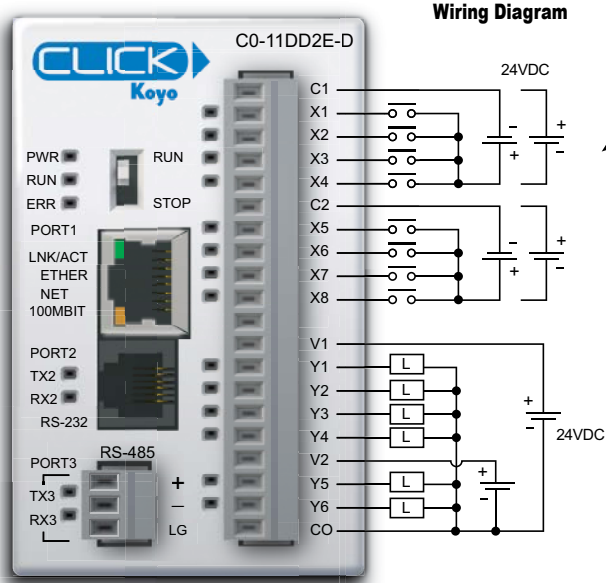


# Ethernet Standard PLC

**C0-11DD2E-D \$212.00**

**8 DC Input/6 Sourcing DC Output Micro PLC**



**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>Input Frequency (Max)</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

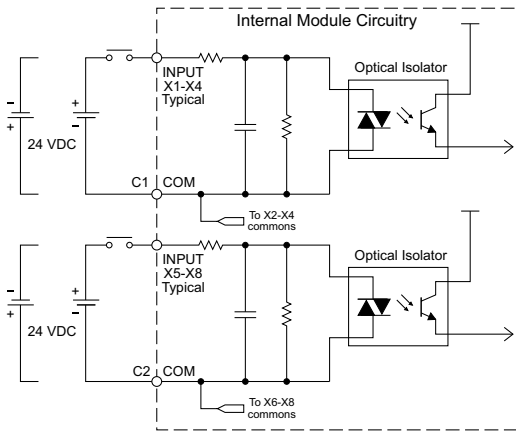
<b>Outputs per Module</b>	6 (Source)
<b>Operating Voltage Range</b>	24VDC
<b>Output Voltage Range</b>	19.2–30 VDC
<b>Maximum Output Current</b>	0.1 A/point, 0.6 A/common
<b>Minimum Output Current</b>	0.2 mA
<b>Maximum Leakage Current</b>	0.1 mA @ 30VDC
<b>On Voltage Drop</b>	0.5 VDC @ 0.1 A
<b>Maximum Inrush Current</b>	150mA for 10ms
<b>OFF to ON Response</b>	Max. 0.5 μs
<b>ON to OFF Response</b>	Max. 0.5 μs
<b>Status Indicators</b>	Logic Side (6 points, red LED)
<b>Commons</b>	1 (6 points/common)

## General Specifications

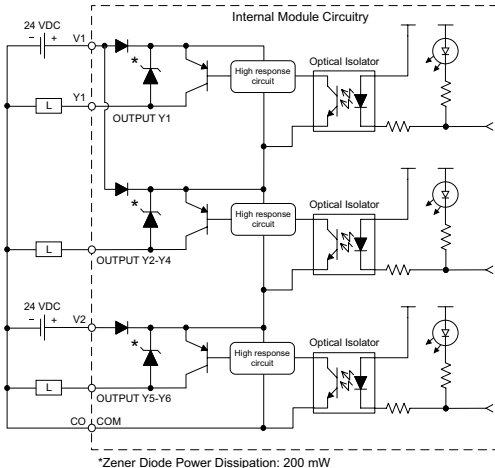
<b>Current Consumption at 24VDC</b>	140mA
<b>Terminal Block Replacement Part No.</b>	C0-16TB
<b>Drawing Link</b>	<a href="#">PDF</a>
<b>Weight</b>	5.0 oz [140g]

