

STR8

DC Advanced Microstep Drive



Product Features

- Current range 2.35A to 8.0A peak of sine
- Electronic damping (anti-resonance)
- Microstepping & microstep emulation
- Built-in self test move profile
- Step & direction inputs
- CW Pulse/CCW pulse operation
- Idle current reduction
- Selectable digital input filter



Description

The STR8 stepper drive is a compact, powerful, digital step & direction drive, great for OEM applications requiring basic step & direction control of a 2-phase step motor. The STR8 outputs up to 8 A/phase to the step motor, and is compatible with a variety of 2-phase step motors that have been selected to optimize performance of both the drive and motor.

The STR8 drive features advanced microstepping performance and sophisticated current control with anti-resonance. Anti-resonance electronically damps motor and system resonances, which improves motor smoothness and torque over a wide speed range.

Each STR8 step motor drive operates in either Step & Direction or Pulse/Pulse control mode. Selecting between these two modes is done by moving a jumper located under the cover of the drive. Each STR8 drive can microstep up to 20,000 steps/rev with a 1.8° step motor (1/100 step), and can even microstep the step motor when the command pulses are low resolution. This feature is called Microstep Emulation. All drive 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.

Specifications

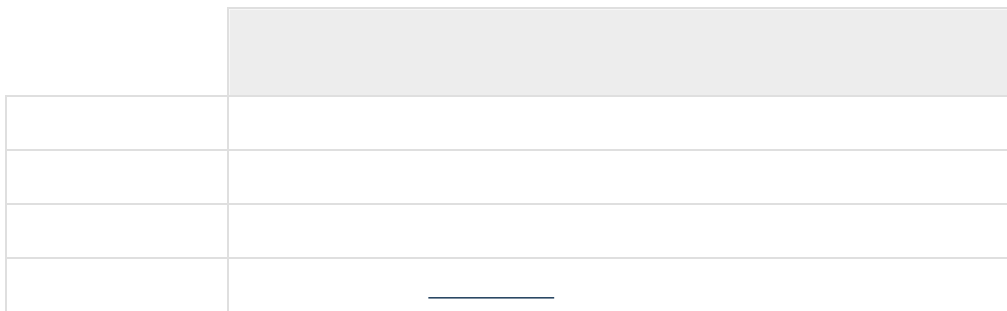
Model Number	STR8
Part Number	5000-158
Supply Voltage	24-75 VDC
Supply Voltage Type	DC
Control Modes	<ul style="list-style-type: none">• Step & Direction
Output Current	2.35-8.0 A/phase
Communication Ports	NA
Encoder Feedback	No
Step Resolution	<ul style="list-style-type: none">• Full• Half• Microstepping• Microstep Emulation
Idle Current Reduction	50% or 90%
Setup Method	Switch / potentiometer
Digital Inputs	3
Digital Outputs	1
Analog Inputs	NA
Dimensions	4.65 x 2.97 x 1.30 inches
Weight	10.8 oz
Operating Temperature Range	0 to 70 °C
Ambient Temperature Range	0 to 50 °C
Ambient Humidity	90% max, non-condensing
Status LEDs	1 red, 1 green
Circuit Protection	<ul style="list-style-type: none">• Short circuit• Over-voltage• Under-voltage

Software

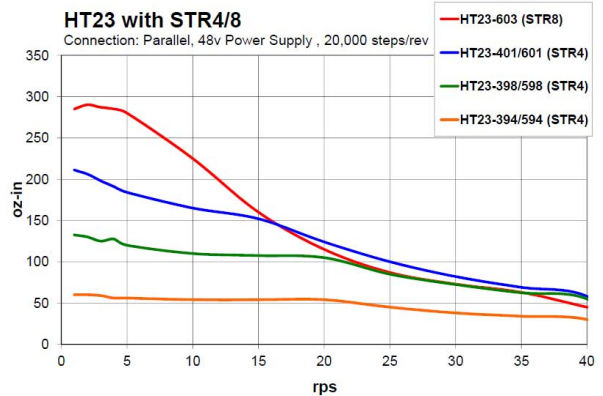
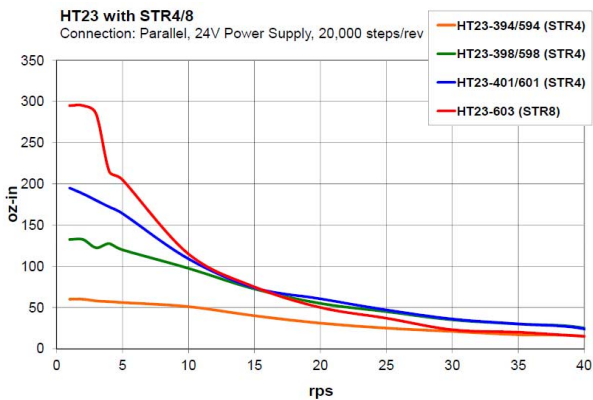
Software Downloads	There is no software related to this product.
Sample Code	There are no sample code documents at this time.

