



# STEPPER DRIVES WITH AC POWER SUPPLY

AC  
 Power  
 Supply

Configuration  
 Software and  
 Programming  
 Cables  
 Included!

## STAC6 Series



- Current Output 0.5 to 6.0 A
- 90 to 135 Vac Input
- Configurator™ Configuration Software
- Configurable Idle Current Reduction
- External Control Options
- Pulse and Direction
- Analog Command Signal
- Host Command via RS232/485
- Fault Protection:
  - Over-Voltage, Under-Voltage
  - Over-Temp
  - External Output Shorts
  - Internal Amplifier Shorts
  - Motor Regeneration
- Multi-Axis System with SiNet™ Hub
- Stand-Alone Programming on Si Model
- Microstepping Emulation: Up to 51,200 Steps/Revolution

### Advanced Features

- Auto Setup Measures Motor Parameters and Configures Tuning Parameters
- Self-Test Detects Encoder and Determines Resolution; Diagnoses Miswires and Open Phases
- Torque Ripple Smoothing Assures Smoother Motion at Lower Speeds
- Command Signal Smoothing Assures Smooth Acceleration/Deceleration Ramps
- Anti-Resonance Eliminates Midrange Instability; Allows Stable Operation to 50 rps or Greater



STAC6-Si shown smaller than actual size.

STAC6-S shown smaller than actual size.

## SPECIFICATIONS

### POWER AMPLIFIER SECTION

**Amplifier Type:** MOSFET, dual H-bridge, 4 quadrant

**Current Control:** 4 state PWM at 20 KHz

**Output Current:** 0.5 to 6.0 A in 0.01 A increments

**Power Supply:** Line operated nominal 120 Vac, 50/60 Hz

**DC Bus Voltage:** Nominal 165 Vdc

**AC Input Voltage:** 94 to 135 Vac, 50/60 Hz

**Protection:** Over/under-voltage, over-temp, external output shorts (phase-to-phase, phase-to-ground), internal amplifier shorts

**Idle Current Reduction:** Reduction to any integral percent of full-current after delay (selectable in milliseconds)

**Motor Regeneration:** Built-in regeneration circuit (25 W max)

### CONTROLLER SECTION

**Non-Volatile Storage:** Configurations are stored in FLASH memory

**Step and Direction Inputs:** Optically Isolated: 5 to 12V; minimum pulse width = 200 ns; maximum pulse frequency = 2 MHz

**Speed Range:** Depends upon selected resolution; amplifier is suitable for speeds up to 133 rps

**Resolution:** Software selectable from 200 to 51,200 steps/rev in increments of 1 step/rev

**Encoder Option:** Differential line receivers suitable for 200 KHz or greater

**Interface:** RS232 and RS485 bus

**Ambient Temperature:** 0 to 55°C (32 to 158°F)

**Humidity:** 90% non-condensing

### INPUTS AND OUTPUTS

#### STAC6-S:

**7 Digital Inputs:** Two 5V, five 12 to 24V

**3 Digital Outputs:** 30V

**2 Analog Inputs:** ±10V

#### STAC6-Si:

**15 Digital Inputs:** Two 5V, thirteen 12 to 24V

**7 Digital Outputs:** 30V



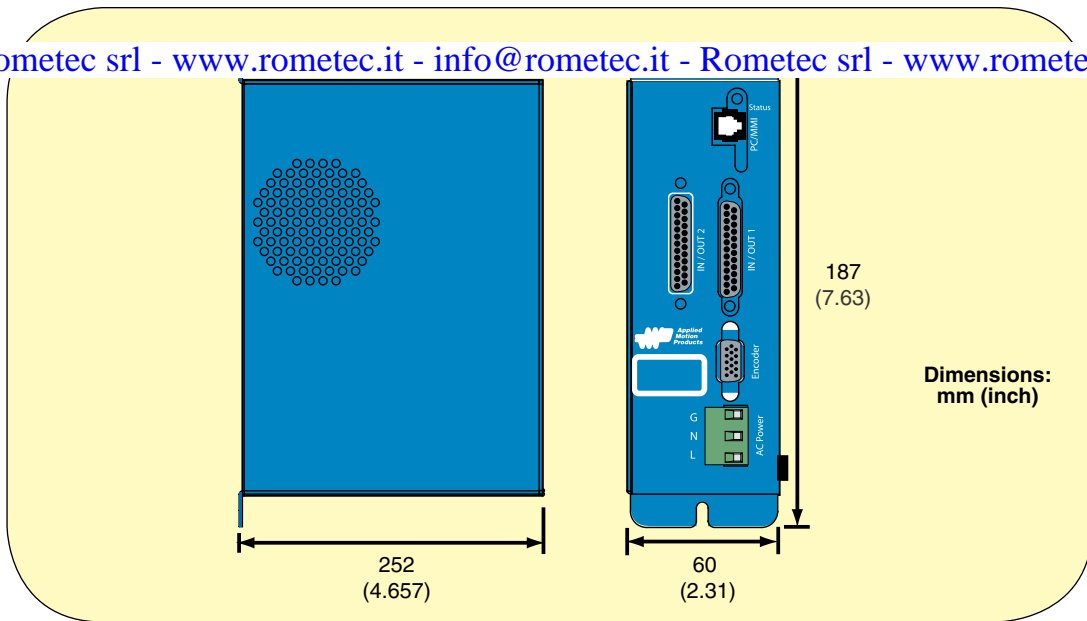
# CONFIGURATOR™ CONFIGURATION SOFTWARE



The new CONFIGURATOR™ software simplifies the setup and configuration of the STAC6. Click on the icon representing the aspect of the drive that needs changing and an intuitive dialog box will open. Configuration data for recommended motors is available from a drop down menu. The Configurator also allows the user to create a custom motor configuration.



The CONFIGURATOR™ incorporates a new on-line help menu. All technical data, application information and advice on setting up the drive, now just a mouse click away.



Dimensions:  
mm (inch)

## ACCESSORIES

The STAC6-Si is available with an optional MMI operator interface. The MMI-01 is an easy-to-use, NEMA 4/12 (IP56/52) terminal with a 20 key membrane keypad and 4x20 character LCD display. Software for using the MMI is contained in the Si Programmer itself, and therefore all functions of the MMI come with each Si drive. The MMI can be used to display messages to an operator, wait for an operator to press the ENTER key, allow an operator to enter move distances, move speeds, and loop counts, and much more.

Real-Time  
Communication  
with Operator  
Interface

Order  
MMI-01  
Separately. Visit  
[omega.com/  
mmi-01](http://omega.com/mmi-01)



MMI-01 shown  
smaller than  
actual size.

