

# 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>	Not Applicable for DL105	<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 \$230.00		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		

\* 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. \*\* Using D2-CTRINT or Hx-CTRIO modules.

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

## Controller Compatibility (continued)

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

Company Information

Drives

Soft Starters

Motors

Power Transmission

Motion: Servos and Steppers

Motion Controls

Sensors: Proximity

Sensors: Photoelectric

Sensors: Encoders

Sensors: Limit Switches

Sensors: Current

Sensors: Pressure

Sensors: Temperature

Sensors: Level

Sensors: Flow

Pushbuttons and Lights

Stacklights

Signal Devices

Process

Relays and Timers

Pneumatics: Air Prep

Pneumatics: Directional Control Valves

Pneumatics: Cylinders

Pneumatics: Tubing

Pneumatics: Air Fittings

Appendix Book 2

Terms and Conditions