

CLICK PLUS PLC Specifications

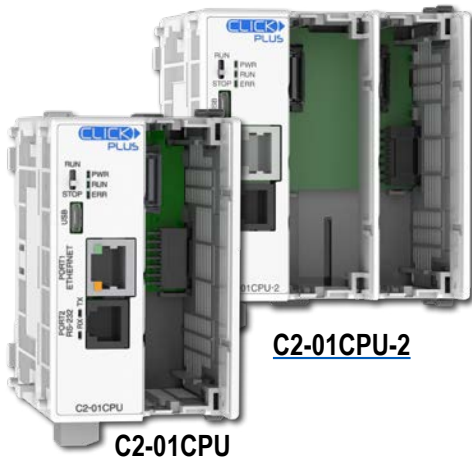
General Specifications For All CLICK PLUS PLC Products

These general specifications apply to all CLICK PLUS PLCs. Please refer to the appropriate I/O temperature derating charts under the Option Slot module and Stackable I/O module specifications to determine best operating conditions based on the ambient temperature of your particular application.

General Specifications	
Operating Temperature	32°F to 131°F [0°C to 55°C]
Storage Temperature	-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)
Ambient Humidity	30% to 95% relative humidity (non-condensing)
Environmental Air	No corrosive gases. Environmental pollution level is 2 (UL840)
Environment	For Indoor Use Only
Vibration	IEC60068-2-6 (Test Fc) 5-9Hz:3.5mm amplitude, 9-150Hz 1.0G 10 sweep cycles per axis on each of 3 mutually perpendicular axes.
Shock	IEC60068-2-27 (Test Ea) 15G peak, 11ms duration, 3 shocks in each direction per axis, on 3 mutually perpendicular axes.
Voltage Withstand (Dielectric)	1000VAC, 1 minute (between G and 24V IN)
Insulation Resistance	500VDC, 10M ohm (between G and 24V IN)
Noise Immunity	<EN61131-2> EN61000-4-2 (ESD): 4kV(Contact Discharge) 8kV(Air Discharge) EN61000-4-3 (RFI): 10V/m (80MHz-1GHz) ,3V/m (1.4 GHz-2.0 GHz) 1V/m (2.0 GHz-2.7 GHz) EN61000-4-4 (FTB) : 2kV ,positive/negative , 5kHz (DC Power Port) 1kV ,positive/negative, 5kHz (I/O and Communication Port) EN61000-4-5 (Surge): 0.5 kV/1kV line to line 0.5 kV/1kV line to earth EN61000-4-6 (Conducted): 10V ,0.15 MHz – 80MHz EN61000-4-8 (Power frequency magnetic field immunity) : 30A/m <Local Test> Impulse Immunity : 1000V @ 1µs pulse
Emissions	EN55011 Class A (Radiated RF emission)
Agency Approvals	UL61010 (File No. E157382, E316037); CE (EN61131-2); CUL Canadian C22.2
Radio Standards	FCC part15C (US), RED Article3.2 (CE), IC RSS-247 (Canada), MIC Item 19 of Article 2-1 (Japan), AS/NZS 4268 (Australia/New Zealand)
Other	RoHS 2011/65/EU Amendment (EU)2015/863

CLICK PLUS PLC Specifications

PLC Unit Specifications (continued)



C2-01CPU-2

C2-01CPU



C2-02CPU-2

C2-02CPU



C2-03CPU-2

C2-03CPU

CLICK PLUS PLC Unit Specifications				
	<i>C2-01CPU</i> <i>C2-01CPU-2</i>	<i>C2-02CPU</i> <i>C2-02CPU-2</i>	<i>C2-03CPU</i> <i>C2-03CPU-2</i>	
Control Method	Stored Program/Cyclic execution method			
I/O Numbering System	Fixed in Decimal			
Ladder Memory (steps)	8000			
Total Data Memory (words)	8000			
Contact Execution (boolean)	< 0.2 μs			
Typical Scan (1k boolean)	< 1ms			
RLL Ladder Style Programming	Yes			
Run Time Edits	Yes			
Scan	Variable / fixed			
PLC Mode Switch	1 (RUN/STOP)			
FLASH Memory	Standard on PLC			
Protocol	Modbus RTU (master/slave)	Yes	No	Yes
	ASCII (in/out)	Yes	No	Yes
	Modbus TCP (client server)	Yes	Yes	Yes
	EtherNet/IP Implicit and Explicit (adapter server)	Yes	No	Yes*
MQTT	Publisher: 4 publishers, 3 blocks each Subscriber: 10 blocks			
Data Logging	N/A	N/A	Time, date, 16 addresses	
CLICK Programming Software	Yes (Windows)			
Number of Instructions Available	21			
Control Relays	2000			
System Control Relays	1000			
Timers	500			
Counters	250			
Interrupt	Yes (external: 8 / timed: 4)			
Subroutines	Yes			
For/Next Loops	Yes			
Math (Integer and Hex)	Yes			
Drum Sequencer Instruction	Yes			
Internal Diagnostics	Yes			
Password Security	Yes			
System Error Log	Yes			
User Error Log	No			
Memory Backup	Super capacitor + battery			
Battery Backup	Yes (battery part #D0-MC-BAT)			
Calendar/Clock	Yes			