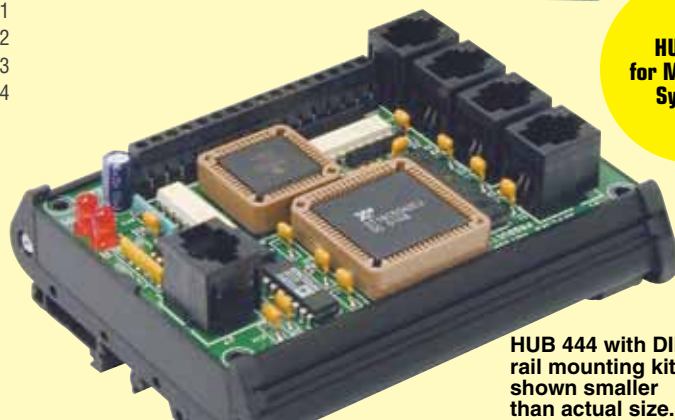
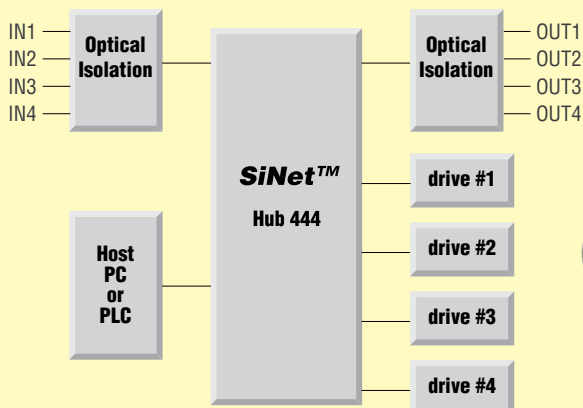
## Multi-Axis Systems

Connect up to 4 drives on a multi-axis system using SiNet™ Hub 444. Use SiNet Hub Programmer™ software to develop your sequence of events, then download to the hub for a stand-alone system or send serial commands to the drives from a PC, PLC, HMI, or other host controller.

Order  
HUB 444  
Separately. Visit  
[omega.com/  
hub444](http://omega.com/hub444)



HUB 444  
for Multi-Axis  
Systems



HUB 444 with DIN  
rail mounting kit  
shown smaller  
than actual size.



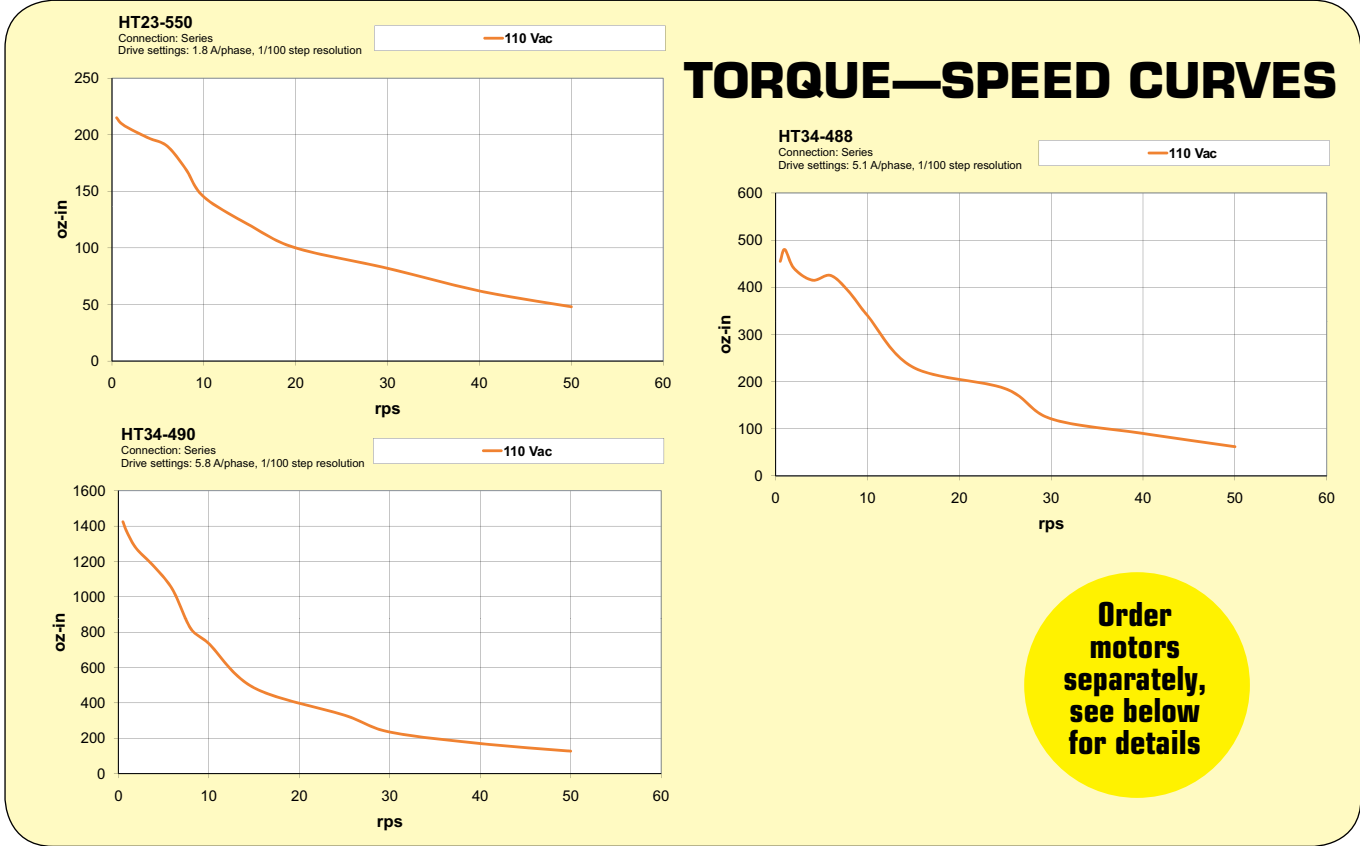
OMBOB-1 shown smaller than actual size.



Great for prototyping systems!

### OMBOB-1 / OMBOB-2 Breakout Box for I/O Connector

- Break out DB-25 I/O Connector to Screw Terminals
- Includes 1 m (3') Cable
- OMBOB-1: Compatible with all STAC6 Models
- OMBOB-2: Compatible with STAC6-Si



Order motors separately, see below for details

**To Order** Visit [omegamation.com/stac6](http://omegamation.com/stac6) for Pricing and Details

MODEL NO.	DESCRIPTION
<b>STAC6-S</b>	High performance stepper drive complete with AC power supply
<b>STAC6-Si</b>	High performance stepper drive with Si Programmer™
<b>STAC6-S-220V</b>	High performance stepper drive complete with 220 Vac power supply
<b>STAC6-Si-220V</b>	High performance stepper drive complete with 220 Vac power supply and Si programmer

\* Software and download cable included.  
Ordering Example: **STAC6-S**, high performance stepper drive with AC power supply.

### RECOMMENDED MOTORS

MODEL NO.	DESCRIPTION
<b>OMHT23-550</b>	NEMA 23, 255 oz-in holding torque, shielded cable
<b>OMHT34-488</b>	NEMA 34, 650 oz-in holding torque, shielded cable
<b>OMHT34-490</b>	NEMA 34, 1845 oz-in holding torque, shielded cable

Ordering Example: **OMHT34-488**, high torque step motor with 650 oz-in holding torque.  
Visit [omega.com](http://omega.com) for additional stepper motor information.

### ACCESSORIES

MODEL NO.	DESCRIPTION
<b>OMBOB-1</b>	Breakout box for I/O connector #1
<b>OMBOB-2</b>	Breakout box for I/O connector #2

Ordering Example: **OMBOB-1**, breakout box for I/O connector #1.