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

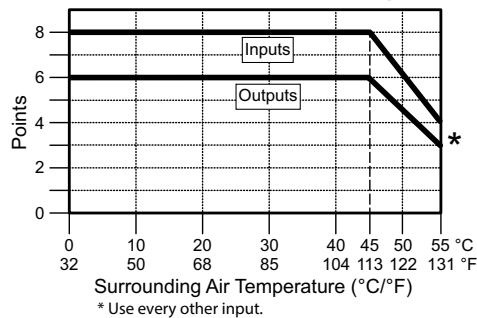
### Equivalent Input Circuit



### Equivalent Output Circuit



**C0-11DD2E-D Temperature Derating Chart**



### ZiPLink Pre-Wired PLC Connection Cables and Modules

**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: 32°F to 140°F [0°C to 60°C]; All other modules: 32°F to 131°F [0°C to 55°C], IEC 60068-2-14 (Test Nb, Thermal Shock)
<b>Storage Temperature</b>	-4°F to 158°F [-20°C to 70°C] IEC 60068-2-1 (Test Ab, Cold) IEC 60068-2-2 (Test Bb, Dry Heat) 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], Procedure[VIII] JIS C60068-2-27 (Sine wave vibration test)
<b>Shock</b>	MIL STD 810C, Method 516.2, IEC60068-2-27, JIS C60068-2-27, Category [f], Procedure[VIII]
<b>Noise Immunity</b>	<EN61131-2> EN61000-4-2 (ESD) EN61000-4-3 (RFI) EN61000-4-4 (FTB) EN61000-4-5 (Surge) EN61000-4-6 (Conducted) EN61000-4-8 (Power frequency magnetic field immunity)  <Local Test> Impulse noise 1µs, 1000V 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

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					
<b>Ethernet CPUs</b>	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>						
	<a href="#">C0-10DRE-D</a>		N/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>						
	<a href="#">C0-11DRE-D</a>		N/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>						
	<a href="#">C0-12DRE-D</a>		N/A				
	<a href="#">C0-12ARE-D</a>						
	<a href="#">C0-12DD1E-1-D</a>		v2.30				
	<a href="#">C0-12DD2E-1-D</a>						
	<a href="#">C0-12DRE-1-D</a>		N/A				
	<a href="#">C0-12ARE-1-D</a>						
	<a href="#">C0-12DD1E-2-D</a>		v2.30				
	<a href="#">C0-12DD2E-2-D</a>						
	<a href="#">C0-12DRE-2-D</a>		N/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>						
	<a href="#">C0-04POT</a>						v3.70
	Other modules						v1.00

# CLICK PLC Family Overview

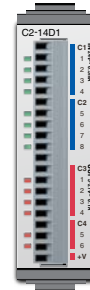
## What you'll need

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 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.

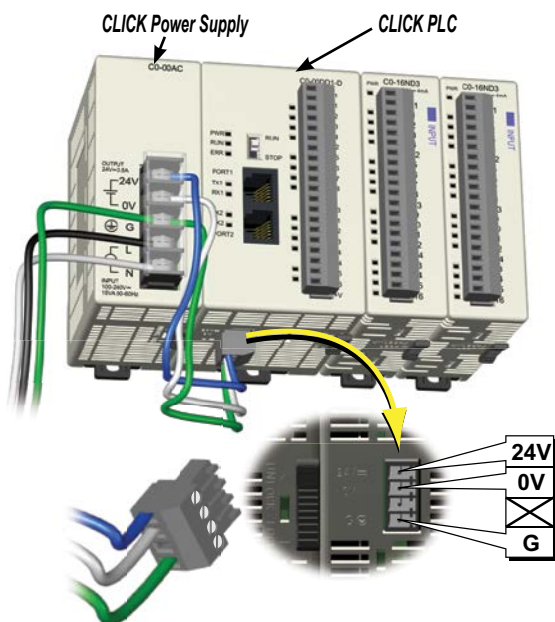
### PSP24-DC12-1 DC-DC Converter

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

CO-00AC



CO-01AC



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.