* EtherNet/IP available on the Ethernet RJ45 port only. Not available over Wi-Fi.

CLICK PLUS PLC Specifications

PLC Unit Specifications (continued)

CLICK PLUS PLC Unit Specifications							
		C2-01CPU	C2-01CPU-2	C2-02CPU	C2-02CPU-2	C2-03CPU	C2-03CPU-2
I/O Slot	Internal I/O	N/A (optional)					
	Option Slot Support	Yes, 1	Yes, 2	Yes, 1	Yes, 2	Yes, 1	Yes, 2
	Expansion I/O	Yes (max. 8 modules)					
Com. Ports	USB Port (programming)	Yes (device) (For programming and providing 5VDC power, microB USB)					
	Ethernet (RJ45)	Yes (10/100)		No		Yes (10/100)	
	Serial Port RS-232 (RJ12)	Yes		No		Yes	
	Serial Port RS-485 (terminal block)	No				Yes	
	WLAN	No		Yes (RP-SMA connection for optional external antenna, shared)			
	Bluetooth	No					
Status Indicators	WLAN Status LED	None		1			
	Bluetooth Status LED	None		1			
	CPU Status LED	3 (PWR/RUN/ERR)					
	Ethernet Status LED	2 (LINK/ACT 10/100)		None		2 (LINK/ACT 10/100)	
	Serial Status LED	2 (TX/RX)		None		2 (TX/RX)	
	SD Card Status LED	None				1	
Other	MicroSD Card Slot (SDHC-compatible)	No				Yes	
Power	Nominal Input Voltage	24VDC (4-pin terminal block)					
	Operating Voltage Range	24VDC, Class 2 or SELV (Safety Extra-Low Voltage) or Limited Energy Circuit power supply					
	Input Voltage Range	20.0–28.0 VDC					
	Maximum Inrush Current	30A @ 1ms					
	Power Consumption	20W	22W	20W	22W	20W	22W
	Acceptable External Power Drop	Max 10ms (AC power failure with C0-00AC or C0-01AC)					
	Current Required	110mA	120mA	105mA	115mA	130mA	140mA
	Fuse	None					
	External Fuse Recommended	No					
	Polarity Protection	Power input is reverse polarity protected					
	USB Supply	5VDC (via USB programming port)					
Communication Port & Terminal Block Replacement		N/A		N/A		AutomationDirect p/n C0-3TB	
24VDC Power Terminal Block Replacement		AutomationDirect p/n C0-4TB					
Antenna Requirements		N/A		2.4 GHz antenna, RP-SMA connector (AutomationDirect p/n SE-ANT250 or SE-ANT210)			
Drawing Link		PDF	PDF	PDF	PDF	PDF	PDF
Weight		3.5 oz [99g]	4.0 oz [114g]	3.3 oz [94g]	3.8 oz [109g]	4.0 oz [114g]	4.6 oz [129g]

CLICK PLUS PLC Specifications

CLICK PLUS PLC Hardware/Software Compatibility

The table below shows the minimum software and hardware versions required for the CLICK PLUS PLCs and Option Slot Modules. The CLICK PLUS PLC can also utilize the CLICK Stackable I/O Modules, as any software and hardware version compatible with CLICK PLUS is also compatible with the CLICK Stackable I/O Modules.