# STEPPED DRIVES

Rometec srl - [www.rometec.it](http://www.rometec.it) - [info@rometec.it](mailto:info@rometec.it) - Rometec srl - [www.rometec.it](http://www.rometec.it) - [info@rometec.it](mailto:info@rometec.it)

## HIGH PERFORMANCE STEP AND DIRECTION DRIVES



### STR Series



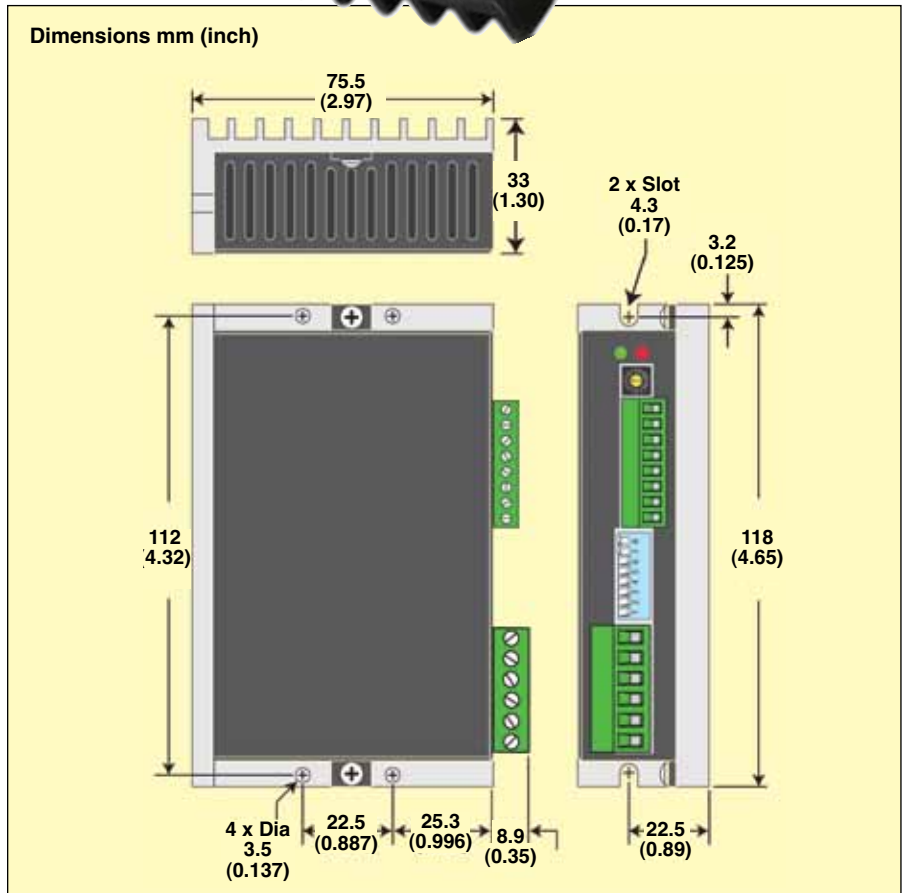
STR4 shown actual size.

- Sophisticated Current Control;  
STR2: 2A/phase  
STR4: 4A/phase  
STR8: 8A/phase
- Anti-Resonance for Optimized Torque and Smoothness Over a Wide Speed Range
- Microstep Emulation for Creating Smooth Motion Even with Low-Resolution Step Signals
- Up to 20,000 Steps/Revolution
- Step and Direction or CW/CCW Pulse Operation
- Built-In Noise Filter on STEP and DIR Inputs
- Large Family of Compatible 2-Phase Stepper Motors

The STR series stepper drive is a compact, powerful, digital step and direction drive available in three power ranges: 2 A/phase, 4 A/phase and 8 A/phase. The STR series is ideal for applications requiring basic step and direction control of a 2-phase step motor.

All setup is done via dip switches and a rotary switch on the side of the drive, including motor selection, running current, idle current, and step resolution.

STR drives are available with a large family of compatible 2-phase step motors, selected to optimize performance of both the drive and motor.



Rometec srl - [www.rometec.it](http://www.rometec.it) - [info@rometec.it](mailto:info@rometec.it) - Rometec srl - [www.rometec.it](http://www.rometec.it) - [info@rometec.it](mailto:info@rometec.it)