## CLICK 24VDC Power Supply Ratings

Part Number	Output Current	Price
CO-00AC	0.5 A	\$51.00
CO-01AC	1.3 A	\$63.00

## 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, 0.2 A @ 200VAC	0.9 A @ 100VAC, 0.6 A @ 200VAC
Inrush Current	30A	
Efficiency	80% typical	

## 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 (automatic recovery)	@ 1.6 A (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	

## 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

# Power Budgeting

## Power Budgeting

There are two factors to consider when determining the power required to operate a CLICK PLC system. The first is the power required by the PLC and internal logic-side power provided through the PLC. This includes the CPU's own I/O, any connected I/O modules that are powered through the PLC expansion port, plus any device, such as a **C-more** Micro-Graphic panel, that is powered through one of the communications ports.

The second area is the power required by all externally-connected I/O devices. This should be viewed as the field-side power required. The field-side power is dependent on the voltage used for a particular input or output device as it relates to the wired I/O point and to the calculated load rating of the connected device.

It is strongly recommended that the power source for the logic side be separate from the power source for the field side to help eliminate possible electrical noise.

Power budgeting requires the calculation of the total current the 24VDC power source needs to provide to CLICK's logic side. A separate calculation is required to determine the total current required for all devices operating from the field side of the PLC system.

Refer to the Power Budgeting example shown on the following page. The table shows required current for a CLICK PLUS PLC, two I/O modules, and a **C-more** Micro. Use the total amperage values to select a suitable power supply.



**CLICK 24VDC Power Supply**  
C0-00AC or C0-01AC



**Other 24VDC Power Supply**  
Example: PSP24-060S

## Power Consumption for CLICK and CLICK PLUS PLC Units

## Power Consumption for CLICK PLUS Option Slot Modules

PLC Current Consumption (mA)		
Part Number	Power Budget 24VDC (Logic Side)	External 24VDC (Field Side)
<b>Basic PLC Units</b>		
<a href="#">C0-00DD1-D</a>	120	60
<a href="#">C0-00DD2-D</a>	120	0
<a href="#">C0-00DR-D</a>		
<a href="#">C0-00AR-D</a>		
<b>Standard PLC Units</b>		
<a href="#">C0-01DD1-D</a>	140	60
<a href="#">C0-01DD2-D</a>	140	0
<a href="#">C0-01DR-D</a>		
<a href="#">C0-01AR-D</a>		
<b>Analog PLC Units</b>		
<a href="#">C0-02DD1-D</a>	140	60
<a href="#">C0-02DD2-D</a>	140	0
<a href="#">C0-02DR-D</a>		
<b>Ethernet Basic PLC Units</b>		
<a href="#">C0-10DD1E-D</a>	120	60
<a href="#">C0-10DD2E-D</a>	120	0
<a href="#">C0-10DRE-D</a>		
<a href="#">C0-10ARE-D</a>		
<b>Ethernet Standard PLC Units</b>		
<a href="#">C0-11DD1E-D</a>	140	60
<a href="#">C0-11DD2E-D</a>	140	0
<a href="#">C0-11DRE-D</a>		
<a href="#">C0-11ARE-D</a>		

PLC Current Consumption (mA)		
Part Number	Power Budget 24VDC (Logic Side)	External 24VDC (Field Side)
<b>Ethernet Analog PLC Units</b>		
<a href="#">C0-12DD1E-D</a>	140	60
<a href="#">C0-12DD2E-D</a>		
<a href="#">C0-12DRE-D</a>	160	0
<a href="#">C0-12ARE-D</a>		
<a href="#">C0-12DD1E-1-D</a>	140	60
<a href="#">C0-12DD2E-1-D</a>		
<a href="#">C0-12DRE-1-D</a>	160	0
<a href="#">C0-12ARE-1-D</a>		
<a href="#">C0-12DD1E-2-D</a>	140	60
<a href="#">C0-12DD2E-2-D</a>		
<a href="#">C0-12DRE-2-D</a>	160	0
<a href="#">C0-12ARE-2-D</a>		
<b>CLICK PLUS PLCs</b>		
<a href="#">C2-01CPU</a>	110	0
<a href="#">C2-01CPU-2</a>	120	
<a href="#">C2-02CPU</a>	105	
<a href="#">C2-02CPU-2</a>	115	
<a href="#">C2-03CPU</a>	130	
<a href="#">C2-03CPU-2</a>	140	

