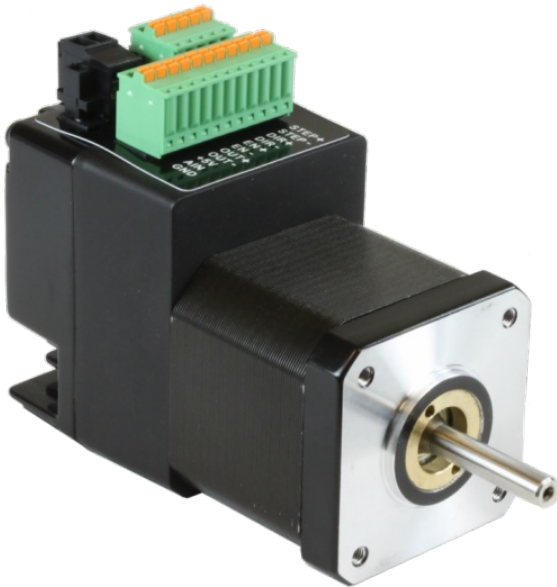


STM17C-3CN

NEMA 17 Integrated CANopen Drive+Motor

1pc. - 408.00
50pc. - 306.00



Product Features

- *Sophisticated current control*
- *Anti-resonance*
- *Torque ripple smoothing*
- *Microstep emulation*
- *NEMA 17 frame size*
- *DS301 and DSP402 supported*
- *Profile position, velocity and homing modes*
- *Objects for Q programming*
- *Objects for data registers*
- *RS-232 port for programming*



Description

The STM17C-3CN integrated stepper is a drive+motor unit, fusing a NEMA 17 step motor and a sophisticated 2.0 A/phase (peak-of-sine) stepper drive into a single device. Power to the drive, located at the rear of the motor, must be supplied by an external DC supply. See Related and Recommended Products below for compatible 24 and 48 volt DC [power supplies](#) .

The STM17C-3CN integrated stepper is designed to operate on a CANopen communication network and conforms to Can in Automation (CiA) DS301 and DSP402 specifications. It supports Profile Position, Profile Velocity, and Homing modes, as well as the ability to run stored Q programs via Applied Motion-specific CANopen objects. All STM17 units are setup and configured using Applied Motion's [ST Configurator™](#) software.


Each STM17 integrated stepper comes with 3 digital inputs, 1 digital output, and 1 analog input. The digital inputs accept signals of 5-24 VDC and can be used for connecting pulse & direction signals, end-of-travel limit switches, jog switches, quadrature encoder signals, PLC outputs, sensors, or many other signal types. The digital output can be connected to PLC inputs, counters, lights, relays, or other devices. The analog input accepts 0-5 VDC signals and can be used for velocity and position control.

The STM17C-3CN comes with an RS-232 port for programming and a CANopen port for network communications.

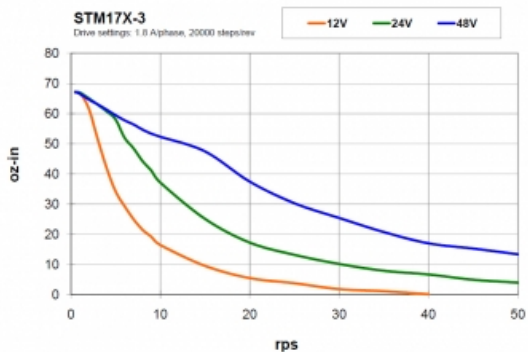
Specifications

Part Number:	STM17C-3CN
Supply Voltage:	12-48 VDC
Supply Voltage Type:	DC
Control Modes:	CANopen
Communication Ports:	RS-232 CANopen
Encoder Feedback:	No
Step Resolution:	Full Half Microstepping Microstep Emulation
Idle Current Reduction:	0-90%
Setup Method:	Software setup
Digital Inputs:	3
Digital Outputs:	1
Analog Inputs:	1 single-ended
Circuit Protection:	Short circuit Over-voltage Under-voltage Over-temp
Status LEDs:	1 red, 1 green
Frame Size:	NEMA 17
Holding Torque:	68 oz-in
Step Angle:	1.8 deg
Rotor Inertia:	1.16E-03 oz-in-sec ²
Length:	3.19 inches
Weight:	15.6 oz
Operating Temperature Range:	0-85 °C
Ambient Temperature Range:	0-40 °C
Ambient Humidity:	90% max, non-condensing
Insulation Class:	Class B (130 °C)


