

# SureStep<sup>®</sup> Stepping Systems with PLCs

## Controller Compatibility

Motion Control with AutomationDirect PLCs* and SureStep <sup>®</sup> Stepping Systems			
PLC Series	Starting at \$199.00	Starting at \$125.00	Starting at \$251.00
	1 axis control**	1-2 axis control***	1-5 axis control***
	<b>DL105</b>	<b>DL05*</b>	<b>DL06*</b>
<b>Built-In PLC Pulse Outputs</b>	1 axis pulse output included with the PLC base unit.		
<b>Maximum Pulse Rate Output</b>	7,000 pulses/sec		10,000 pulses/sec
<b>Target Pulse Range</b>	-8,388,608 to +8,388,607 pulses		
<b>Minimum Velocity</b>	40 pulses/sec		
<b>Velocity Resolution</b>	10 pulses/sec		
<b>Accel/Decel Range</b>	0.1 to 10 sec		
<b>Position Control</b>	Trapezoidal Profiles		
<b>Velocity Control</b>	Velocity Levels		
<b>I/O Modules Pulse Outputs</b>	<b>H0-CTRIO (1 axis per module)</b>		
<b>Maximum Pulse Rate Output</b>	25,000 pulses/sec		
<b>Target Pulse Range</b>	+ / - 2.1 billion pulses (31 bits plus sign)		
<b>Minimum Velocity</b>	40 pulses/sec		
<b>Velocity Resolution</b>	10 pulses/sec		
<b>Accel/Decel Range</b>	0.1 to 10 sec		
<b>Position Control</b>	Trapezoidal Profiles (linear & S-curve ramps)		
<b>Velocity Control</b>	Dynamic Velocity (controlled accel/decel)		
<b>Maximum Number of Modules</b>	1		4

\* Any AutomationDirect PLC capable of RS-232 ASCII communication can write serial commands to the SureStep Advanced Microstepping Drives (STP-DRV-4850 & -80100). These PLCs include DirectLOGIC series DL 05, 06, 250-1, 260, 350, & 450, as well as CLICK, Do-more and P3000 series. However, we strongly recommend using DL06, DL260, Do-more, CLICK, or Productivity3000 PLCs for serial commands due to their more advanced ASCII instruction set which includes PRINTV and VPRINT commands.

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

Motion Control with AutomationDirect PLCs* and SureStep <sup>™</sup> Stepping Systems				
1-16 axis control depending on base size and power supply budget **				
PLC Series	CPUs starting at No Match!			CPUs starting at \$299.00
	<b>DL205*</b>			<b>Do-more</b>
<b>I/O Modules Pulse Outputs</b>	<b>D2-CTRINT (1 axis per module)</b>	<b>H2-CTRIO (2 axes)</b>	<b>T1H-CTRIO (2 axes per module)</b>	<b>H2-CTRIO2 (2 axes)</b>
<b>Maximum Pulse Rate Output</b>	5,000 pulses/sec	25,000 pulses/sec	25,000 pulses/sec	250,000 pulses/sec
<b>Target Pulse Range</b>	-8,388,608 to +8,388,607 pulse		+ / - 2.1 billion pulses	
<b>Minimum Velocity</b>	40 pulses/sec	25 pulses/sec		
<b>Velocity Resolution</b>	10 pulses/sec	1 pulse/sec		
<b>Accel/Decel Range</b>	0.1 to 10 sec			
<b>Position Control</b>	Trapezoidal Profiles (linear and S-curve ramps)			
<b>Velocity Control</b>	Dynamic Velocity (controlled accel/decel)			
<b>Maximum Number of Modules</b>	1	1-8		

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## Controller Compatibility (continued)

<b>Motion Control with PC-based Control and Sure Step<sup>®</sup> Stepping Systems</b>			
<i>1-16 axis control depending on base size and power supply budget *</i>			
<b>Controller Series</b>	PC-based motion control with Think & Do on your <b>Windows PC</b>		
<b>I/O Modules Pulse Outputs</b>	<b>H2-CTRIO (2 axes per module)</b>	<b>T1H-CTRIO (2 axes per module)</b>	<b>H2-CTRIO2 (2 axes)</b>
<b>Maximum Pulse Rate Output</b>	25,000 pulses/sec	25,000 pulses/sec	250,000 pulses/sec
<b>Target Pulse Range</b>	+ / - 2.1 billion pulses		
<b>Minimum Velocity</b>	25 pulses/sec		
<b>Velocity Resolution</b>	1 pulse/sec		
<b>Accel/Decel Range</b>	0.1 to 10 sec		
<b>Position Control</b>	Trapezoidal Profiles (linear and S-curve ramps)		
<b>Velocity Control</b>	Dynamic Velocity (controlled accel/decel)		
<b>Maximum Number of Modules</b>	1-8		
<i>* Using Hx-CTRIO modules</i>			