

PROGRAMMABLE STEP MOTOR INDEXER/DRIVE

MICROSTEPPING 1.2 A, 40 Vdc

1240i



- Precise Pulse Width Modulation Switching Amplifiers Providing Up to 1.2 A per Phase and Microstepping to 50,800 Steps Per Revolution
- Accepts 12 to 42 Vdc Power Supply
- Powerful, Flexible, Easy to Use Indexer
- Connects by a Simple Cable to Your PC for Programming (Cable Included)
- Microsoft Windows™-Based Software for Easy Setup and Programming
- Eight Inputs for Interacting with the User and Other Equipment
- Three Outputs for Coordinating External Equipment
- External Trigger I/O is Optically Isolated, 5 to 24V, Sinking or Sourcing Signals; PC/MMI Port is RS232
- 76.2 x 101.6 x 16.5 mm (3 x 4 x 0.65") Overall Dimensions
- Optional Man Machine Interface (MMI) Allows Operator to Enter Distances, Speeds, Cycle Counts and More
- CE Compliant

The 1240i is a programmable step motor driver suited for a wide range of motion control applications. It includes a sophisticated controller integrated with a 48-watt microstepping amplifier. The 1240i includes easy to use software for the rapid development of stand-alone motion control programs. The 1240i can also be commanded in real time from a host PC or



1240i shown close to actual size.

PLC, using the Si Command Language™. For multi-axis applications, up to four drives (stepper or Servo) can be networked using a single SiNet™ Hub 444. The 1240i includes 8 optically isolated programmable inputs for triggering, branching, position sensing and end of travel detection. 3 optically isolated programmable outputs can send signals to other electronic devices and activate relays.

SPECIFICATIONS

Amplifiers: Dual H-bridge, 3 state, pulse width modulated (PWM) switching at 25 KHz. 0.2 to 1.2 A/phase output current, software selectable; 48 watts maximum output power; automatic idle current reduction (software programmable) reduces current to motor when idle; minimum motor inductance is 0.8 mH

Power Supply: Accepts 12 to 42 Vdc power supply, 1.2 A typical max load

Inputs: 5 to 24 Vdc, optically isolated; 2200 Ω internal resistance; can be configured for sinking (NPN) or sourcing (PNP) signals

Outputs: Optically isolated; 5 to 24 Vdc, 100 mA max

Microstepping: 13 software selectable resolutions; steps per revolution with 1.8° motor: 2000, 5000, 10,000, 12,800, 18,000, 20,000, 21,600, 25,000, 25,400, 25,600, 36,000, 50,000, 50,800; waveform: pure sine

Motion Update: 12,800 Hz

Physical: Constructed on 2 mm (0.063") thick printed circuit board; four mounting holes, 4 mm (0.156") diameter

Overall size: 76.2 x 101.6 x 16.5 mm (3 x 4 x 0.65")

Weight: 68.3 gm (2.4 oz)

Ambient Operating Temperature: 0 to 50°C (32 to 122°F)