Downloads

Speed-Torque Curves:	 STM17-3_torque_curves.pdf
Manuals:	 STM17_Hardware_Manual.pdf  STM17C_QuickSetup_920-0045.pdf  CANopen_Manual_920-0025K.pdf
Datasheet:	http://s3.amazonaws.com/applied-motion-pdf/STM17C-3CN.pdf
Family Datasheet:	 STM-Datasheet-925-0009.pdf  CANopen_FAQ2.pdf  STM-CANopen-EDS.eds
2D Drawing:	 STM17-3_RevA.pdf  STM17C-3X_3D.pdf  STM17X-3X_NEW_DESIGN_2D-drawing.pdf
3D Drawing:	 STM17S-3X_Simple.igs  STM17X-3X_NEW.igs
Agency Approvals:	 STM17_23_24_CE_DOC.pdf

Torque Curves



Software

Software:	ST Configurator™
Sample Code:	 CANopen_Example.zip

STM17C-3CN Part No. STM17C-3CN	
1pc.	\$408.00
25pc.	\$350.88
50pc.	\$306.00
100pc.	Contact us for 100+ piece pricing.

Products in the Series *CANopen Products*

Part Number	Frame Size	Supply Voltage	Control Modes	Holding Torque	Communication Ports	Encoder Feedback	1pc./50pc.
5000-136	NA	24-48 VDC	CANopen	NA	RS-232, CANopen	No	\$541.00 / \$405.75
5000-137	NA	24-48 VDC	CANopen	NA	RS-232, CANopen	Yes	\$585.00 / \$438.75
5000-146	NA	24-80 VDC	CANopen	NA	RS-232, CANopen	No	\$631.00 / \$473.25
5000-147	NA	24-80 VDC	CANopen	NA	RS-232, CANopen	Yes	\$682.00 / \$511.50
5000-152	NA	94-135 VAC	CANopen	NA	RS-232, CANopen	Yes	\$1107.00 / \$830.25
5000-153	NA	94-265 VAC	CANopen	NA	RS-232, CANopen	Yes	\$1212.00 / \$909.00
5000-160	NA	24-80 VDC	CANopen	NA	RS-232, CANopen	NA	\$585.00 / \$438.75
STM17C-3CE	NEMA 17	12-48 VDC	CANopen	68	RS-232, CANopen	Yes	\$470.00 / \$352.50
STM17C-3CN	NEMA 17	12-48 VDC	CANopen	68	RS-232, CANopen	No	\$408.00 / \$306.00
STM23C-3CE	NEMA 23	12-70 VDC	CANopen	210	RS-232, CANopen	Yes	\$535.00 / \$401.25
STM23C-3CN	NEMA 23	12-70 VDC	CANopen	210	RS-232, CANopen	No	\$460.00 / \$345.00
STM24C-3CE	NEMA 24	12-70 VDC	CANopen	340	RS-232, CANopen	Yes	\$663.00 / \$497.25
STM24C-3CN	NEMA 24	12-70 VDC	CANopen	340	RS-232, CANopen	No	\$588.00 / \$441.00

Products in the Series *STM17 Integrated Steppers*

Part Number	Frame Size	Supply Voltage	Control Modes	Holding Torque	Communication Ports	Encoder Feedback	1pc./50pc.
STM17C-3CE	NEMA 17	12-48 VDC	CANopen	68	RS-232, CANopen	Yes	\$470.00 / \$352.50
STM17C-3CN	NEMA 17	12-48 VDC	CANopen	68	RS-232, CANopen	No	\$408.00 / \$306.00
STM17Q-1AE	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus	31	RS-232	Yes	\$347.00 / \$260.25
STM17Q-1AN	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus	31	RS-232	No	\$272.00 / \$204.00
STM17Q-1RE	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus	31	RS-485	Yes	\$353.00 / \$264.75
STM17Q-1RN	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus	31	RS-485	No	\$278.00 / \$208.50
STM17Q-2AE	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus	54	RS-232	Yes	\$350.00 / \$262.50
STM17Q-2AN	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus	54	RS-232	No	\$275.00 / \$206.25
STM17Q-2RE	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus	54	RS-485	Yes	\$356.00 / \$267.00
STM17Q-2RN	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus	54	RS-485	No	\$281.00 / \$210.75
STM17Q-3AE	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus	68	RS-232	Yes	\$353.00 / \$264.75
STM17Q-3AN	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus	68	RS-232	No	\$288.00 / \$216.00
STM17Q-3RE	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus	68	RS-485	Yes	\$360.00 / \$270.00
STM17Q-3RN	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus	68	RS-485	No	\$295.00 / \$221.25
STM17R-3ND	NEMA 17	12-48 VDC	Step & Direction	68	NA	No	\$118.00 / \$118.00
STM17R-3NE	NEMA 17	12-48 VDC	Step & Direction	68	NA	Yes	\$192.00 / \$192.00
STM17R-3NN	NEMA 17	12-48 VDC	Step & Direction	68	NA	No	\$117.00 / \$117.00
STM17S-1AE	NEMA 17	12-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands	31	RS-232	Yes	\$317.00 / \$237.75
STM17S-1AN	NEMA 17	12-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands	31	RS-232	No	\$242.00 / \$181.50
STM17S-1RE	NEMA 17	12-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands	31	RS-485	Yes	\$325.00 / \$243.75
STM17S-1RN	NEMA 17	12-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands	31	RS-485	No	\$250.00 / \$187.50
STM17S-2AE	NEMA 17	12-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands	54	RS-232	Yes	\$324.00 / \$243.00
STM17S-2AN	NEMA 17	12-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands	54	RS-232	No	\$249.00 / \$186.75
STM17S-2RE	NEMA 17	12-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands	54	RS-485	Yes	\$331.00 / \$248.25
STM17S-2RN	NEMA 17	12-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands	54	RS-485	No	\$256.00 / \$192.00
STM17S-3AE	NEMA 17	12-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands	68	RS-232	Yes	\$328.00 / \$246.00