**Order Power Supplies Separately. See [omega.com](http://omega.com) for details**

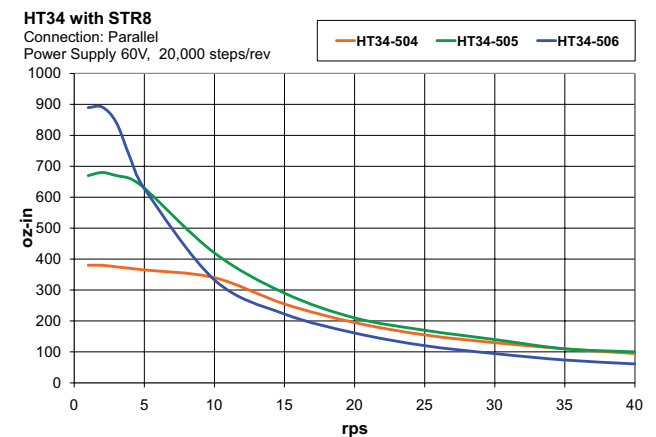
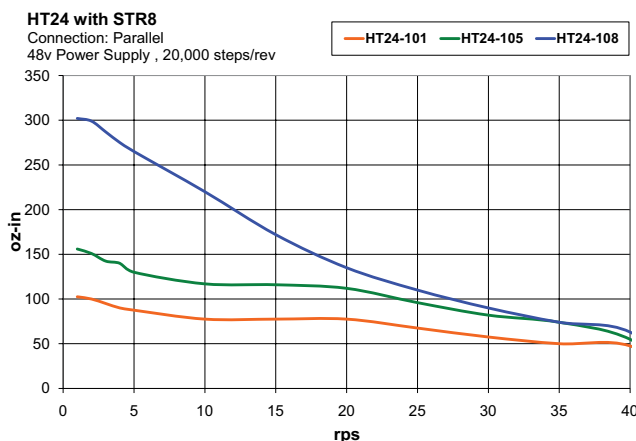
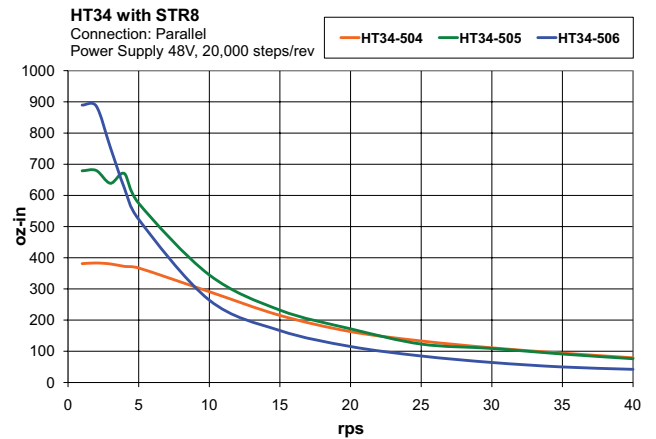
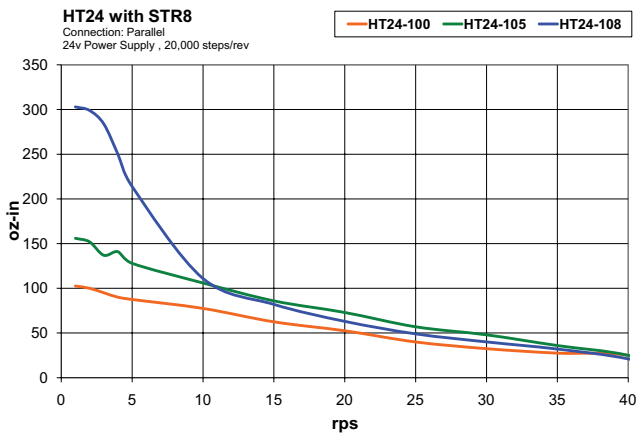
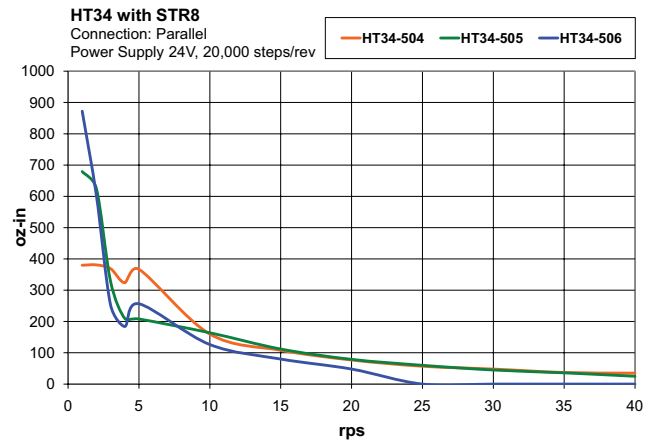
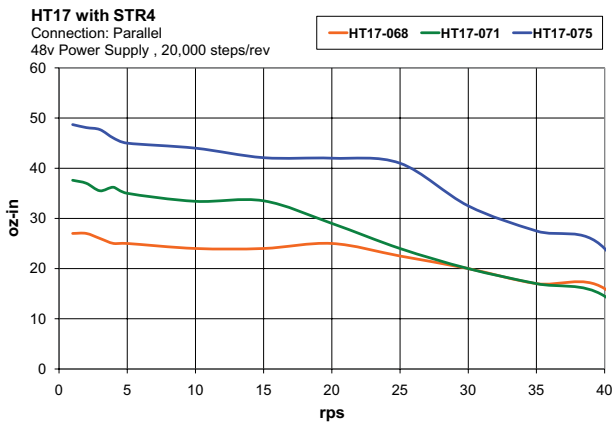
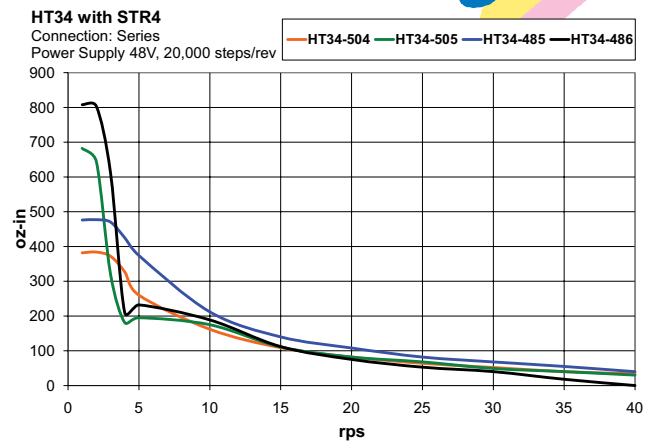
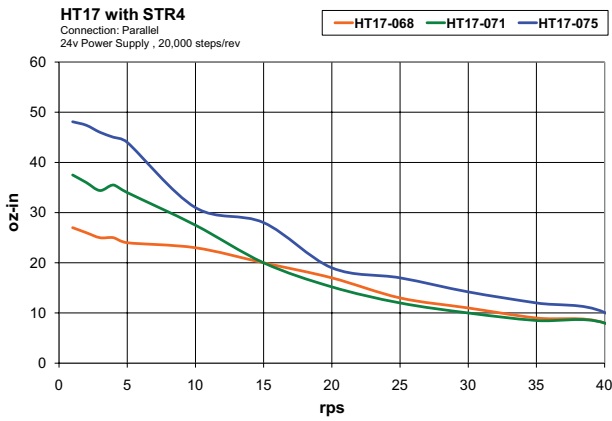


OMHT Series, visit [omega.com/omht\\_series](http://omega.com/omht_series) for details. All models shown smaller than actual size.

**RECOMMENDED MOTORS**

MODEL NO.	DESCRIPTION
<b>RECOMMENDED MOTORS FOR STR2</b>	
OMHT11-013	NEMA 11 stepper motor, 15 oz-in holding torque, 1.0 A/phase
OM5014-842	NEMA 14 stepper motor, 26 oz-in holding torque, 1.0 A/phase
OMHT17-075	NEMA 17 stepper motor, 62.8 oz-in holding torque, 1.7 A/phase, parallel connection
OMHT17-275	NEMA 17 stepper motor, 62.8 oz-in holding torque, 1.7 A/phase, parallel connection
<b>RECOMMENDED MOTORS FOR STR4/STR8</b>	
OMHT17-075	NEMA 17 stepper motor, 62.8 oz-in holding torque, 1.7 A/phase, parallel connection
OMHT17-275	NEMA 17 stepper motor, 62.8 oz-in holding torque, 1.7 A/phase, parallel connection
OMHT24-100	NEMA 24 stepper motor, 123 oz-in holding torque, 2.8 A/phase
OMHT24-105	NEMA 24 stepper motor, 177 oz-in holding torque, 4.0 A/phase
OMHT24-108	NEMA 24 stepper motor, 354 oz-in holding torque, 4.0 A/phase
OMHT34-485	NEMA 34 stepper motor, 650 oz-in holding torque, 4.3 A/phase, series connection
OMHT34-486	NEMA 34 stepper motor, 1200 oz-in holding torque, 4.1 A/phase, series connection
OMHT34-504	NEMA 34 stepper motor, 396 oz-in holding torque, 3.18 A/phase, series connection
OMHT34-505	NEMA 34 stepper motor, 849 oz-in holding torque, 3.18 A/phase, series connection
<b>RECOMMENDED MOTORS FOR STR8</b>	
OMHT34-485	NEMA 34 stepper motor, 650 oz-in holding torque, 8.6 A/phase, parallel connection
OMHT34-486	NEMA 34 stepper motor, 1200 oz-in holding torque, 8.1 A/phase, parallel connection
OMHT34-487	NEMA 34 stepper motor, 1845 oz-in holding torque, 9.01 A/phase, parallel connection
OMHT34-504	NEMA 34 stepper motor, 396 oz-in holding torque, 6.3 A/phase, parallel connection
OMHT34-505	NEMA 34 stepper motor, 849 oz-in holding torque, 6.3 A/phase, parallel connection
OMHT34-506	NEMA 34 stepper motor, 1260 oz-in holding torque, 5.6 A/phase, parallel connection

Note: Ratings are with motor connected in parallel.



### OMRC-050 Regen Clamp—For Stepper Drive Power Supply Protection

- Voltage Range 24 to 80 Vdc
- 50 W Power Dissipation
- Regen Present LED
- Power LED
- 76 x 102 x 6.4 mm (3 x 4 x 2.5")

#### SPECIFICATIONS

**Input Power Cont:** 50 W  
**Input Power Peak:** 800 W  
**Voltage Range:** 24 to 80 Vdc

OMRC-050 shown smaller than actual size.



#### Recommended When Using:

NEMA 17 motors @ speeds > 30 rps  
 NEMA 23 motors @ speeds > 10 rps  
 NEMA 34 motors @ speeds > 4 rps

### Recommended Power Supplies (Order Separately)

OMPS150A24: 24 Vdc at 6.3 A  
 OMPS300A48: 48 Vdc at 6.7 A



OMPS150A24 shown smaller than actual size.