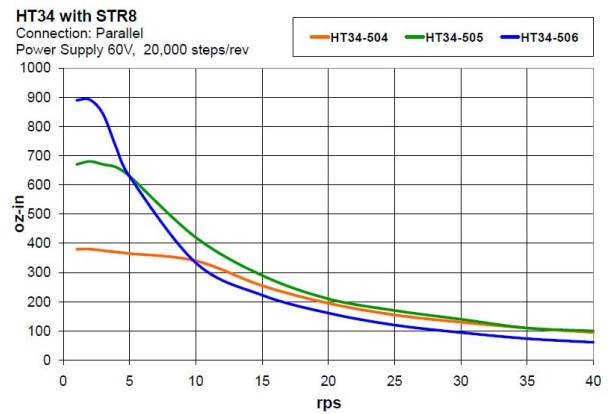
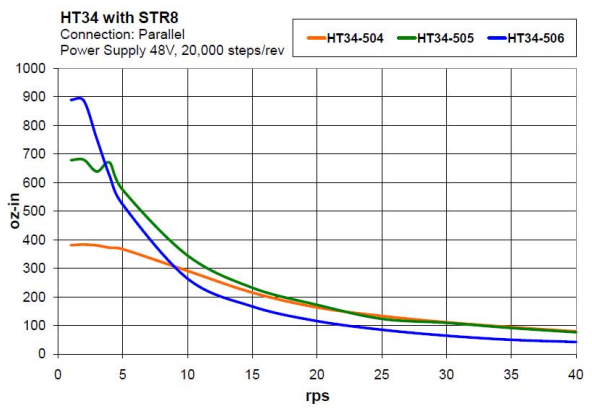
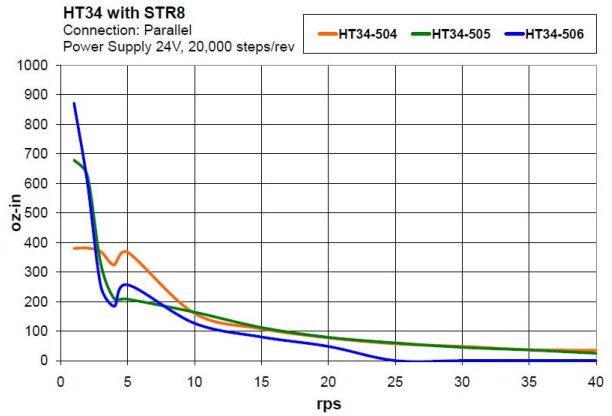
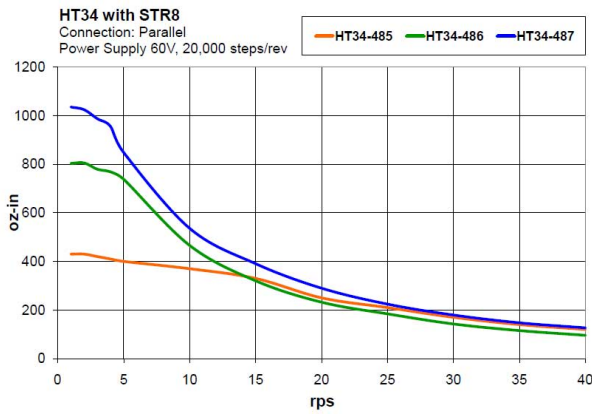
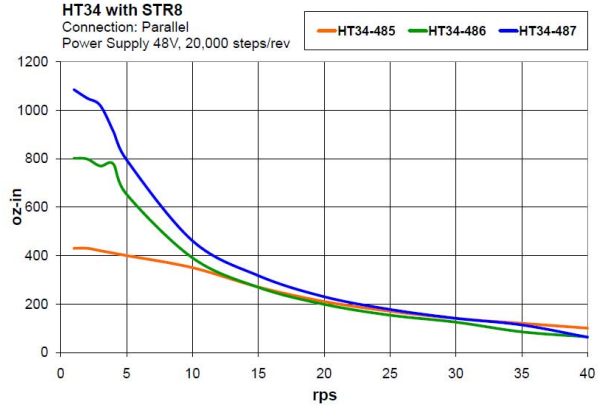
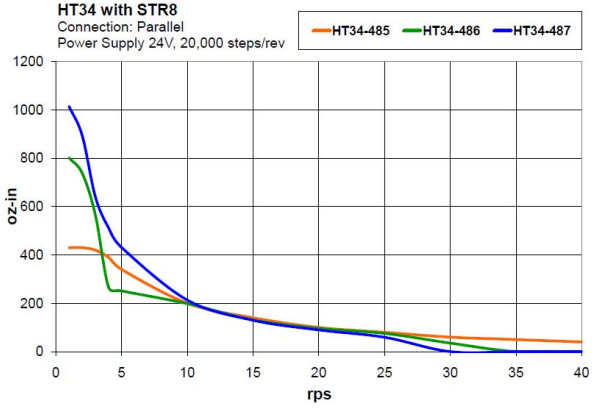
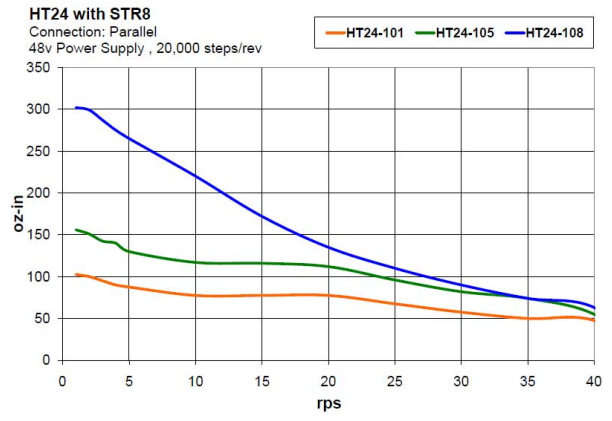
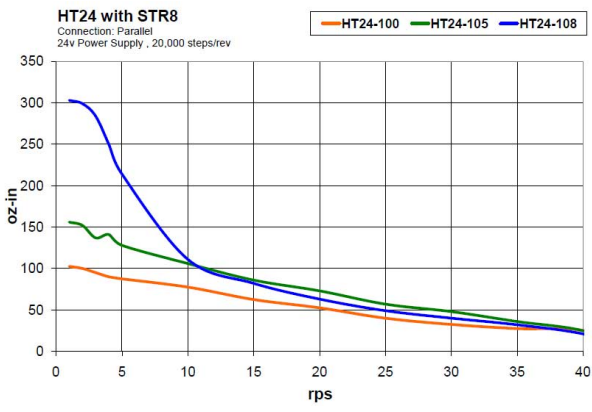
Downloads

