



Stepping Systems with PLCs

Controller Compatibility

High Speed Pulse Motion Control with AutomationDirect PLCs* and SureStep® Stepping Systems			
PLC Series	Starting at \$0129k:	Starting at \$0129y:	Starting at \$012a5:
	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 \$;00?tx:		CPUs starting at \$;00b!_:
	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 \$00c94:	Starting at \$00c1d:
	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	Not Applicable for DL105	H0-CTRIO2 (1 axis per module)	
Maximum Pulse Rate (pulses/sec)		65,000	
Position Control		Trapezoidal Profiles (linear & S-curve ramps)	
Velocity Control		Dynamic Velocity (controlled accel/decel)	
Maximum Number of Modules		1	4

* 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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Controller Compatibility (continued)

High Speed Pulse Motion Control with AutomationDirect PLCs* and SureStep™ Stepping Systems				
<i>1–16 axis control depending on base size and power supply budget **</i>				
PLC Series	CPUs starting at Retired		CPUs starting at \$00b?x:	
	DL205		Do-more	
I/O Modules Pulse Outputs	D2-CTRINT (1 axis per module)	H2-CTRIO2 (2 axes)	T1H-CTRIO (2 axes per module)	H2-CTRIO2 (2 axes)
Maximum Pulse Rate (pulses/sec)	5,000	65,000	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		

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** using D2-CITRANT or Hx-CTRIO modules.