Order Motors Separately See [omega.com](http://omega.com) for Details

#### SPECIFICATIONS

##### POWER AMPLIFIER SECTION (STR4)

**Amplifier Type:** Mosfet, dual H-bridge, 4 quadrant  
**Current Control:** 4 state Pwm at 20 Khz  
**Output Current:** Up to 4.5 a/phase, depending on motor selection  
**Switch Selectable % of Maximum Current:** 100%, 90%, 80%, 70%  
**Power Supply:** External 24 to 48 Vdc power supply required  
**Idle Current Reduction:** Reduction to 50% or 90%, switch selectable

##### POWER AMPLIFIER SECTION (STR8)

**Amplifier Type:** Mosfet, dual H-bridge, 4 quadrant  
**Current Control:** 4 state Pwm at 20 Khz  
**Output Current:** Up to 8 a/phase, depending on motor selection  
**Switch Selectable % of Maximum Current:** 100%, 90%, 80%, 70%

**Power Supply:** External 24 to 75 Vdc power supply required  
**Idle Current Reduction:** Reduction to 50% or 90%, switch selectable

##### CONTROLLER SECTION

**Mode Of Operation:** Step and direction, Cw/Ccw  
**Microstep Resolution:** Switch selectable: 200, 200 smooth, 400, 400 smooth, 2000, 5000, 12800, 20000 steps/revolution  
**Speed Range:** Depends upon selected resolution amplifier is suitable for speeds up to 50 Rps  
**Anti Resonance:** Raises the system damping ratio eliminates midrange instability and allows stable operation to 50 Rps

**Waveform:** Allows for fine adjustment of phase current waveform harmonic content to reduce low-speed torque ripple in the range 0.25 to 1.5 Rps  
**Digital Noise Filter:** Step pulse input: 150 Khz or 2 Mhz, jumper selectable  
**Self Test Switch Selectable:** Rotates motor 2 revolutions in each direction  
**Control Inputs:** Step, direction, enable, optically isolated; 4 to 30 Vdc, 5 to 15 ma.

**Step Input:** Min pulse width = 250 Ns; max pulse frequency = 2 Mhz  
**Fault Output:** Photodarlington, 80 Ma, 30 Vdc max; voltage drop = 1.2 Vdc max at 80 Ma  
**Ambient Temperature:** 0 to 50°C (32 to 122°F) humidity 90% non-condensing

**To Order** Visit [omega.com/str](http://omega.com/str) for Pricing and Details

MODEL NO.	DESCRIPTION
STR2	Step and direction stepper drive with 2 A output
STR4	Step and direction stepper drive with 4.5 A output
STR8	Step and direction stepper drive with 8 A output

#### ACCESSORIES

MODEL NO.	DESCRIPTION
OMPS150A24	Power supply with active PFC filter, 24 Vdc, 6.3 A
OMPS300A48	Power supply with active PFC filter, 48 Vdc, 6.7 A
OMRC-050	Regeneration clamp, 24 to 80 Vdc
POWER CORD-SE	AC power cord with stripped end termination





# PERFORMANCE STEPPER DRIVES WITH ADVANCED FEATURES AND CONTROL OPTIONS

ST Series



Configuration  
Software  
Included!



ST5-S  
shown close  
to actual size.

- Current Output 0.5 to 10.0 A
- Configurator™ Configuration Software
- Configurable Idle Current Reduction
- External Control Options
- Pulse and Direction
- Analog Command Signal
- Host Command Via RS232/485
- Fault Protection (Over-Voltage, Under-Voltage, Over-Temp, External Output Shorts, Internal Amplifier Shorts)
- Multi-Axis System with SiNet™ Hub
- Stand-Alone Programming on Si Model
- Microstepping Emulation (Up to 51200 steps/revolution)

## Advanced Features

- Auto Setup: Measures Motor Parameters and Configures Tuning Parameters
- Self-Test: Detects Encoder and Determines Resolution; Diagnoses Miswires and Open Phases
- Torque Ripple Smoothing: Smoother Motion at Lower Speeds
- Command Signal Smoothing: Assures Smooth Acceleration/Deceleration Ramps
- Anti-Resonance: Eliminates Mid-Range Instability; Allows Stable Operation to 50 rps or Greater

## SPECIFICATIONS

### ST5-S, ST5-Si POWER AMPLIFIER SECTION

**Amplifier Type:** MOSFET, Dual H-Bridge, 4 Quadrant  
**Current Control:** 4 state PWM at 20 KHz  
**Output Current:** 0.5 to 5.0 A/phase in 0.01 A increments  
**Power Supply:** External 24 to 48 Vdc power supply required  
**Input Voltage Range:** 18 to 53 Vdc  
**Protection:** Over voltage, under voltage, over-temp, external output shorts (phase-to-phase, phase-to-ground), internal amplifier shorts  
**Idle Current Reduction:** Reduction to any integer percent of full-current after delay selectable in milliseconds

### ST10-S, ST10-Si POWER AMPLIFIER SECTION

**Amplifier Type:** MOSFET, Dual H-Bridge, 4 Quadrant  
**Current Control:** 4 state PWM at 20 KHz  
**Output Current:** 0.5 to 10.0 A/phase in 0.01 A increments  
**Power Supply:** External 24 to 80 Vdc power supply required  
**Input Voltage Range:** 18 to 88 Vdc  
**Protection:** Over voltage, under voltage, over-temp, external output shorts (phase-to-phase, phase-to-ground), internal amplifier shorts

**Idle Current Reduction:** Reduction to any integer percent of full-current after delay selectable in milliseconds

### -S AND -SI (COMMON FEATURES) CONTROLLER SECTION

**Mode of Operation:** Step and direction, CW/CCW, encoder following, oscillator, joystick, SCL, Si (Si programming is only available on the -Si models)  
**Microstep Resolution:** Software selectable from 200 to 51,200 steps/rev in increments of 200 steps/rev  
**Speed Range:** Depends upon selected resolution; amplifier is suitable for speeds up to 50 rps  
**Anti-Resonance:** Raises the system damping ratio to eliminate mid-range instability and allows stable operation to 50 rps  
**Waveform:** Allows for fine adjustment of phase current waveform harmonic content to reduce low-speed torque ripple in the range 0.25 to 1.5 rps  
**Dynamic Smoothing:** Software configurable filtering (4th order, elliptic) for use in removing spectral components from the command sequence; reduces jerk and excitation of extraneous system resonances  
**Encoder Option:** Employs encoder (high or low resolution) to provide stall detection, stall prevention and perform position verification and maintenance



