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Product Datasheet
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SVAC3-IP-E220

Q Programmable Servo Drive w/ EtherNet/IP

1pc. - $710.00
50pc. - $532.50

Product **Features**

- *Programmable digital servo drive in a compact package*
- *DSP-based current control*
- *Operates from 220 VAC*
- *Provides motor current up to 1.8 A rms continuous, 3.75 A rms peak*
- *Fast 10/100 Ethernet for programming and communications*
- *EtherNet/IP communication protocol for network communications with PLCs and other devices*
- *Supports all SVAC3-S and SVAC3-Q control modes*
- *UDP & TCP support*
- *12 digital inputs, 6 digital outputs, all optically isolated*
- *1 analog input, +/-10 volt range*
- *Jerk filter for S-curve acceleration ramps*

Description

The SVAC3-IP-E220 is a compact and cost-effective servo drive that is compatible with a variety of servo motors and a great choice for many OEM applications. Its all-digital design and DSP-based current control allow for smooth motion and a quick response from the specially matched set of Applied Motion motors available with it. Power to the drive comes from single-phase 220 VAC and the drive can output up to 1.8 A rms continuous, 3.75 A rms peak to the servo motor. The drive also has built-in protection features like over-voltage, over-temperature, and over-current, which prevent damage to the drive while running in adverse conditions.

The SVAC3-IP-E220 incorporates EtherNet/IP network communications, the widely used industrial protocol for manufacturing automation applications. With EtherNet/IP users can control, configure and query the drive using an open, standards-based, industrial Ethernet connection at speeds up to 100 MBits/sec. The SVAC3-IP drives run all of the same control modes as Q drives, with the addition that all drive features can be accessed over EtherNet/IP, including more than 100 commands and 130 registers for controlling motion, I/O, configuration, polling, math, register manipulation, and Q programming.

For connecting to external devices such as limit switches, proximity or photoelectric sensors, PLC I/O, lamps, and other devices, the drive comes with 12 digital inputs, 6 digital outputs, and 1 analog input. In addition to EtherNet/IP the drive supports Ethernet TCP and UDP protocols for sending commands from Applied Motion's proprietary Serial Command Language (SCL). The same 10/100 Mbit Ethernet port on the drive is also used for tuning, configuring and programming the drive using the *Quick Tuner™* and *Q Programmer™* software applications.

This servo motor drive is UL Recognized (File No. E332730), CE approved, and RoHS compliant.

Specifications

Model Number	SVAC3-IP-E220
Part Number	5000-223
Supply Voltage	108-242 VAC
Supply Voltage Type	AC
Control Modes	• Streaming Commands • Q Programming • EtherNet/IP
Output Current, Continuous	1.8 A rms
Output Current, Peak	3.75 A rms
Communication Ports	• Ethernet • EtherNet/IP
Feedback	Halls + Incremental encoder
Setup Method	Software setup
Digital Inputs	12
Digital Outputs	6
Analog Inputs	1 single-ended
Dimensions	5.5 x 4.5 x 2.0 inches
Weight	22.4 oz
Operating Temperature Range	0 to 70 °C
Ambient Temperature Range	0 to 55 °C
Ambient Humidity	90% max, non-condensing
Status LEDs	1 red, 1 green
Circuit Protection	• Short circuit • Over-voltage • Under-voltage • Over-temp

Software

Software Downloads	• ARM Firmware Downloader • DSP Firmware Downloader • Q Programmer™ • Quick Tuner™ • SCL Utility
Sample Code	• C_sharp_UDP_example.zip • VB6_UDP_example.zip • VB6_UDP_example.zip

Downloads

Manuals	SVAC3_Hardware_Manual_920-0028.pdf SVAC3_QuickSetupGuide_920-0052.pdf Host_Command_Reference_Rev I.pdf
Datasheet	Servo-Products-Datasheet-925-0008.pdf EtherNet-IP-White-Paper_920-0050.pdf EIP_EDS_FILES.zip
2D Drawing	SVAC3.pdf
3D Drawing	SVAC3.igs
Speed-Torque Curves	SVAC3_speed-torque.pdf
Agency Approvals	STAC5_SVAC3_CE_DOC.PDF
Application Notes	APPN0024_AOIs-for-RSLogix5000.zip APPN0023_MicroLogix-to-EtherNet-IP-drive.zip APPN0022_CompactLogix-to-EtherNet-IP-drive.zip APPN0016_Simple-25-pin-mating-connections.pdf