Manuals	STR4-8 Hardware Manual 920-0030G.pdf STR Quick Setup Guide.pdf
Datasheet	STR Datasheet 925-0002.pdf
2D Drawing	STR4_8_drawing.pdf ST4_8_simple_3D.pdf
3D Drawing	STR4_8.igs
Speed-Torque Curves	STR_speed-torque.pdf
Agency Approvals	STR_CE_DOC.PDF
Application Notes	There are currently no Application Notes available for this product.

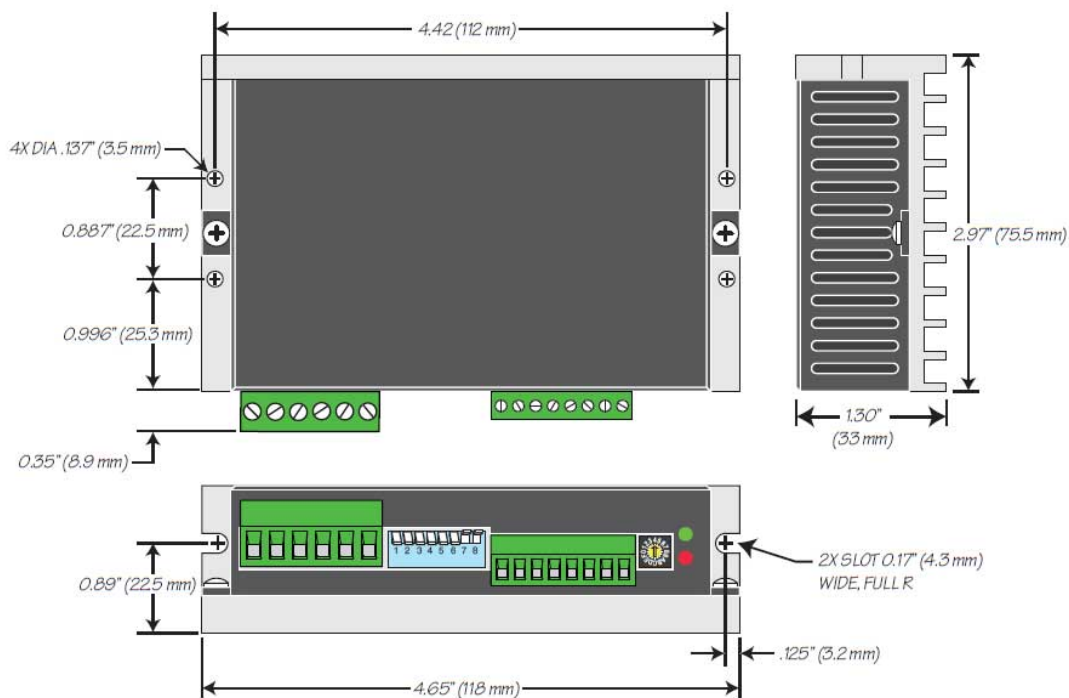


Torque Curves





2D Drawings



Products in the Series *STR Stepper Drives*

Model Number	Supply Voltage	Control Modes	Output Current	Communication Ports	Encoder Feedback	1pc./50pc.
STR2	12-48 VDC	Step & Direction	0.3-2.2 A/Phase	NA	No	
STR4	24-48 VDC	Step & Direction	1.12-4.5 A/Phase	NA	No	
STR8	24-75 VDC	Step & Direction	2.35-8.0 A/Phase	NA	No	