  |
| <a href="#">C0-12DRE-D</a>    | <a href="#">C2-08DR-4VC</a>   |  |             |  |                                  |
| <a href="#">C0-12ARE-D</a>    | <a href="#">C2-08AR-4VC</a>   |  |             |  |                                  |
| <a href="#">C0-12DD1E-1-D</a> | <a href="#">C2-08D1-6C</a>    |  |             |  |                                  |
| <a href="#">C0-12DD2E-1-D</a> | <a href="#">C2-08D2-6C</a>    |  |             |  |                                  |
| <a href="#">C0-12DRE-1-D</a>  | <a href="#">C2-08DR-6C</a>    |  |             |  |                                  |
| <a href="#">C0-12ARE-1-D</a>  | <a href="#">C2-08AR-6C</a>    |  |             |  |                                  |
| <a href="#">C0-12DD1E-2-D</a> | <a href="#">C2-08D1-6V</a>    |  |             |  |                                  |
| <a href="#">C0-12DD2E-2-D</a> | <a href="#">C2-08D2-6V</a>    |  |             |  |                                  |
| <a href="#">C0-12DRE-2-D</a>  | <a href="#">C2-08DR-6V</a>    |  |             |  |                                  |
| <a href="#">C0-12ARE-2-D</a>  | <a href="#">C2-08AR-6V</a>    |  |             |  |                                  |
| NA                            | <a href="#">C2-DCM</a>        | No ZiPLinks are available for CLICK PLUS Option Slot Communications Module                                       |             |  |                                  |

### Table Notes:

\* Select the cable length by replacing the \* with: Blank = 0.5 m, -1 = 1.0 m, or -2 = 2.0 m.

1 Note: The C0-04TRS relay output is derated not to exceed 2A per point maximum when used with the ZIPLink wiring system.

2 Note: Fuses (5x20 mm) are not included. See Edison Electronic Fuse section for 5x20 mm fuse. S500 and GMA electronic circuit protection is recommended for fast-acting maximum protection. S506 and GMC electronic circuit protection is recommended for time-delay performance. Ideal for inductive circuits. To ensure proper operation, do not exceed the voltage and current rating of the ZIPLink module. ZL-RFU20 = 2A per circuit.

## CLICK/CLICK PLUS PLC Discrete Input Module ZIPLink Selector

| I/O Module   |                          | ZIPLink     |                 |                |
|--------------|--------------------------|-------------|-----------------|----------------|
| Input Module | # of Terms               | Component   | Module Part No. | Cable Part No. |
| C0-08SIM     | Not supported by ZIPLink |             |                 |                |
| C0-08ND3     | 11                       | Feedthrough | ZL-RTB20        | ZL-C0-CBL11 *  |
| C0-08ND3-1   |                          |             |                 |                |
| C0-08NE3     |                          |             |                 |                |
| C0-08NA      |                          |             |                 |                |
| C0-16ND3     | 20                       | Feedthrough | ZL-RTB20        | ZL-C0-CBL20 *  |
|              |                          | Sensor      | ZL-LTB16-24-1   |                |
| C0-16NE3     | 20                       | Feedthrough | ZL-RTB20        |                |
|              |                          | Sensor      | ZL-LTB16-24-1   |                |

## CLICK/CLICK PLUS PLC Discrete Output Module ZIPLink Selector

| I/O Module               |                                 | ZIPLink          |                               |                               |
|--------------------------|---------------------------------|------------------|-------------------------------|-------------------------------|
| Output Module            | # of Terms                      | Component        | Module Part No.               | Cable Part No.                |
| C0-08TD1                 | 11                              | Feedthrough      | <a href="#">ZL-RTB20</a>      | <a href="#">ZL-C0-CBL11</a> * |
| C0-08TD2                 |                                 |                  |                               |                               |
| C0-08TR                  |                                 |                  |                               |                               |
| C0-08TR-3                | Not supported by <b>ZIPLink</b> |                  |                               |                               |
| C0-08TA                  |                                 |                  |                               |                               |
| <a href="#">C0-16TD1</a> | 20                              | Feedthrough      | <a href="#">ZL-RTB20</a>      | <a href="#">ZL-C0-CBL20</a> * |
|                          |                                 | Fuse             | <a href="#">ZL-RFU20 2</a>    |                               |
|                          |                                 | Relay (sinking)  | <a href="#">ZL-RRL16-24-1</a> |                               |
| <a href="#">C0-16TD2</a> | 20                              | Feedthrough      | <a href="#">ZL-RTB20</a>      | <a href="#">ZL-C0-CBL20</a> * |
|                          |                                 | Fuse             | <a href="#">ZL-RFU20 2</a>    |                               |
|                          |                                 | Relay (sourcing) | <a href="#">ZL-RRL16-24-2</a> |                               |
| C0-04TRS1                | 20                              | Feedthrough      | <a href="#">ZL-RTB20</a>      | <a href="#">ZL-C0-CBL20</a> * |
| C0-04TRS-10              | Not supported by <b>ZIPLink</b> |                  |                               |                               |

