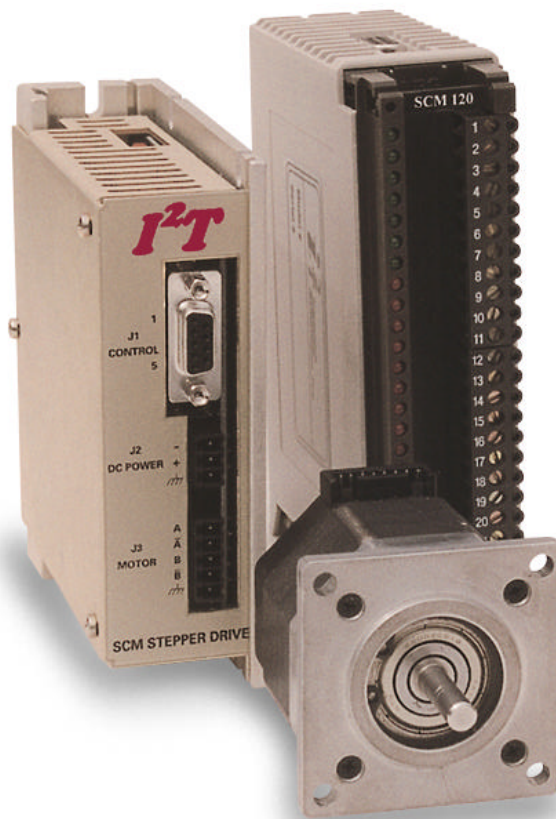


SCM 120 – Compact PLC 2-Axis Stepper Control Module

The SCM 120 is a 2-axis stepper motor control module manufactured by Integrated Industrial Technologies for the Square D Compact series programmable controller. The SCM 120 controls 2 axes of stepper motors either independently or together providing point-to-point or coordinated motion profiles.

Features & Benefits:

- The SCM 120 produces step and direction outputs for controlling 2 full-step or micro-stepping drives (user units) controlling amplifiers with a resolution from 200 to 51,200 steps per revolution.
- The SCM 120 allows the Compact PLC to move the two independent stepper axes in user units directly from the PLC code. No high-level languages are needed to perform complex move profiles.
- Absolute and index type moves are controlled from the PLC logic. Sixteen positions for each axis can be stored in the SCM 120. The user can command the stepper motor to move to a stored position by simply turning on its associated bit in a PLC register.
- The SCM 120 has clockwise, counter-clockwise, machine fault, and home limit inputs for each axis. An axis enable, direction, and step (pulse) output is provided for an I²T or user supplied stepper amplifier.
- A Windows compatible Stepper Setup program is provided to quickly setup the SCM 120. The user can exercise the stepper and mechanical system without having to write any PLC code.
- A loadable function block is provided to allow the user to implement homing, point-to-point move profiles or sixteen-point move profiles without having to write logic to perform motion.



I²T also provides a range of micro-stepping amplifiers and motors ranging in size from 225 oz-in to 1284 oz-in of torque. Power supplies, and cables can also be supplied.

Applications:

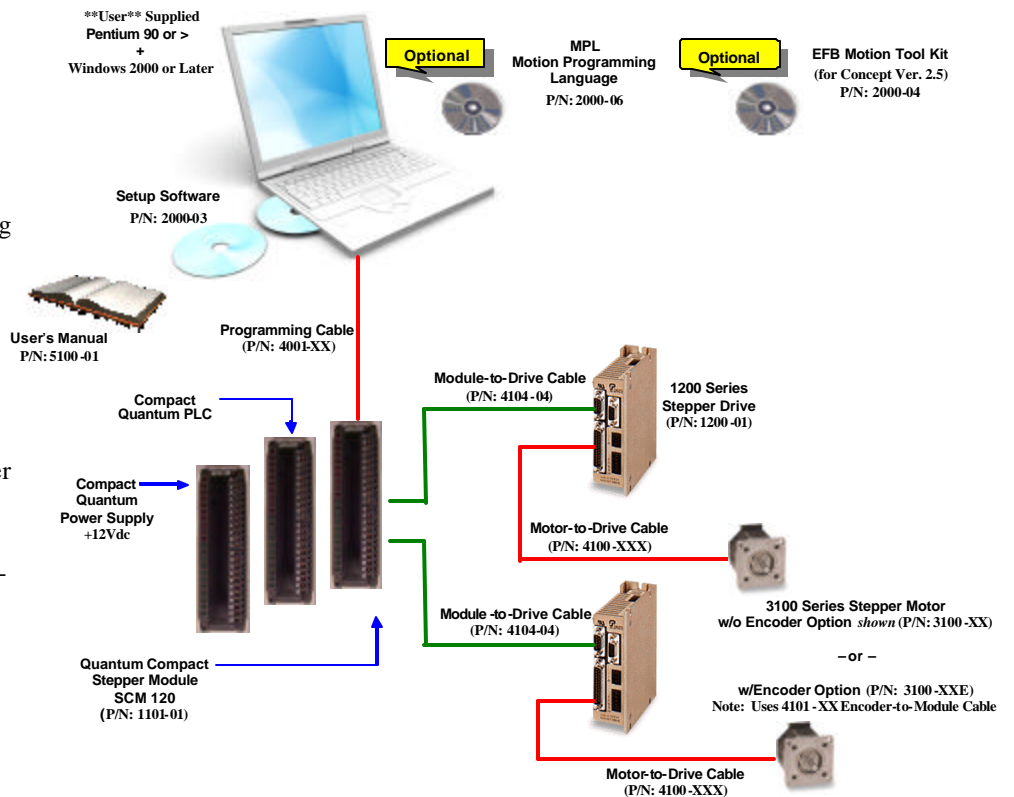
- Point-to-Point Discrete Part Equipment
- Grinding & Tool Feed Applications
- Positioning Equipment
- Feed-to-Length Equipment
- X-Y Contouring
- Conveyors