CLICK PLUS Option Slot Modules Current Consumption (mA)		
Part Number	Power Budget 24VDC (Logic Side)	External 24VDC (Field Side)
<b>Option Slot I/O Modules</b>		
<a href="#">C2-14D1</a>	50	60
<a href="#">C2-14D2</a>	50	0
<a href="#">C2-14DR</a>	75	0
<a href="#">C2-14AR</a>	75	0
<a href="#">C2-14TTL</a>	220	0
<a href="#">C2-08D1-4VC</a>	80	60
<a href="#">C2-08D2-4VC</a>	80	0
<a href="#">C2-08DR-4VC</a>	100	0
<a href="#">C2-08AR-4VC</a>	100	0
<a href="#">C2-08D1-6C</a>	80	60
<a href="#">C2-08D2-6C</a>	80	0
<a href="#">C2-08DR-6C</a>	100	0
<a href="#">C2-08AR-6C</a>	100	0
<a href="#">C2-08D1-6V</a>	80	60
<a href="#">C2-08D2-6V</a>	80	0
<a href="#">C2-08DR-6V</a>	100	0
<a href="#">C2-08AR-6V</a>	100	0
<b>Option Slot Intelligent Modules</b>		
<a href="#">C2-DCM</a>	60	0
<a href="#">C2-NRED</a>	125	0
<a href="#">C2-OPCUA</a>	125	0

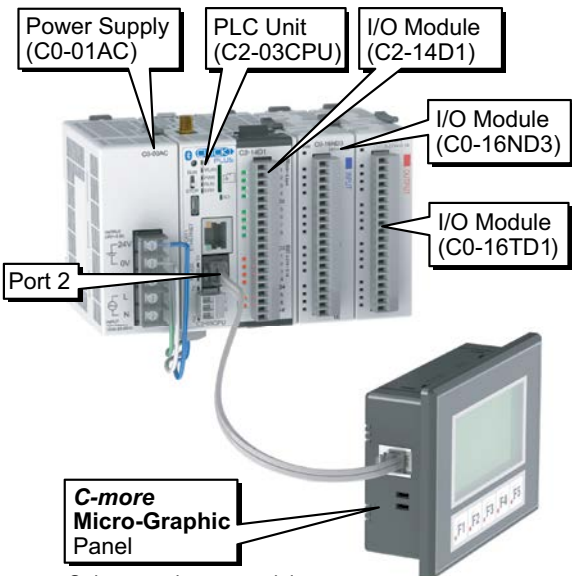
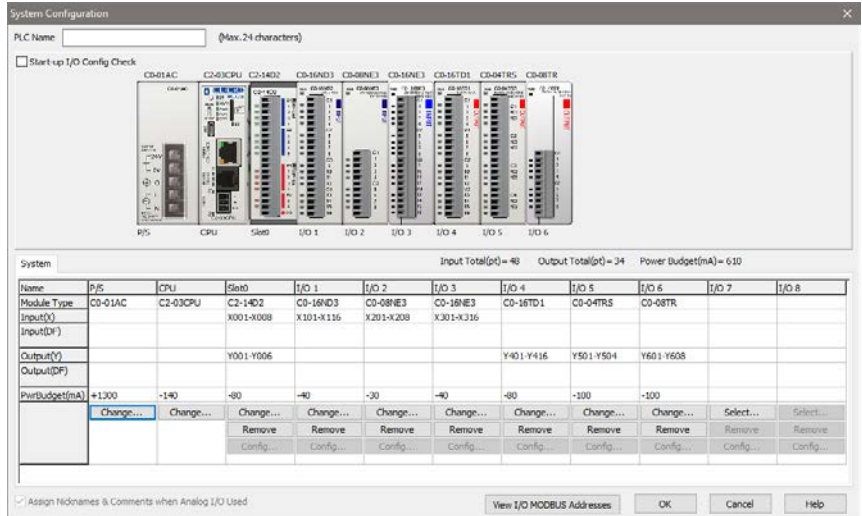


