## **Stepping Systems with PLCs**

## **Controller Compatibility**

High Speed Pulse Motion Control with AutomationDirect PLCs* and SureStep® Stepping Systems					
PLC Series	Starting at \$199.00	Starting at \$310.00	Starting at \$368.00		
	BX-DM1x-10	BX-DM1x-18	BX-DM1x-36		
Maximum Number of Axes	2	3	3		
Output Signal Type	Sink/Source				
Maximum Pulse Rate (pulses/ sec)	250,000				
Position Control	Trapezoidal Profiles (linear and S-curve ramps)				
Velocity Control	Dynamic Velocity (controlled accel/decel)				

High Speed Pulse Motion Control with AutomationDirect PLCs* and SureStep™ Stepping Systems						
1–16 axis control depending on base size and power supply budget **						
PLC Series	CPUs starting at \$361.00		CPUs starting at \$735.00			
	P2000		P3000			
I/O Modules Pulse Outputs	P2-HSO		P3-HSO			
Maximum Number of Axes	2 per module, 22 per PLC rack, 44 per PLC system					
Output Signal Type	Line Driver	Sink/Source	Line Driver	Sink/Source		
Maximum Pulse Rate (pulses/ sec)	1,000,000	500,000	1,000,000	500,000		
Position Control	Trapezoidal Profiles (linear and S-curve ramps)					
Velocity Control	Dynamic Velocity (controlled accel/decel)					
Maximum Number of Modules	11 per PLC rack, 22 per PLC system					

High Speed Pulse Motion Control with AutomationDirect PLCs* and SureStep® Stepping Systems					
PLC Series	Starting at Retired	Starting at \$242.00	Starting at \$458.00		
	DL105	DL05	DL06		
Built-In PLC Pulse Outputs	1 axis pulse output included with the PLC base unit				
Maximum Number of Axes	1 axis control**	1-2 axis control***	1-5 axis control***		
Maximum Pulse Rate (pulses/sec)	7,000		10,000		
Position Control	Trapezoidal Profiles (linear only)				
Velocity Control	Velocity Levels (no ramps available when changing velocity)				
I/O Modules Pulse Outputs		H0-CTRIO2 (1 a	H0-CTRIO2 (1 axis per module)		
Maximum Pulse Rate (pulses/sec)		65,0	000		
Position Control	Not Applicable for DL105 Trapezoidal Profiles (linear & S-curve ramps)				
Velocity Control		Dynamic Velocity (controlled accel/decel)			
Maximum Number of Modules		1	4		

<sup>\*</sup> Any PLC capable of RS-232 ASCII communication can write serial commands to the STP-DRV-4850, -80100 Drives. Any PLC capable of RS-485 ASCII communication can write serial commands to the Advanced Integrated drives. Most AutomationDirect PLCs will communicate using either RS-232 or RS-485 communications, however we recommend using either Click, Productivity, or BRX (DoMore) as they are modern PLCs. DirectLogic will also work but is older technology.

\*\* When using DC output models only. \*\*\* When using either DC output model or H0-CTRIO option module.

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## **Stepping Systems with PLCs**

## **Controller Compatibility (continued)**

High Speed Pulse Motion Control with AutomationDirect PLCs* and SureStep™ Stepping Systems						
1–16 axis control depending on base size and power supply budget **						
PLC Series	CPUs starting at Retired		CPUs starting at \$411.00			
	DL205		Do-more			
I/O Modules Pulse Outputs	D2-CTRINT	H2-CTRIO2	T1H-C	CTRIO	H2-CTRIO2	
	(1 axis per module)	(2 axes)	(2 axes per module)		(2 axes)	
Maximum Pulse Rate (pulses/	5.000	65.000	25,000 250.0		250.000	
sec)	5,000	05,000	25,000		250,000	
Position Control	Trapezoidal Profiles (linear and S-curve ramps)					
Velocity Control	Dynamic Velocity (controlled accel/decel)					
Maximum Number of Modules	1 1-8					

<sup>\*</sup> Any PLC capable of RS-232 ASCII communication can write serial commands to the STP-DRV-4850, -80100 Drives. Any PLC capable of RS-485 ASCII communication can write serial commands to the Advanced Integrated drives. Most AutomationDirect PLCs will communicate using either RS-232 or RS-485 communications, however we recommend using either Click, Productivity, or BRX (DoMore) as they are modern PLCs. DirectLogic will also work but is older technology.

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<sup>\*\*</sup> using D2-CITRANT or Hx-CTRIO modules.