

SMARTSTEP MICROSTEPPING DRIVES



SMARTSTEP MICROSTEPPING DRIVES

IDC's SMARTSTEP is a complete, packaged microstepping drive/control that provides a user friendly system, as well as many compelling features and benefits. Consider a SMARTSTEP when your application requires:

- High Throughput. The SMARTSTEP has the same outstanding dynamic performance as the NextStep microstepping drive which incorporates the latest in Anti-Resonance technology to maximize the torque, and optimize the performance of step motors.
- Ease of Integration. The SMARTSTEP uses IDC's IDEAL™ programming language, and Application Developer software package which simplifies system set-up and integration.
- Small Panel Space. The SMARTSTEP has an internal heatsink and fan which keeps the panel space required for each unit small, and allows multiple units to be stacked together in multi-axis applications.
- Smoother performance across the entire motion profile.
- Up to 8 amps of motor current. The SMARTSTEP is compatible with both standard and enhanced 17 frame to 42 frame step motors.

Additional SMARTSTEP Features

- c L/C rated
- Flash memory allows the SMARTSTEP to be completely reconfigured from a file obtained via the Internet for easy upgrades of both hardware and firmware
- 60K memory, up to 400 programs standard
- RS-232 communications standard, RS-485 optional
- Operates from 120 VAC standard, or 240 VAC optional
- All system configuration and drive settings are software configurable, which means there are no switches to set
- High Speed Registration input
- Faster microprocessor and data bus improves the SmartStep's computational horsepower compared to the S6961
- Go Immediate Mode. This mode of operation allows the controller to multitask between motion control and I/O operations
- User scaling of position, velocity, and acceleration
- Descriptive variables, math and conditional branching
- Accepts encoder feedback for Stall Detection, Closed Loop operation, and Position Maintenance
- 1-99 Axis of immediate control via host RS-232C communication
- Compatible with IDC's Application Developer Software
- Sixteen configurable I/O (8 inputs, 8 outputs,)
 - 1 dedicated home and 2 dedicated end of travel inputs
- Optically isolated I/O, 12/24 VDC compatible
- Compatible with IDC's S series step motors, and P/K series enhanced step motors.
- A handful of accessories simplify integration.

AGENCY APPROVAL

- Models CE Compliant: EMC standard EB61800-3 and safety standard EN50178

For 17 or 23 frame step motor applications IDC has developed the SMARTSTEP23. Some of the features included in the SMARTSTEP23 are:

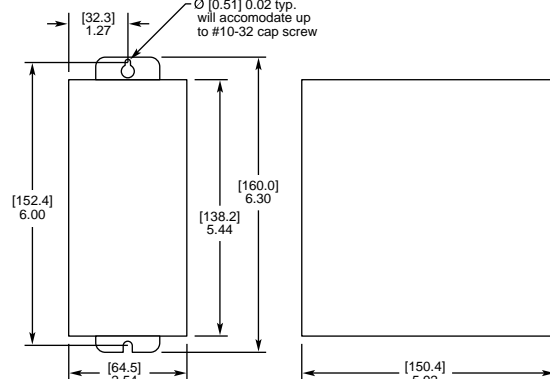
- The SMARTSTEP23 provides up to 3 amps of current which makes it ideal for 17 or 23 frame step motor applications
- Same outstanding dynamic performance as the NextStep microstepping drive
- Operates from 120 VAC
- All the same features and benefits found in the SMARTSTEP

DRIVE SPECIFICATIONS

	SMARTSTEP	SMARTSTEP23	SMARTSTEP-240
Step Sizes	36000 steps/motor rev		
Input Voltage	90 to 120 VAC single phase, 50/60 Hz, 500 VA max @ 7.9 amp setting	90 to 120 VAC single phase, 50/60 Hz, 250 VA max @ 3.0 amp setting	100 to 240 VAC single phase, 50/60 Hz, 500 VA max @ 3.9 amp setting
Output Current	0-7.9 amps, 0.1 amp increments. If current setting is higher than 6 amps, drive will fold back current to 6 amps when motor is at rest	0-3 amps, 0.1 amp increments	0-3.9 amps, 0.1 amp increments
Interface	8 Programmable, Limits, Home Incremental Encoder		
Inputs	8 Programmable LED Indications		
Outputs	8 Programmable LED Indications		
Protection	Short Circuit, Brownout (Under Voltage), Over Temperature, Interlock, and Regen/Over Voltage		
Package Size	63.5 x 160.02 x 149.86 mm (2.5 x 6.3 x 5.9 in)		

SMARTSTEP (Standard)

[mm] in



SMARTSTEP Minimum Depth (Optional)

[mm] in

