

## ST Stepper Drives

Advanced Microstepping Drives with Multiple Control Options



### Product Features

- *Sophisticated current control*
- *Advanced anti-resonance algorithm*
- *Torque ripple smoothing*
- *Microstepping*
- *Microstep Emulation*
- *Idle current reduction*
- *Multiple control options*
- *RS-232, RS-485, CANopen, Ethernet UDP & TCP, and EtherNet/IP communication options*

## Series Details

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The ST stepper drives are a family of compact digital stepper drives with multiple control options and many sophisticated features. The ST drives represent the latest generation of stepper drive technology from Applied Motion. Step motors run smoother than ever with features such as anti-resonance, torque ripple smoothing, and microstep emulation. Step motors also run faster and with more torque due to the alleviation of mid-band resonance issues.

ST drives are powered from 24-48 (ST5) or 24-80 (ST10) volts DC. They come with multiple control options, including:

- “S” drives for basic applications such as step & direction or velocity mode
- “Plus” drives for stand-alone Q programming with limited I/O
- “Q” drives for stand-alone Q programming with more I/O and options for encoder feedback, RS-485, and Ethernet UDP & TCP communications
- “Si” drives for stand-alone Si programming and optional encoder feedback
- “C” drives for use as slave nodes on CANopen networks, with or without encoder feedback
- “IP” drives for use in EtherNet/IP communication networks, with full Q programming capabilities and optional encoder feedback

Other features of the ST drives include:

- Encoder feedback for improved system performance using Stall Detection, Stall Prevention, and precise alignment to the index pulse
- Communication options including RS-232/422/485, Ethernet UDP & TCP, CANopen, and EtherNet/IP
- Third-party HMI compatibility with Q drives
- User-friendly software for setup and configuration, tuning, and programming

## Products in the Series *ST Stepper Drives*

Model Number	Supply Voltage	Control Modes	Output Current, Continuous	Communication Ports	Encoder Feedback	1pc.
<a href="#">ST10-C-CE</a>	24-80 VDC	CANopen	0.1-10.0 A/Phase	RS-232, CANopen	Yes	\$682.00
<a href="#">ST10-C-CN</a>	24-80 VDC	CANopen	0.1-10.0 A/Phase	RS-232, CANopen	No	\$757.00
<a href="#">ST10-IP-EE</a>	24-80 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP, Modbus TCP	0.1-10.0 A/Phase	Ethernet, EtherNet/IP	Yes	\$852.00
<a href="#">ST10-IP-EN</a>	24-80 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP, Modbus TCP	0.1-10.0 A/Phase	Ethernet, EtherNet/IP	No	\$791.00
<a href="#">ST10-Plus</a>	24-80 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming	0.1-10.0 A/Phase	RS-232	No	\$322.00
<a href="#">ST10-Q-EE</a>	24-80 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus TCP	0.1-10.0 A/Phase	Ethernet	Yes	\$871.00
<a href="#">ST10-Q-EN</a>	24-80 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus TCP	0.1-10.0 A/Phase	Ethernet	No	\$792.00
<a href="#">ST10-Q-NE</a>	24-80 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Velocity Control, Modbus RTU	0.1-10.0 A/Phase	RS-232	Yes	\$696.00
<a href="#">ST10-Q-NF</a>	24-80 VDC	Step & Direction, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Velocity Control, Modbus RTU	0.1-10.0 A/Phase	RS-232	Yes	\$668.00
<a href="#">ST10-Q-NN</a>	24-80 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus RTU	0.1-10.0 A/Phase	RS-232	No	\$618.00
<a href="#">ST10-Q-RE</a>	24-80 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	0.1-10.0 A/Phase	RS-232, RS-485	Yes	\$828.00
<a href="#">ST10-Q-RN</a>	24-80 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	0.1-10.0 A/Phase	RS-232, RS-485	No	\$756.00
<a href="#">ST10-S</a>	24-80 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, SiNet Hub Compatible	0.1-10.0 A/Phase	RS-232	No	\$274.00
<a href="#">ST10-Si-NE</a>	24-80 VDC	Si Programming	0.1-10.0 A/Phase	RS-232	Yes	\$756.00
<a href="#">ST10-Si-NF</a>	24-80 VDC	Si Programming	0.1-10.0 A/Phase	RS-232	Yes	\$763.00
<a href="#">ST10-Si-NN</a>	24-80 VDC	Si Programming	0.1-10.0 A/Phase	RS-232	No	\$696.00
<a href="#">ST5-C-CE</a>	24-48 VDC	CANopen	0.1-5.0 A/Phase	RS-232, CANopen	Yes	\$702.00
<a href="#">ST5-C-CN</a>	24-48 VDC	CANopen	0.1-5.0 A/Phase	RS-232, CANopen	No	\$649.00
<a href="#">ST5-IP-EE</a>	24-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP, Modbus TCP	0.1-5.0 A/Phase	Ethernet, EtherNet/IP	Yes	\$786.00
<a href="#">ST5-IP-EN</a>	24-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP, Modbus TCP	0.1-5.0 A/Phase	Ethernet, EtherNet/IP	No	\$728.00
<a href="#">ST5-Plus</a>	24-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming	0.1-5.0 A/Phase	RS-232	No	\$295.00

<a href="#">ST5-Q-EE</a>	24-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus TCP	0.1-5.0 A/Phase	Ethernet	Yes	\$737.00
<a href="#">ST5-Q-EN</a>	24-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus TCP	0.1-5.0 A/Phase	Ethernet	No	\$677.00
<a href="#">ST5-Q-NE</a>	24-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus RTU	0.1-5.0 A/Phase	RS-232	Yes	\$648.00
<a href="#">ST5-Q-NF</a>	24-48 VDC	Step & Direction, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Velocity Control, Modbus RTU	0.1-5.0 A/Phase	RS-232	Yes	\$636.00
<a href="#">ST5-Q-NN</a>	24-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus RTU	0.1-5.0 A/Phase	RS-232	No	\$560.00
<a href="#">ST5-Q-RE</a>	24-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	0.1-5.0 A/Phase	RS-232, RS-485	Yes	\$750.00
<a href="#">ST5-Q-RN</a>	24-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	0.1-5.0 A/Phase	RS-232, RS-485	No	\$684.00
<a href="#">ST5-S</a>	24-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, SiNet Hub Compatible	0.1-5.0 A/Phase	RS-232	No	\$247.00
<a href="#">ST5-Si-NE</a>	24-48 VDC	Si Programming	0.1-5.0 A/Phase	RS-232	Yes	\$695.00
<a href="#">ST5-Si-NF</a>	24-48 VDC	Si Programming	0.1-5.0 A/Phase	RS-232	Yes	\$727.00
<a href="#">ST5-Si-NN</a>	24-48 VDC	Si Programming	0.1-5.0 A/Phase	RS-232	No	\$588.00