## CLICK/CLICK PLUS PLC Combo I/O Module ZIPLink Selector

| I/O Module   |            | ZIPLink     |                 |                |
|--------------|------------|-------------|-----------------|----------------|
| Combo Module | # of Terms | Component   | Module Part No. | Cable Part No. |
| C0-16CDD1    | 20         | Feedthrough | ZL-RTB20        | ZL-C0-CBL20 *  |
| C0-16CDD2    |            |             |                 |                |
| C0-08CDR     | 11         | Feedthrough | ZL-RTB20        | ZL-C0-CBL11 *  |

## CLICK/CLICK PLUS PLC Analog I/O Module ZIPLink Selector

| I/O Module    |            | ZIPLink   |                 |                |
|---------------|------------|---|-----------------|----------------|
| Analog Module | # of Terms | Component   | Module Part No. | Cable Part No. |
| C0-04AD-1     | 11         | Feedthrough   | ZL-RTB20        | ZL-C0-CBL11 *  |
| C0-04AD-2     | 11         | Feedthrough   | ZL-RTB20        | ZL-C0-CBL11 *  |
| C0-04RTD      | 20         | No ZIPLinks are available for RTD and thermocouple modules. |                 |                |
| C0-04THM      | 11         |   |                 |                |
| C0-04DA-1     | 11         | Feedthrough   | ZL-RTB20        | ZL-C0-CBL11 *  |
| C0-04DA-2     | 11         | Feedthrough   | ZL-RTB20        | ZL-C0-CBL11 *  |
| C0-4AD2DA-1   | 20         | Feedthrough   | ZL-RTB20        | ZL-C0-CBL20 *  |
| C0-4AD2DA-2   | 20         | Feedthrough   | ZL-RTB20        | ZL-C0-CBL20 *  |

# Accessories

## **C2-USER-M      \$0.00** **CLICK PLUS PLC Hardware User Manual**

Manual covers all CLICK PLUS PLC and I/O module installation and wiring, specifications, error codes and troubleshooting guide. The CLICK PLUS PLC Hardware User Manual can be downloaded free at the AutomationDirect Web site; [www.AutomationDirect.com](http://www.AutomationDirect.com)



## **C0-USER-M      \$0.00** **CLICK PLC Hardware User Manual**

Manual covers all CLICK PLC and I/O module installation and wiring, specifications, error codes and troubleshooting guide. The CLICK PLC Hardware User Manual can be downloaded free at the AutomationDirect Web site; [www.AutomationDirect.com](http://www.AutomationDirect.com)



## **C0-PGMSW      \$11.00** **Programming Software CD-ROM**

The programming software can be downloaded free at the AutomationDirect Web site, or the CD can be purchased from the AutomationDirect online Web store. [www.AutomationDirect.com](http://www.AutomationDirect.com)



## **EA-MG-PGM-CBL      \$46.50** **PC to Panel Programming Cable Assembly for C-more Micro-Graphic Panels and CLICK/CLICK PLUS PLCs**

The 6-ft cable assembly connects a personal computer to any **C-more** Micro-Graphic panel, CLICK PLC, or select CLICK PLUS PLC for setup and programming.

*Note: This cable assembly uses the PC's USB port and converts the signals to serial transmissions. The USB port supplies 5VDC to the Micro-Graphic panel for configuration operations.*

Assembly includes standard USB A-type connector to B-type connector cable, custom converter, and an RS232C cable with an RJ12 modular connector on each end.