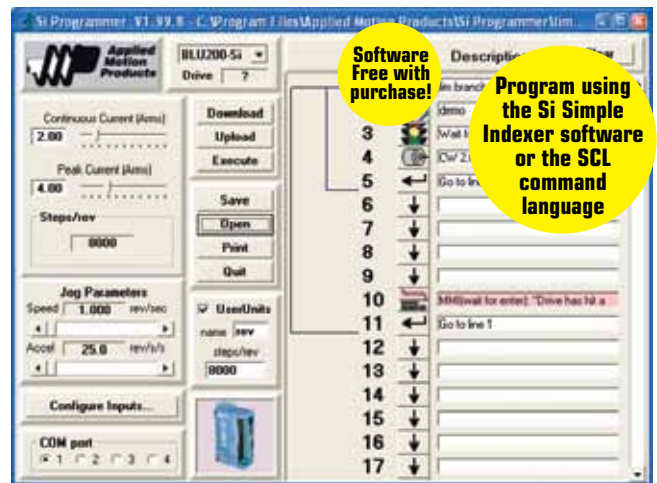
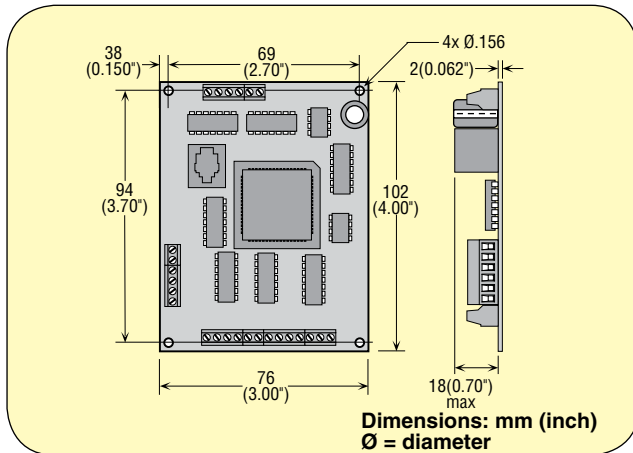
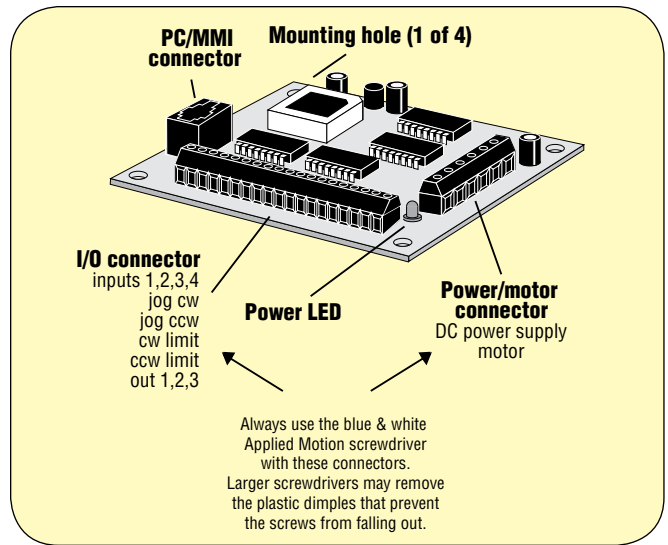
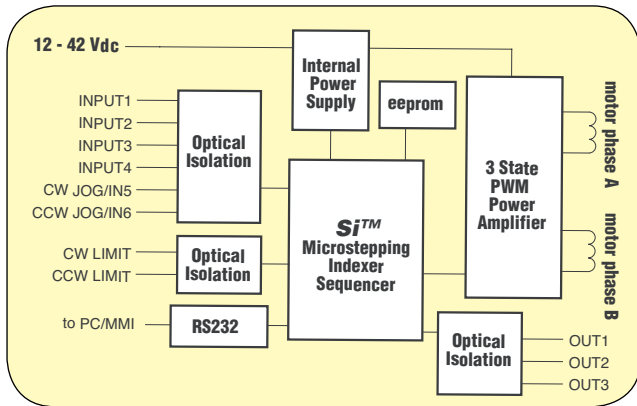
Connectors: European style screw terminal blocks

Power Supply and Motor: 6 position

Signal Input/Output: 19 position

Wire Size: 16 to 28 AWG

Agency Approvals: CE compliant to EN55011A, EN50082-1(1997)



Si Programmer™

ACCESSORIES INCLUDED

Programming software
Programming cable

OPTIONAL ACCESSORIES

Power Supply (Required for Drive Operation):

Recommended: OMPS150A24, 24 Vdc, 6.3 A

Multi-Axis Systems:

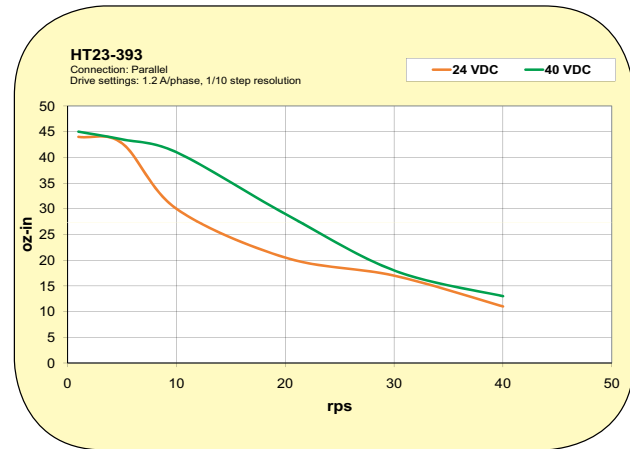
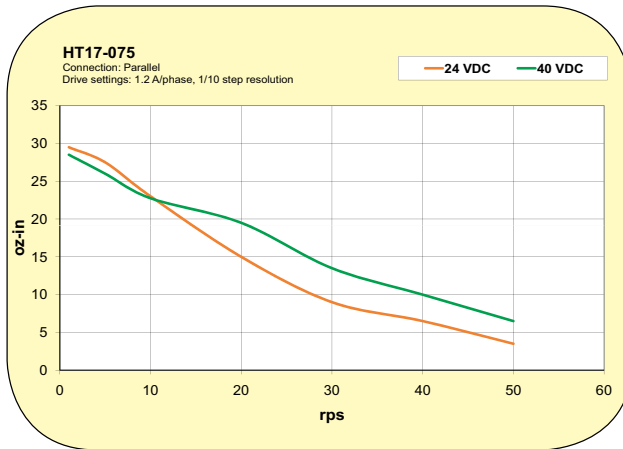
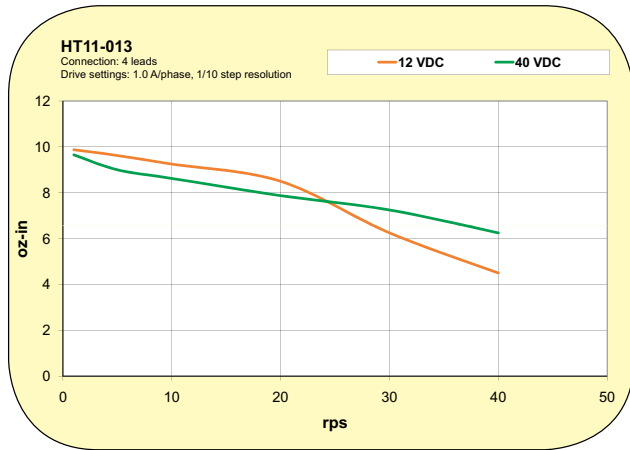
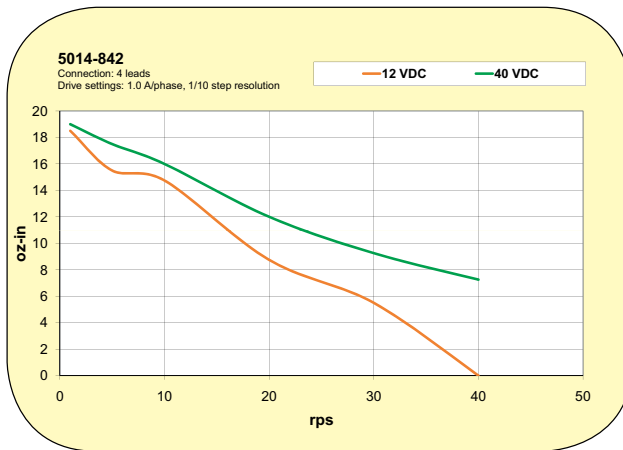
Hub 444: Network up to 4 drives

Operator Interface:

MMI-01: Stand-alone operation



TORQUE-SPEED CURVES FOR RECOMMENDED MOTORS



To Order Visit omegamation.com/1240i for Pricing and Details

MODEL NO.	DESCRIPTION
1240i	Programmable step motor indexer drive

Ordering Example: 1240i, programmable step motor drive.

RECOMMENDED MOTORS FOR 1240i

MODEL NO.	DESCRIPTION
OMHT11-013	NEMA 11 step motor, 15 oz-in holding torque
OM5014-842	NEMA 14 step motor, 26 oz-in holding torque
OMHT17-075	NEMA 17 step motor, 62.8 oz-in holding torque
OMHT17-275	NEMA 17 step motor, 62.3 oz-in holding torque
OMHT23-393	NEMA 23 step motor, 76.6 oz-in holding torque
OMHT23-593	NEMA 23 step motor, 79.3 oz-in holding torque

ACCESSORIES

MODEL NO.	DESCRIPTION
MMI-01	Operator Interface
OM-CONV-USB	USB to RS232 interface converter
OM-PL-USBS	USB to RS232 converter; works with Windows Vista and Windows 7
OMPS150A24	Stepper drive power supply, 24 Vdc, 6.3 A
POWER CORD-SE	AC power cord with stripped end termination
SI-PROG-CBL	Replacement programming cable (comes with drive)
DRIVE-CBL	Replacement MMI and/or HUB communications cable (comes with MMI-01 and BUB 444)
DSUB-9-MF	DIN rail interface module, 9-pin
DSUB-9-MF-CBL	DSUB cable, 9-pin, 2 m (6.6'), male/female connectors

Order motors separately, see below for details