# Power Budgeting

## Power Consumption for CLICK Stackable I/O Modules

I/O Module Current Consumption (mA)		
Part Number	Power Budget 24VDC (logic side)	External 24VDC (field side)
<b>Discrete Input Modules</b>		
<a href="#">C0-08SIM</a>	50	0
<a href="#">C0-08ND3</a>	30	0
<a href="#">C0-08ND3-1</a>	30	0
<a href="#">C0-16ND3</a>	40	0
<a href="#">C0-08NE3</a>	30	0
<a href="#">C0-16NE3</a>	40	0
<a href="#">C0-08NA</a>	30	0
<b>Discrete Output Modules</b>		
<a href="#">C0-08TD1</a>	50	15
<a href="#">C0-08TD2</a>	50	0
<a href="#">C0-16TD1</a>	80	100
<a href="#">C0-16TD2</a>	80	0
<a href="#">C0-08TA</a>	80	0
<a href="#">C0-04TRS</a>	100	0
<a href="#">C0-04TRS-10</a>	120	0
<a href="#">C0-08TR</a>	100	0
<a href="#">C0-08TR-3</a>	90	0

I/O Module Current Consumption (continued) (mA)		
Part Number	Power Budget 24VDC (logic side)	External 24VDC (field side)
<b>Discrete Combo I/O Modules</b>		
<a href="#">C0-16CDD1</a>	80	50
<a href="#">C0-16CDD2</a>	80	0
<a href="#">C0-08CDR</a>	80	0
<b>Analog Input Modules</b>		
<a href="#">C0-04AD-1</a>	20	65
<a href="#">C0-04AD-2</a>	23	65
<a href="#">C0-04POT</a>	30	0
<a href="#">C0-04RTD</a>	25	0
<a href="#">C0-04THM</a>	25	0
<b>Analog Output Modules</b>		
<a href="#">C0-04DA-1</a>	20	145
<a href="#">C0-04DA-2</a>	20	85
<b>Analog Combo I/O Modules</b>		
<a href="#">C0-4AD2DA-1</a>	25	75
<a href="#">C0-4AD2DA-2</a>	20	65
<b>C-more Micro-Graphic Panel</b>		
<b>Monochrome only</b>	90	0



Only monochrome models can be powered from port 2.

### Power Budgeting Example

Current Consumption (mA) Example		
Part Number	Power Budget 24VDC (logic side)	External 24VDC (field side)
<a href="#">C2-03CPU</a>	130	0
<a href="#">C2-14D1</a>	50	60
<a href="#">C0-16ND3</a>	40	0
<a href="#">C0-16TD1</a>	80	100
<b>C-more Micro</b>	90	0
<b>Total:</b>	<b>390</b>	<b>160*</b>

\* Add in calculated load of connected I/O devices.



# 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 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.
C0-00DD1-D	NA	20	Feedthrough	ZL-RTB20, ZL-RTB20-1	ZL-C0-CBL20 *
C0-00DD2-D	NA				
C0-00DR-D	NA				
C0-00AR-D	NA				
C0-01DD1-D	NA				
C0-01DD2-D	NA				
C0-01DR-D	NA				
C0-01AR-D	NA				
C0-02DD1-D	NA				
C0-02DD2-D	NA				
No ZIPLinks are available for CLICK Analog PLC units.					
C0-02DR-D	NA	20	Feedthrough	ZL-RTB20, ZL-RTB20-1	ZL-C0-CBL20 *
C0-10DD1E-D	NA				
C0-10DD2E-D	NA				
C0-10DRE-D	NA				
C0-10ARE-D	NA				
C0-11DD1E-D	C2-14D1				
C0-11DD2E-D	C2-14D2				
C0-11DRE-D	C2-14DR				
C0-11ARE-D	C2-14AR				
NA	C2-14TTL				
No ZIPLinks are available for CLICK Ethernet Analog PLC units or CLICK PLUS Option Slot Modules with analog I/O.					
C0-12DD1E-D	C2-08D1-4VC	20	Feedthrough	ZL-RTB20, ZL-RTB20-1	ZL-C0-CBL20 *
C0-12DD2E-D	C2-08D2-4VC				
C0-12DRE-D	C2-08DR-4VC				
C0-12ARE-D	C2-08AR-4VC				
C0-12DD1E-1-D	C2-08D1-6C				
C0-12DD2E-1-D	C2-08D2-6C				
C0-12DRE-1-D	C2-08DR-6C				
C0-12ARE-1-D	C2-08AR-6C				
C0-12DD1E-2-D	C2-08D1-6V				
C0-12DD2E-2-D	C2-08D2-6V				
C0-12DRE-2-D	C2-08DR-6V				
C0-12ARE-2-D	C2-08AR-6V				
No ZIPLinks are available for CLICK PLUS Option Slot Communications Module					
NA	C2-DCM	20	Feedthrough	ZL-RTB20, ZL-RTB20-1	ZL-C0-CBL20 *
	C2-NRED				
	C2-OPCUA				