STM17S-3AN	NEMA 17	12-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands	68	RS-232	No	\$263.00 / \$197.25
STM17S-3RE	NEMA 17	12-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands	68	RS-485	Yes	\$335.00 / \$251.25
STM17S-3RN	NEMA 17	12-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands	68	RS-485	No	\$270.00 / \$202.50
TSM17C-1CG	NEMA 17	12-48 VDC	Q Programming, CANopen	40	CANopen	Yes	\$547.00 / \$410.25
TSM17C-2CG	NEMA 17	12-48 VDC	Q Programming, CANopen	59	CANopen	Yes	\$551.00 / \$413.25
TSM17C-3CG	NEMA 17	12-48 VDC	Q Programming, CANopen	73	CANopen	Yes	\$554.00 / \$415.50
TSM17P-1AG	NEMA 17	12-48 VDC	Step & Direction, Encoder Following	40	RS-232	Yes	\$378.00 / \$283.50
TSM17P-2AG	NEMA 17	12-48 VDC	Step & Direction, Encoder Following	59	RS-232	Yes	\$380.00 / \$285.00
TSM17P-3AG	NEMA 17	12-48 VDC	Step & Direction, Encoder Following	73	RS-232	Yes	\$383.00 / \$287.25
TSM17Q-1AG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	40	RS-232	Yes	\$412.00 / \$309.00
TSM17Q-1RG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	40	RS-485	Yes	\$418.00 / \$313.50
TSM17Q-2AG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	59	RS-232	Yes	\$415.00 / \$311.25
TSM17Q-2RG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	59	RS-485	Yes	\$391.00 / \$293.25
TSM17Q-3AG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	73	RS-232	Yes	\$418.00 / \$313.50
TSM17Q-3RG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	73	RS-485	Yes	\$424.00 / \$318.00
TSM23C-2CG	NEMA 23	12-70 VDC	Q Programming, CANopen	142	CANopen	Yes	\$562.00 / \$421.50
TSM23C-3CG	NEMA 23	12-70 VDC	Q Programming, CANopen	212	CANopen	Yes	\$576.00 / \$432.00
TSM23C-4CG	NEMA 23	12-70 VDC	Q Programming, CANopen	340	CANopen	Yes	\$631.00 / \$473.25
TSM23P-2AG	NEMA 23	12-70 VDC	Step & Direction, Encoder Following	142	RS-232	Yes	\$392.00 / \$294.00
TSM23P-3AG	NEMA 23	12-70 VDC	Step & Direction, Encoder Following	212	RS-232	Yes	\$403.00 / \$302.25
TSM23P-4AG	NEMA 23	12-70 VDC	Step & Direction, Encoder Following	340	RS-232	Yes	\$445.00 / \$333.75
TSM23Q-2AG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	142	RS-232	Yes	\$507.00 / \$380.25
TSM23Q-2RG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	142	RS-485	Yes	\$514.00 / \$385.50
TSM23Q-3AG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	212	RS-232	Yes	\$521.00 / \$390.75
TSM23Q-3RG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	212	RS-485	Yes	\$529.00 / \$396.75
TSM23Q-4AG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	340	RS-232	Yes	\$576.00 / \$432.00
TSM23Q-4RG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	340	RS-485	Yes	\$582.00 / \$437.25

TSM23Q-4RG	NEMA 23	12-70 VDC	Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus	340	RS-485	Yes	\$584.00 / \$438.00
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