SCM 120 – Compact PLC 2-Axis Stepper Control Module

Specifications:

- 2 Axes per Module
- Moves Executed from PLC
- 16 Positions, Speeds, Accels, and Decels stored on module
- Windows Setup Software for easy axis configuration
- PLC Loadable for easy PLC programming
- Trapezoidal or Blended Move Profiles
- Adjustable Accel and Decel Rates
- Resolutions up to 51,200 steps per revolution
- Absolute Position up to 32,767,000 user counts
- Positions and Speeds Programmed in User Units
- Low Cost
- Stepper Motors/Amps from 225–1284 oz-in
- Optional Power Supplies and Cables

Typical Configurations:



Typical Configuration:

Stepper Module

1101-01 SCM 120 2-Axis Stepper Module

Stepper Drives

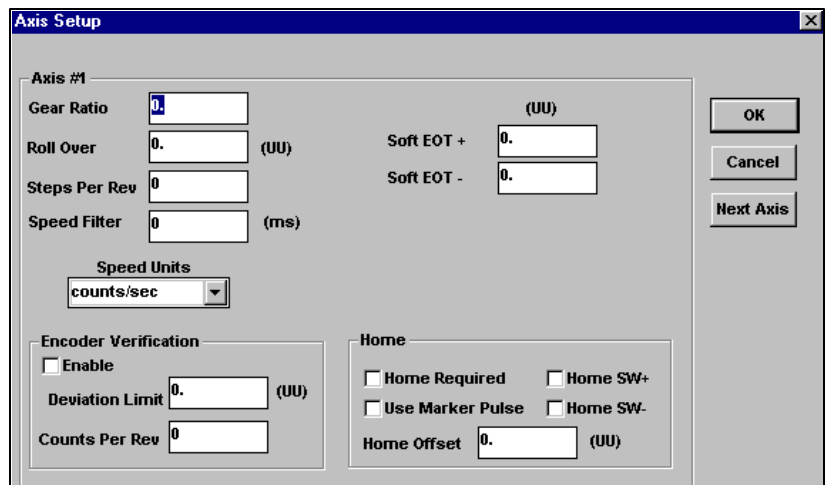
- 1200-01 Micro-stepping Drive – 7.1A Peak, 5A Rms, 75Vdc
- 1200-02 Optional Heat Sink for 3100-01
- 1200-03 Power Supply – 48Vdc @ 6A or 72Vdc @ 3A
- 1200-04 Power Supply – 40Vdc @ 40A or 60Vdc @ 27A

Stepper Motors

- 3100-01 NEMA 23, 225 oz-in
- 3100-02 NEMA 34, 319 oz-in
- 3100-03 NEMA 34, 638 oz-in
- 3100-04 NEMA 34, 958 oz-in
- 3100-05 NEMA 34, 1222 oz-in
- 3100-06 NEMA 42, 1284 oz-in

Stepper Cables

- 4101-04 Module-to-Drive Cable
- 4100-025 Drive-to-Motor Cable – 25 ft.
- 4100-050 Drive-to-Motor Cable – 50 ft.



SCM 120 Setup Software



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