**Communication Interface:** RS232;

RS485 option available for Si models

**Ambient Temperature:** 0 to 55°C (32 to 158°F)

**Humidity:** 90% non-condensing

**-Si CONTROLLER SECTION**

**Non-Volatile Storage:** Program and drive configuration are saved in EEPROM memory

**INPUTS**

**X1, X2:** Optically isolated, differential, 5V; minimum pulse width = 250 ns; maximum pulse frequency = 2 MHz

**Function:** Step and direction, encoder following, sensor, home or branch select

**X3:** Optically isolated, 12 to 24V, sourcing or sinking, shares common with X3-X6

**Function:** Motor enable, sensor, home or branch select

**X4:** Optically isolated, 12 to 24V, sourcing or sinking, shares common with X3-X6

**Function:** Alarm reset, sensor, home or branch select

**X5, X6:** Optically isolated, 12 to 24V, sourcing or sinking, shares common with X3-X6

**Function:** Jogging, sensor, home or branch select

**X7, X8:** Optically isolated, differential, 12 to 24V

**Function:** CW and CCW limits, sensor, home or branch select

**OUTPUTS**

**Y1:** Optical darlington, 30V, 100 mA max, NPN/sinking, shared common with Y2 and Y3

**Function:** Brake or general purpose programmable

**Y2:** Optical darlington, 30V, 100 mA max, NPN/sinking, shared common with Y1 and Y3

**Function:** Motion, tach or general purpose programmable

**Y3:** Optical darlington, 30V, 100 mA max, NPN/sinking, shared common with Y1 and Y2

**Function:** Fault or general purpose programmable

**Y4:** Optical darlington, 30V, 100 mA max, configurable as sinking or sourcing

**Function:** General purpose programmable

**Analog Inputs (2):**

**Range:** Software selectable: 0 to 5V, ±5V, 0 to 10V, ±10V

**Resolution:**

12 bits (±10V signal range)

11 bits (0 to 10V or ±5V signal range)

10 bits (0 to 5V signal range)

**Encoder:** Differential line receivers suitable for 200 KHz or greater

**-S CONTROLLER SECTION**

**Non-Volatile Storage:** Configurations are saved in FLASH memory aboard the DSP

**Step and Direction Inputs:** Optically isolated, differential, 5V; minimum pulse width = 250 ns; maximum pulse frequency = 2 MHz

**Function:** Step and direction, run/stop and direction or CW and CCW Limits

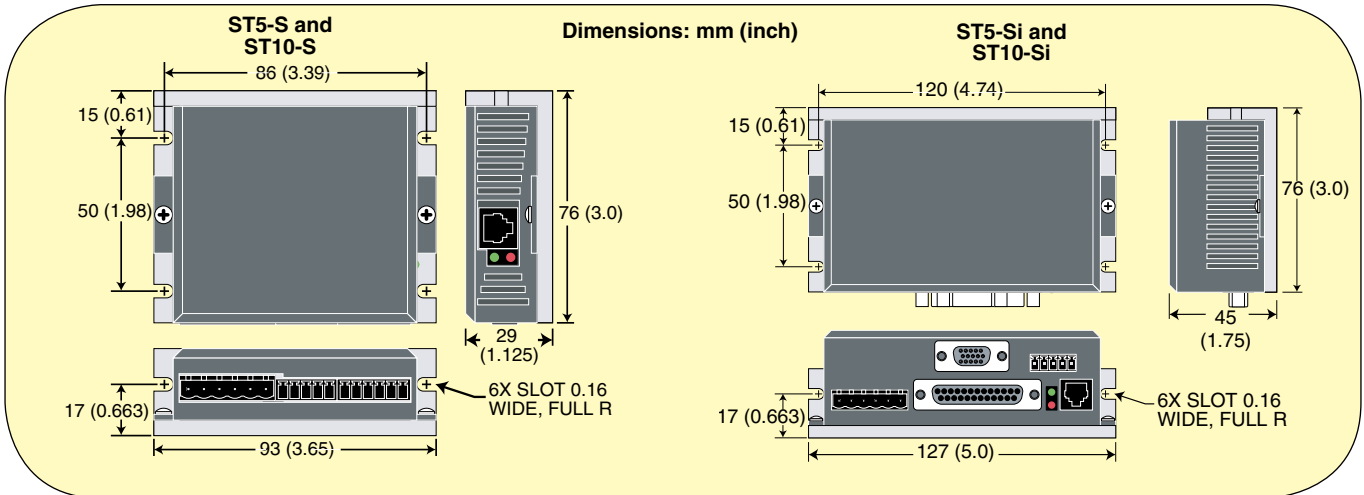
**Enable Input:** Optically isolated, 5 to 12V

**Function:** Motor enable, speed select or alarm reset

**Output:** Optically Isolated, 24V, 10 mA max

**Function:** Fault, motion, tach, or brake

**Analog Input:** 0 to 5V, 12 bits resolution



**SOFTWARE ST CONFIGURATOR™**



**Software Included Free with Purchase of ST Drives!**


- Simple Drive Setup
- Store and Download Configurations



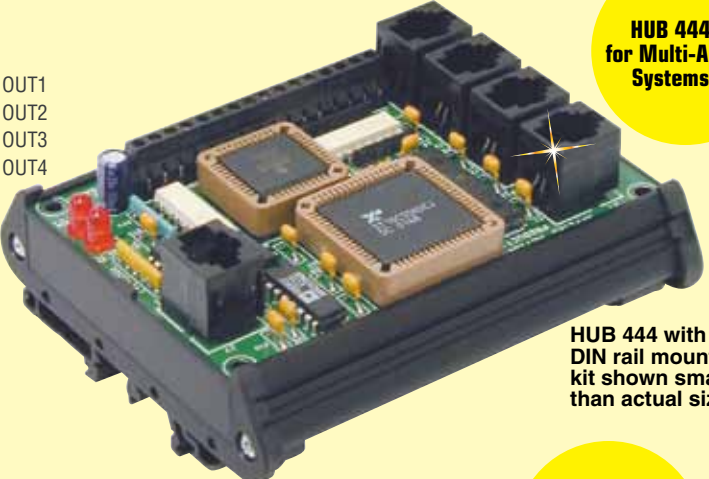
## Multi-Axis Systems

Connect up to 4 drives on a multi-axis system using SiNet™ Hub 444. Use SiNet Hub Programmer™ software to develop your sequence of events, then download to the hub for a stand-alone system or send serial commands to the drives from a PC, PLC, HMI, or other host controller.

**Order HUB 444 Separately. See [omega.com](http://omega.com)**



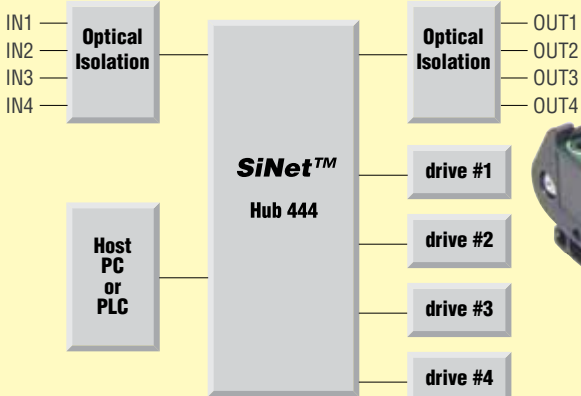
**Order Power Supplies Separately. See [omega.com](http://omega.com)**



**HUB 444 for Multi-Axis Systems**

HUB 444 with DIN rail mounting kit shown smaller than actual size.

**Order Power Supplies Separately. See [omega.com](http://omega.com)**



IN1, IN2, IN3, IN4 → Optical Isolation → SiNet™ Hub 444 → Host PC or PLC

Optical Isolation → OUT1, OUT2, OUT3, OUT4 → drive #1, drive #2, drive #3, drive #4

### RECOMMENDED POWER SUPPLIES (ORDER SEPARATELY)

**ST5-S and -Si:** OMPS150A24, 24 Vdc at 6.3 A. See [omega.com](http://omega.com) for details.  
**ST10-S and -Si:** OMPS300A48, 48 Vdc at 6.7 A. See [omega.com](http://omega.com) for details.

