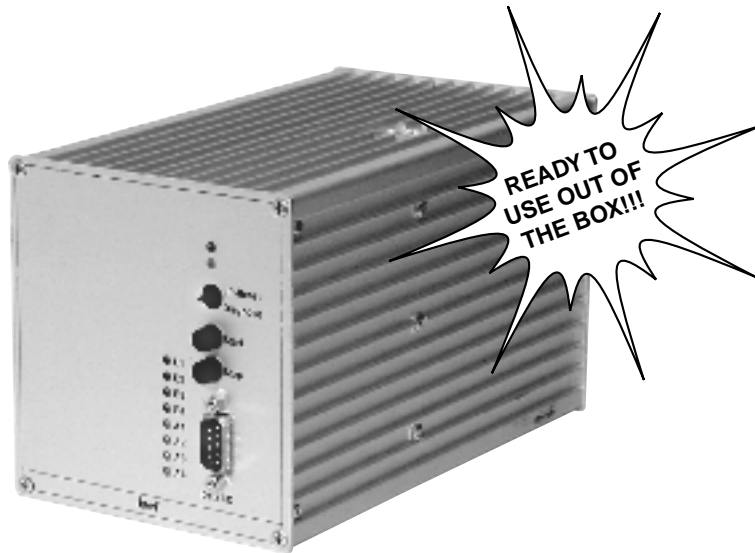


FEATURES

- ◆ Self-contained single-axis controller
- ◆ Logic & drive in one package
- ◆ Bidirectional serial communication at up to 19200 baud
- ◆ LED display on front panel
- ◆ Includes motor cable & communication cable
- ◆ 4 inputs and 4 outputs
- ◆ Commands can be executed as a “batch program”, or each command can be executed in a command-by-command basis
- ◆ All power supplies are built-in and wired up
 - Motor - 44V / 3.5A
- ◆ Comes fully assembled & **READY TO USE**
- ◆ 32K of on-board battery-backed memory
- ◆ Screw terminal connection on rear panel for easy I / O hook-up



MOTION CAPABILITIES

- Linear interpolation at rates up to 10K steps / sec.
- Motions up to $\pm 8,000,000$ steps
- Switch-settable acceleration
- Can be programmed in both incremental and absolute coordinates

STEPPER AMPLIFIERS

- The Stepper Motor Amplifier can produce up to 3.5A at 44V
- Total fault protection against:
 - Short circuit across phases
 - Short circuit to ground
 - Over / under voltage
 - Overtemperature

NOTE: This controller is **CE** compliant.

APPLICATIONS

This controller is for light- to medium-duty applications. Note that since the motors will be powered with 3.5A peak current, the load and force specifications should be correspondingly reduced.

The IT116G Controller consists of:

- 1 IT116G Controller with integral drive
- 1 Motor cable
- 1 Communication cable

Catalog Number	Part Description	Dimensions mm	Weight lbs
HL1300MIT116G	IT116G Single-Axis Controller	105 wide X 110 high X 165 deep	4.5

SOFTWARE / PROGRAMMING

- Direct control through simple ASCII codes.
- Can be programmed via many third-party software packages.



COMMAND SUMMARY

Syntax	Description
@0<axes>	Define Axes: x=1, y=2, z=4
@0R<axes>	Home: x=1, y=2, z=4, confirm completion
@0r<axes>	Home: x=1, y=2, z=4, confirm immediately
@0d<Gx>,<Gy>,<Gz>	Set home speed
@0A Sx, Gx, Sy...Gz2	Incremental motion, confirm completion
@0a Sx, Gx, Sy... Gz2	Incremental motion, confirm immediately
@0M Sx, Gx, Sy... Gz2	Absolute motion
@0m Sx, Gx, Sy... Gz2	Absolute motion
@0P	Identify axes' positions
@0i	Enter program mode
@0f	Circular interpolation direction
@0y...	Perform circular interpolation

Program Mode	Description
0 Sx, Gx, Sy...Gz2	Incremental motion
3<Number>,<Offset>	Make a loop, or branch if <number>=0
6 Sx, Gx, Sy...Gz2	Move until impulse
7<Axes>	Home motors, x=1, y=2, z=4
mSx, Gx, Sy....Gz2	Move absolute
eS	Select interpolation axes/plane: 0=x/y, 1=x/z, 2=y/z
f	Set direction of circular interpolation
y	Perform circular interpolation