

## SiNet™ Hub

### Multi-Axis Motion Hub

#### Features

- Networks all Applied Motion Stepper or Servo *Si™* products for multi-axis motion applications
- For real time execution of commands downloaded from a host PC or PLC using Applied Motion's *Si Command Language™ (SCL)*
- Programmable for stand alone single or multi-axis operations with Applied Motion's easy to use *SiNet Programmer™* Windows software (software and programming cable included)
- Communication via RS232

#### Description

The SiNet™ Hub allows up to 8 Stepper or Servo *Si™* drives to be controlled in host mode from a single PC or PLC's RS-232 serial port or will run in stand-alone mode.

Each indexer-drive acquires its unique address from the port to which it is connected. This simple addressing scheme minimizes the cost of the drives, and more importantly, the cost of configuring and/or replacing drives in your system. Connections are made with low cost, reliable telephone cabling.

Any of our popular, cost effective programmable Stepper or Servo *Si™* drives or *Si™* motor controls can be used with the SiNet™ Hub. By choosing the power level and features you need for each axis of your application, SiNet™ can provide a cost effective single or multi-axis motion solution.

The SiNet™ Hub is powered by the drive that's connected to port #1, saving you the cost and installation expense of using a separate power supply. Our *Si™* Command Language (SCL) allows a host PC or PLC to execute relative, absolute and homing moves, make status inquires, sample inputs, set outputs, and more.



If your application requires a single axes to operate in "host mode", you can connect any of our programmable *Si™* drives directly to your PC via the SiNet Hub and invoke the *Si™* Command Language (SCL).

Our SiNet Programmer™ Windows software allows the user to create and store multi-axis motion control programs in the SiNet™ Hub and run them without a PC. Thus allowing the user to create a complex multi-axis motion system controlled from an operator interface or trigger.

#### Recommended Drives

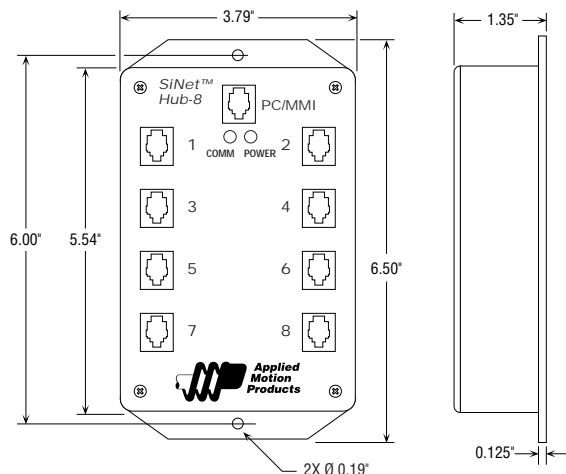
<u>Stepper</u>	<u>Servo</u>
Si3540	BLSi7080
Si5580	BL7080i
1240i	
3540i	
7080i	

## SiNet Hub Technical Specifications

Power .....	Power is provided by Si™ indexer-drive on Port 1. Provides up to 50 mA for MMI via PC/MMI port.
Communication .....	Ports 1 - 8: RS232, 9600 bps, 8 data bits, one stop bit, no parity. MMI: same. PC in router mode: same. PC when running SiNet Programmer software: 19200 bps. Max cable length, any port: 50 feet.
Physical .....	Molded plastic case. RJ11 connectors. 1.35 x 3.8 x 6.5 inches (34.3 x 96.5 x 165.1 mm). Weighs 9 ounces (250 grams). Two red LEDs. Operating temperature range: 0 - 70° C.
Program. ....	Move distances: +/- 16,000,000 steps Move speeds: .025 to 50 rev/sec Accel/Decel range: 1 to 3000 rev/sec/sec Time delays: .01 to 300 seconds Loops counts: 1 to 65,535 Number of nested loops: unlimited Number of subroutines: unlimited Subroutine stack depth: 5 calls maximum Number of comments: limited only by 200 line program length MMI variables for storing speeds, distances and loop counts entered by operator: 50 Maximum size of messages displayed by an MMI Prompt: 60 characters (80 for an MMI Menu instruction) Maximum total size of all MMI Prompt messages: 1500 characters Steps/revolution: 2,000 - 50,800 (200 - 50,800 with Si-100 indexer)

## SiNet Hub Technical Drawings

**MECHANICAL OUTLINE:**



**BLOCK DIAGRAM:**