**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	ZL-RTB20	ZL-C0-CBL11 *
C0-08TD2				
C0-08TR				
C0-08TR-3	Not supported by ZIPLink			
C0-08TA				
C0-16TD1	20	Feedthrough	ZL-RTB20	ZL-C0-CBL20*
		Fuse	ZL-RFU20 2	
		Relay (sinking)	ZL-RRL16-24-1	
C0-16TD2	20	Feedthrough	ZL-RTB20	
		Fuse	ZL-RFU20 2	
		Relay (sourcing)	ZL-RRL16-24-2	
C0-04TRS1	20	Feedthrough	ZL-RTB20	ZL-C0-CBL20*
C0-04TRS-10	Not supported by ZIPLink			

## 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 *
C0-04POT	0	No ZIPLinks are available for RTD and thermocouple modules.		
C0-04RTD	20			
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**     **\$12.00** **Programming Software USB**

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



## **EA-MG-PGM-CBL**     **\$52.00** **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**     **\$5.25** **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**     **\$35.00** **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*

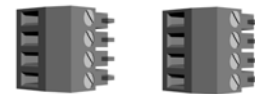
## **C0-3TB**     **\$10.00** **Spare 3-Pole Terminal Block**

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.



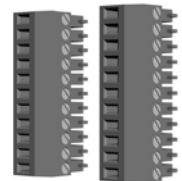
## **C0-4TB**     **\$10.00** **Spare 24VDC Power Terminal Block**

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



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

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



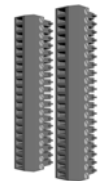
## **C0-8TB-1**     **\$19.50** **Spare 13-Point I/O Terminal Block**

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



## **C0-16TB**     **\$23.00** **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**     **\$16.50** **Spare 6-pt Terminal Block**

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



# Accessories

**SE-ANT250    \$37.00**  
***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    \$8.50**  
***CPU Option Slot Cover***

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



**MSD-SLC16G    \$100.00**  
 16GB microSD card, industrial grade, 3D NAND Flash (with SLC Mode), 85°C [185°F] max operating temp.



**SE-ANT210    \$10.50**  
***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    \$6.50**  
 Replacement CR2354 battery for Standard, Analog, Ethernet Standard and Ethernet Analog PLC units.



**TW-SD-MSL-2    \$4.00**  
***Insulated Slotted Screwdriver***  
 0.4 x 2.5 x 80 mm slotted screwdriver for terminal blocks.



**DN-EB35MN    \$31.50**  
***DINector End Bracket***



**D0-MC-BAT    \$3.00**  
 Replacement CR2032 battery for CLICK PLUS PLC units.



**DN-WS    \$72.00**  
***Wire Stripper***



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



***ZIPLink Wiring Systems***



***Ethernet Cables***  
 Pre-terminated Cat5e Ethernet patch cables with RJ45 connectors provide dependable communication in industrial applications. These cables are available in various lengths and support transmission speeds of 10/100/1000 Mbps.

