

	Item Reference #	Part	Description	Part Number	Quantity	Unit	Unit Cost	Cost	Shipping	Total Cost	Vendor	Vendor Link	Lead time	Order By
PLC Components	1	Arduino PLC Opta Lite	Arduino-based PLC, supports standard IEC 61131-3 PLC languages	AFX00003	3	PLC	\$ 136.15	\$ 136.15	-	\$ 136.15	Arduino.cc	https://store-usa.arduino.cc/products/opta-lite	7	11/21/2024
	2	Arduino IDE	Arduino-compatible software	Arduino IDE 2.3.3	1	Software	\$ -	-	-	\$ -	Arduino.cc	https://www.arduino.cc/en/software	7	11/21/2024
Inputs	3	Push button switches	Buttons used to start and stop the PLC inputs and outputs	GCX1100	4	Buttons	\$ 7.50	\$ 30.00	\$ -	\$ 30.00	AutomationDirect	https://www.automationdirect.com/adc/shopping/catalog/pushbuttons-z-_switches-z-_indicators/pushbuttons/gcx1100	3	11/21/2024
	4	Emergency stop push button	E-stop to kill all power	GCX1131	1	Buttons	\$ 14.50	\$ 14.50	\$ -	\$ 14.50	AutomationDirect	https://www.automationdirect.com/adc/shopping/catalog/pushbuttons-z-_switches-z-_indicators/emergency_stop_pushbuttons/gcx1131	3	11/21/2024
	5	LED indicating lights	Industrial lights that will be used to simulate a stoplight; 1 green, 1 yellow, 1 red	DR16FON-E3G	3	Lights	\$ 13.00	\$ 39.00	\$ -	\$ 39.00	AutomationDirect	https://www.automationdirect.com/adc/shopping/catalog/pushbuttons-z-_switches-z-_indicators/indicating_lights/dr16fon-e3g	3	11/21/2024
	6	Ultrasonic proximity sensor	To be used to sensor motion at a given distance to send an input for the traffic light simulation lab, and the manufacturing simulation lab	UK6A-DP-0A	1	Sensor	\$ 120.00	\$ 120.00	\$ -	\$ 120.00	AutomationDirect	https://www.automationdirect.com/adc/shopping/catalog/sensors-z-_encoders/ultrasonic_proximity_sensors/18mm_tubular/uk6a-dp-0a	3	1/10/2025
	7	Color sensor	Color sensor to be used in manufacturing simulation as an input to sort boxes/blocks based on color	OPT2023	1	Sensor	\$ 372.00	\$ 372.00	\$ -	\$ 372.00	AutomationDirect	https://www.automationdirect.com/adc/shopping/catalog/sensors-z-_encoders/photo_electric_sensors/color_sensors/opt2023	3	1/10/2025
	8	DC Motor Driver	Arduino-compatible; controls speed and direction of a motor	L298N	3	Motor driver	\$ 6.99	\$ 20.97	\$ -	\$ 20.97	Amazon	https://www.amazon.com/Quinzi-Controller-Module-Stepper-Arduino/dp/B014KMHSW6	7	1/10/2025