## **USB-CBL-AMICB6      \$4.25** **USB A to USB microB Programming Cable Assembly (CLICK PLUS Only)**

Programming cable, USB A to USB microB, 6ft (1.83 m) length. For use with CLICK PLUS PLCs and most USB devices. The USB port supplies 5VDC to the CLICK PLUS CPU for programming.



## **D2-DSCBL      \$28.00** **Programming Cable for CLICK/CLICK PLUS and DirectLOGIC PLCs**

12ft. (3.66 m) RS232 shielded PC programming cable for CLICK, select CLICK PLUS PLCs, DL05, DL06, DL105, DL205, D3-350, D4-450, D4-454, and Do-more H2 and T1H series CPUs. 9-pin D-shell female connector to an RJ12 6P6C connector.



*Note: If your PC has a USB port but does not have a serial port, you must use programming cable [EA-MG-PGM-CBL](#) to connect to CLICK PLCs. For CLICK PLUS PLCs, you may also use [USB-CBL-AMICB6](#)*

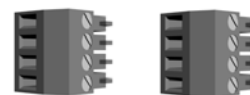
## **C0-3TB      \$8.50** **Spare 3-Pole Terminal Block**

Replacement 3-pole terminal block for the 3-wire RS-485 Port 3 on CLICK Standard and Analog PLCs as well as the CLICK PLUS [C2-03CPU](#). Sold in packs of 2.



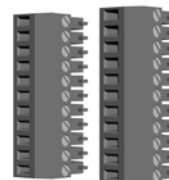
## **C0-4TB      \$8.50** **Spare 24VDC Power Terminal Block**

Replacement terminal block for the 24VDC supply power to the PLC. Sold in packs of 2.



## **C0-8TB      \$14.50** **Spare 8-Point I/O Terminal Block**

Replacement terminal block for the 8-point I/O modules. Sold in packs of 2.



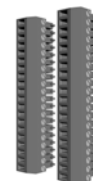
## **C0-8TB-1      \$16.50** **Spare 13-Point I/O Terminal Block**

Replacement terminal block for the 8-point I/O relay modules. Sold in packs of 2.



## **C0-16TB      \$20.00** **Spare 16-Point I/O Terminal Block**

Replacement terminal block for the 16-point I/O modules and PLC built-in I/O. Sold in packs of 2.



## **C2-6TB      \$15.00** **Spare 6-pt Terminal Block**

Replacement terminal block for the C2-DCM serial ports. Sold in packs of 2.



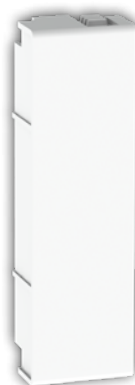
# Accessories

**SE-ANT250     \$42.50**
***Wi-Fi/Bluetooth Dome Antenna***

2.4 GHz antenna, IP67, panel mount, 9.8 ft (3m) cable length, for external mounting when CLICK PLUS PLC is installed in a metallic enclosure.


**C2-FILL     \$8.00**
***CPU Option Slot Cover***

Snap-on cover for CLICK PLUS CPU Option Slot in applications without an Option Slot module present.


**MSD-SLC16G     \$89.00**

16GB microSD card, industrial grade, 3D NAND Flash (with SLC Mode), 70°C [158°F] max operating temp.


**SE-ANT210     \$9.00**
***Wi-Fi/Bluetooth Whip Antenna***

Whip/straight 2.4 GHz antenna, IP65, connector mount. Not recommended for installation in a metallic enclosure.


**D2-BAT-1     \$6.00**

Replacement CR2354 battery for Standard, Analog, Ethernet Standard and Ethernet Analog PLC units.


**TW-SD-MSL-2     \$3.25**
***Insulated Slotted Screwdriver***

0.4 x 2.5 x 80 mm slotted screwdriver for terminal blocks.


**DN-EB35MN     \$26.50**
***DINector End Bracket***

**D0-MC-BAT     \$3.00**

Replacement CR2032 battery for CLICK PLUS PLC units.


**DN-WS     \$59.00**
***Wire Stripper***

***C-more and C-more Micro Graphic Operator Interfaces***

***ZIPLink Wiring Systems***