### FUSING

**Internal Fuse:** ST5 and ST10 contain internal 10 A fast acting fuses

### OMRC-050 Regen Clamp—For Stepper Drive Power Supply Protection

- Voltage Range 24 to 80 Vdc
- 50 W Power Dissipation
- Regen Present LED
- Power LED
- 76 x 102 x 6.4 mm (3 x 4 x 2.5")

**Order OMRC-050 Separately. See [omega.com](http://omega.com)**

OMRC-050 shown smaller than actual size.



### SPECIFICATIONS

**Input Power Cont:** 50 W  
**Input Power Peak:** 800 W  
**Voltage Range:** 24 to 80 Vdc

### Recommended When Using:

NEMA 17 motors @ speeds > 30 rps  
 NEMA 23 motors @ speeds > 10 rps  
 NEMA 34 motors @ speeds > 4 rps

### OMBOB-1 Breakout Box for I/O Connector

- Break out DB-25 I/O Connector to Screw Terminals
- Includes 1 m (3') Cable
- Compatible with ST5-Si and ST10-Si

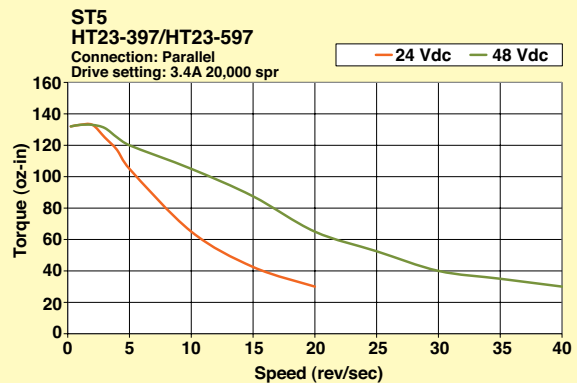
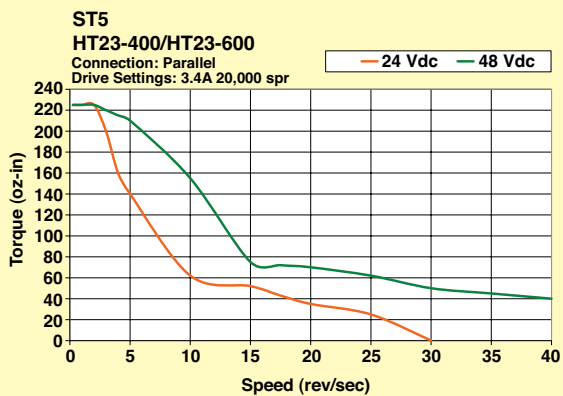
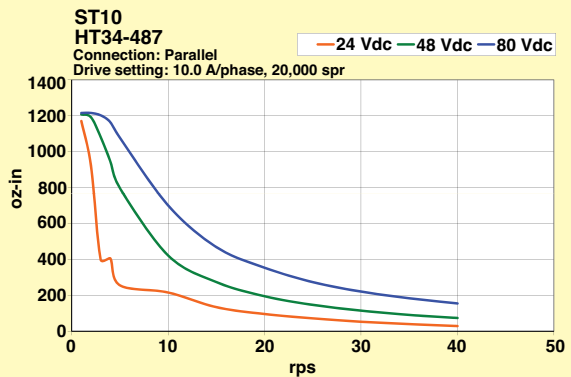
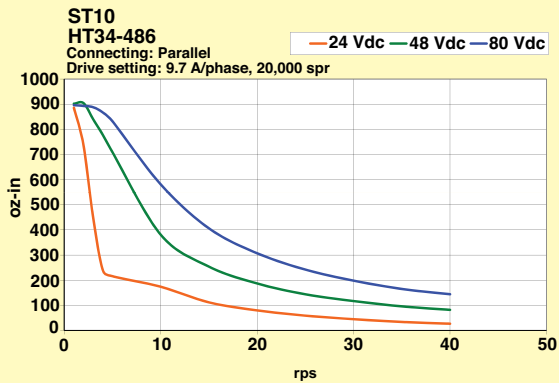
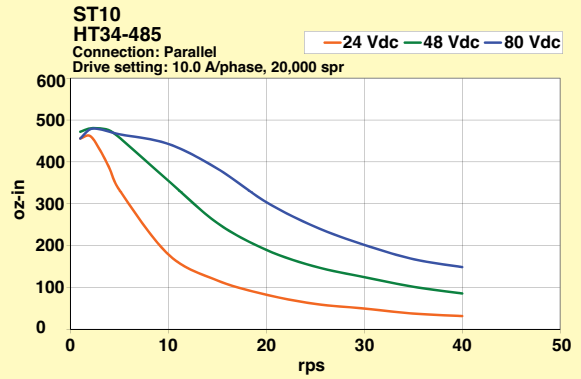
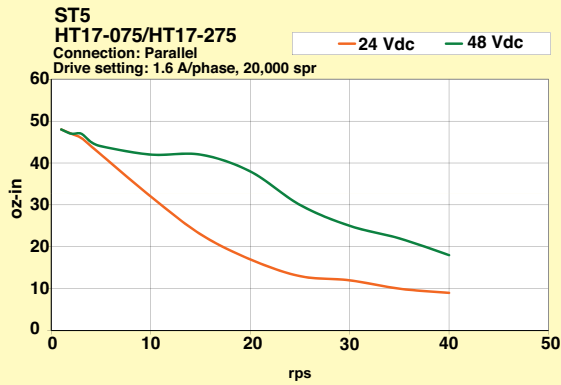
OMBOB-1 shown smaller than actual size.