CLICK PLUS PLC Features Software Compatibility						
Device Type	Part Number	Minimum CLICK Software Version				
		Hardware	High-Speed Inputs*	High-Speed Outputs*	EtherNet/IP	PID, DHCP, DNS, SNTP, MQTT
CLICK PLUS CPU	C2-01CPU	v3.00	v3.00	v3.30	v3.00	v3.00
	C2-02CPU				N/A	
	C2-03CPU				v3.00	
	C2-01CPU-2	v3.20	v3.20	v3.20	v3.20	v3.20
	C2-02CPU-2				N/A	
	C2-03CPU-2				v3.20	
Option Slot I/O Modules	C2-14D1	v3.00	v3.00	v3.30	N/A	N/A
	C2-14D2			N/A		
	C2-14DR					
	C2-14AR					
	C2-08D1-4VC	v3.00	v3.00	v3.30	N/A	N/A
	C2-08D2-4VC			N/A		
	C2-08DR-4VC					
	C2-08AR-4VC					
	C2-08D1-6C	v3.00	v3.00	v3.30	N/A	N/A
	C2-08D2-6C			N/A		
	C2-08DR-6C					
	C2-08AR-6C					
	C2-08D1-6V	v3.00	v3.00	v3.30	N/A	N/A
	C2-08D2-6V			N/A		
	C2-08DR-6V					
	C2-08AR-6V					
Option Slot Intelligent Modules	C2-DCM	v3.20	N/A	N/A	N/A	N/A

* High-speed Inputs and Outputs are only available when the Option Slot I/O Module is installed in Slot 0.

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	
Operating Temperature	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)
Storage Temperature	-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)
Ambient Humidity	30% to 95% relative humidity (non-condensing)
Environmental Air	No corrosive gases. Environmental pollution level is 2 (UL840)
Vibration	MIL STD 810C, Method 514.2, EC60068-2-27, Category [f], Procedure[VIII] JIS C60068-2-27 (Sine wave vibration test)
Shock	MIL STD 810C, Method 516.2, IEC60068-2-27, JIS C60068-2-27, Category [f], Procedure[VIII]
Noise Immunity	<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)
Emissions	EN55011:1998 Class A; EN61000-6-4:2007+A1:2011
Agency Approvals	UL508, UL61010-2-201 (File No. E157382, E316037); CE (EN61131-2); CUL Canadian C22.2
Other	RoHS 2011/65/EU Amendment (EU)2015/863

CLICK PLC Specifications

PLC Unit Specifications

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

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

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	C0-00DD1-D	v1.00	N/A	N/A	N/A	N/A	
	C0-00DD2-D						
	C0-00DR-D						
	C0-00AR-D						
Standard	C0-01DD1-D	v1.20	N/A	N/A	N/A	N/A	
	C0-01DD2-D						
	C0-01DR-D						
	C0-01AR-D						
Analog	C0-02DD1-D (before SN 171208001)	v1.12	N/A	N/A	N/A	N/A	
	C0-02DD1-D (after SN 171208001)	v2.10					
	C0-02DD2-D (before SN 174018001)	v1.12					
	C0-02DD2-D (after SN 174018001)	v2.10					
	C0-02DR-D (before SN 173158001)	v1.12					
	C0-02DR-D (after SN 173158001)	v2.10					
Ethernet CPUs Ethernet CPUs require v2.40 for EtherNet/IP communications							
Ethernet Basic	C0-10DD1E-D	v2.00	v2.30	v2.40	v2.50	v3.00	
	C0-10DD2E-D						
	C0-10DRE-D		N/A				
	C0-10ARE-D						
Ethernet Standard	C0-11DD1E-D	v2.00	v2.30	v2.40	v2.50	v3.00	
	C0-11DD2E-D						
	C0-11DRE-D		N/A				
	C0-11ARE-D						
Ethernet Analog	C0-12DD1E-D	v2.20	v2.30	v2.40	v2.50	v3.00	
	C0-12DD2E-D						
	C0-12DRE-D		N/A				
	C0-12ARE-D						
	C0-12DD1E-1-D		v2.30				
	C0-12DD2E-1-D						
	C0-12DRE-1-D		N/A				
	C0-12ARE-1-D						
	C0-12DD1E-2-D		v2.30				
	C0-12DD2E-2-D						
	C0-12DRE-2-D		N/A				
	C0-12ARE-2-D						
I/O Modules	C0-08NE3	v1.20	N/A	N/A	N/A	N/A	
	C0-16NE3						
	C0-04AD-1	v1.40					
	C0-04AD-2						
	C0-04DA-1						
	C0-04DA-2						
	C0-4AD2DA-1						
	C0-4AD2DA-2						
	C0-04RTD						
	C0-04THM						
	C0-08CDR						
	C0-16CDD1						
	C0-16CDD2						
	Other modules						v1.00