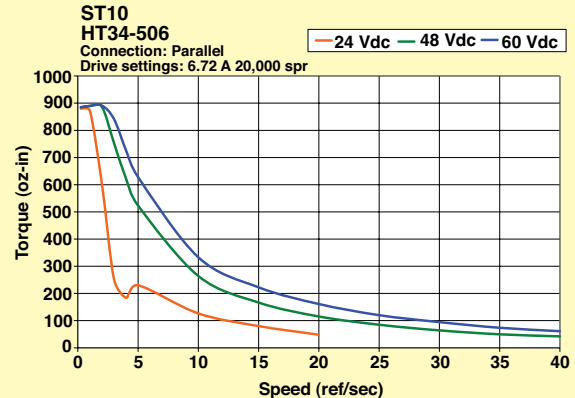
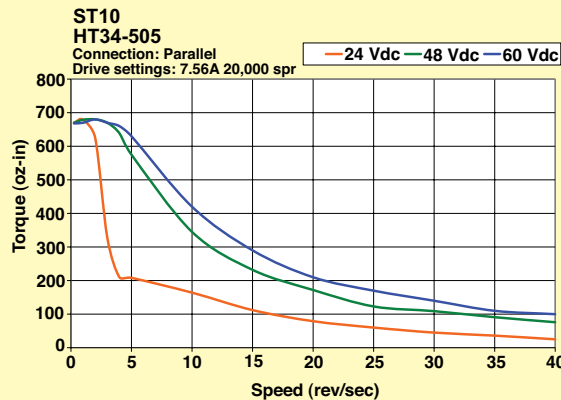
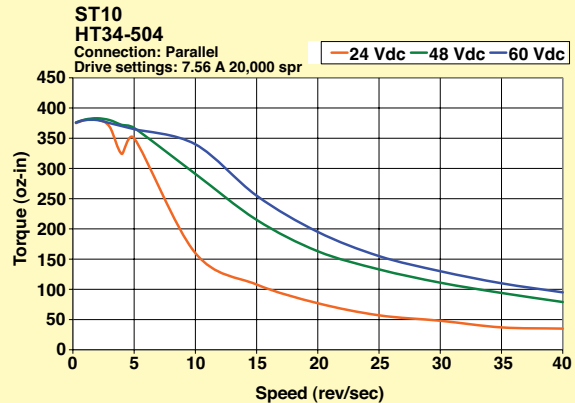
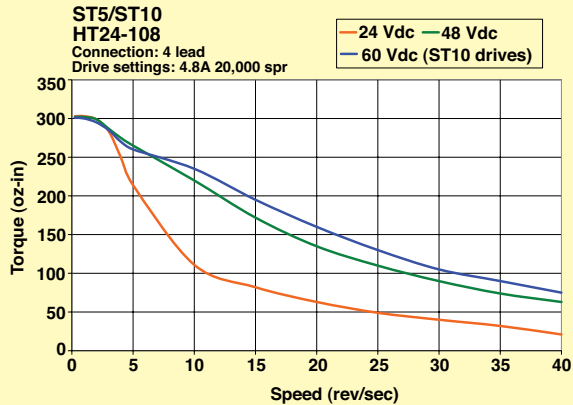
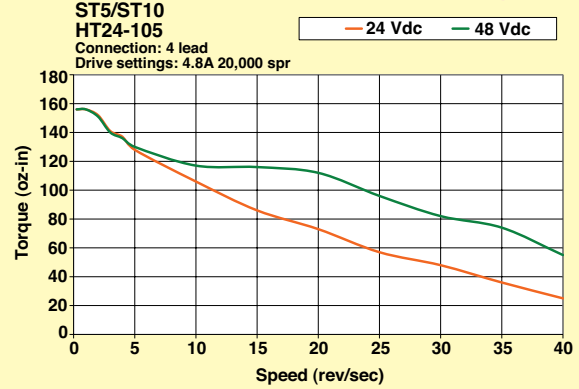
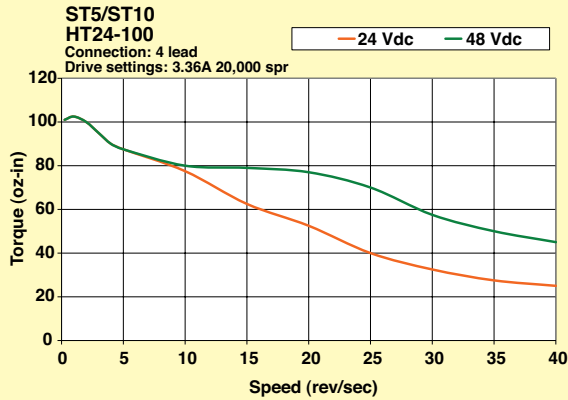
**Great for prototyping systems!**



# TORQUE SPEED CURVES







**To Order** Visit [omegamation.com/st\\_series](http://omegamation.com/st_series) for Pricing and Details

MODEL NO.	DESCRIPTION
<b>ST5-S</b>	Performance stepper drive with 5 A output
<b>ST5-Si</b>	Performance stepper drive with Si Programmer™
<b>ST5-Si-485</b>	Performance stepper drive with Si Programmer™ and RS485 option
<b>ST5-Si-ENC</b>	Performance stepper drive with Si Programmer™ and encoder option
<b>ST5-Si-ENC-485</b>	Performance stepper drive with Si Programmer™ and encoder plus RS485 options
<b>ST10-S</b>	Performance stepper drive with 10 A output
<b>ST10-Si</b>	Performance stepper drive with Si Programmer™
<b>ST10-Si-485</b>	Performance stepper drive with Si Programmer™ and RS485 option
<b>ST10-Si-ENC</b>	Performance stepper drive with Si Programmer™ and encoder option
<b>ST10-Si-ENC-485</b>	Performance stepper drive with Si Programmer™ and encoder plus RS485 options

Note: Software and download cable included.

Ordering Example: **ST5-S**, performance stepper drive with 5 A output.



## RECOMMENDED MOTORS FOR ST5

MODEL NO.	DESCRIPTION
OMHT17-275	NEMA 17, 62.3 oz-in holding torque
OMHT24-100	NEMA 24, 123 oz-in holding torque
OMHT23-597	NEMA 23, 177 oz-in holding torque
OMHT24-105	NEMA 24, 177 oz-in holding torque
OMHT17-075	NEMA 17, 62.8 oz-in holding torque
OMHT23-600	NEMA 23, 264.8 oz-in holding torque
OMHT23-397	NEMA 23, 177 oz-in holding torque
OMHT24-108	NEMA 24, 354 oz-in holding torque
OMHT23-400	NEMA 23, 264 oz-in holding torque

*Ordering Example: ST5-Si, performance stepper drive with Si Programmer™, and OMHT17-075, NEMA 17 high torque step motor. See omegamation.com for more motor specs. Torque-speed curves for recommended motor shown above.*

## RECOMMENDED MOTORS FOR ST10

MODEL NO.	DESCRIPTION
OMHT24-100	NEMA 24, 123 oz-in holding torque
OMHT24-105	NEMA 24, 177 oz-in holding torque
OMHT24-108	NEMA 24, 354 oz-in holding torque
OMHT-34-504	NEMA 34, 396 oz-in holding torque
OMHT34-485	NEMA 34, 650 oz-in holding torque
OMHT34-505	NEMA 34, 849 oz-in holding torque
OMHT-34-506	NEMA 24, 123 oz-in holding torque
OMHT34-486	NEMA 34, 1200 oz-in holding torque
OMHT34-487	NEMA 34, 1845 oz-in holding torque

*Ordering Example: ST10-Si, performance stepper drive with Si Programmer™, and OMHT34-487, NEMA 34 high torque step motor.*

## ACCESSORIES

MODEL NO.	DESCRIPTION
ENC-ST-CA-10	Encoder cable for ST drive, 3 m (10')
OMBOB-1	Breakout box for I/O connector
OMPS150A24	Stepper drive power supply for ST5 series, 24 Vdc, 6.3 A
OMPS300A48	Stepper drive power supply for ST10 series, 48 Vdc, 6.7 A
OM-CONV-USB	USB to RS232 interface converter
OMRC-050	Motor regeneration clamp
POWER CORD-SE	AC power cord with stripped end termination
OM-PL-USBS	USB to RS232 converter; works with Windows Vista and Windows 7
OMG-USB-485-1	USB to RS422/485/530 interface converter; USB-A to DB25-male DB25F/9M cable (DRB RS422 pinout)
OMG-CA175	DB25F/9M cable (DB9 RS422 pinout)
SI-PROG-CBL	Replacement programming cable (comes with drive)
DRIVE-CBL	Replacement MMI and/or HUB communications cable (comes with MMI-01 and HUB 444)
DSUB-9-MF	DIN rail interface module, 9-pin
DSUB-25-MF	DIN rail interface module, 25-pin
DSUB-9-MF-CBL	DSUB cable, 9-pin, 2 m (6.6'), male/female connectors
DSUB-25-MF-CBL	DSUB cable, 25-pin, 2 m (6.6'), male/female connectors

*Ordering Example: ST10-Si-ENC-485, 10 A performance stepper drive with Si programmer plus encoder and RS485 options, ENC-ST-CA-10, 3 m (10') encoder cable for ST drive, and OMBOB-1, breakout box for I/O connector.*