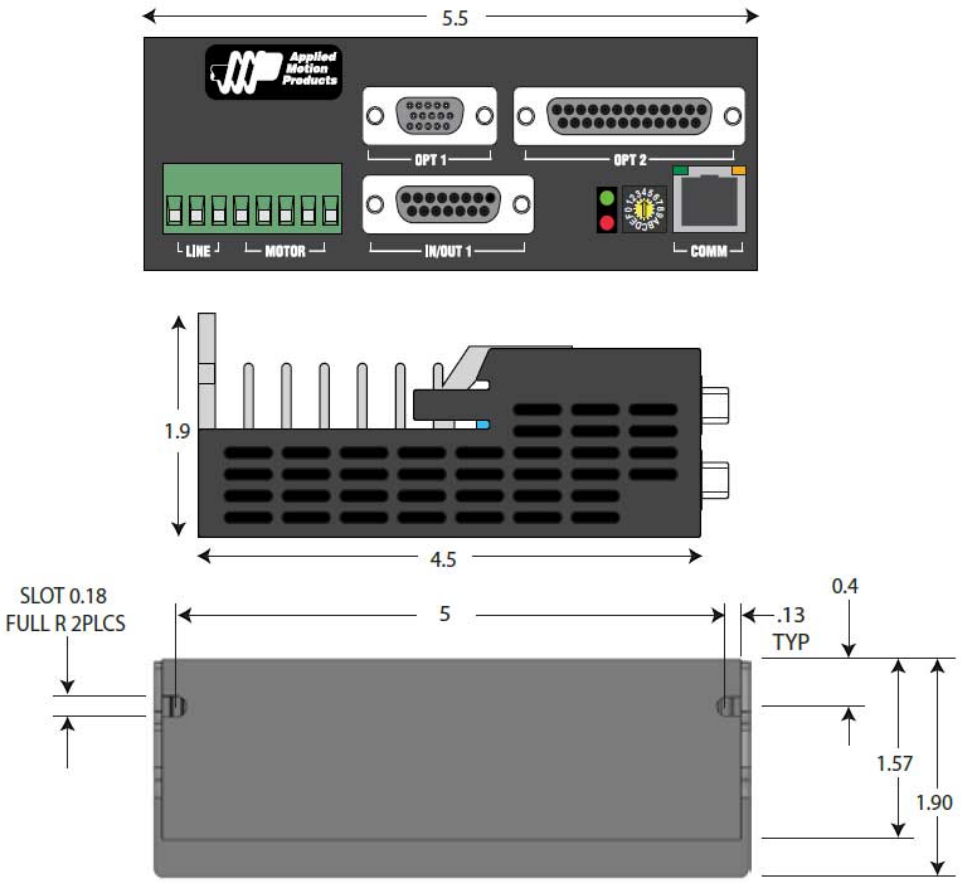
Pricing

	SVAC3-IP-E220 Part No. 5000-223
1pc.	$710.00
25pc.	$610.60
50pc.	$532.50
100pc.	Contact us for 100+ piece pricing.

Torque Curves

2D Drawings

Mechanical Outline



Products in the Series *SVAC3 Servo Drives*

* Closeout priced products are highlighted in green.

* Items with web only pricing are highlighted in yellow.

Model Number	Supply Voltage	Control Modes	Output Current, Continuous (A rms)	Output Current, Peak (A rms)	Communication Ports	1pc./50pc.
SVAC3-IP-E120	108-132 VAC	Streaming Commands Q Programming EtherNet/IP	3.5	7.5	Ethernet EtherNet/IP	$710.00 / $532.50
SVAC3-IP-E220	108-242 VAC	Streaming Commands Q Programming EtherNet/IP	1.8	3.75	Ethernet EtherNet/IP	$710.00 / $532.50
SVAC3-Q-E120	108-132 VAC	Streaming Commands Analog Positioning Encoder Following Q Programming	3.5	7.5	Ethernet	$726.00 / $544.50
SVAC3-Q-E220	108-242 VAC	Streaming Commands Analog Positioning Encoder Following Q Programming	1.8	3.75	Ethernet	$726.00 / $544.50
SVAC3-S-E120	108-132 VAC	Step & Direction Analog Torque / Velocity Streaming Commands	3.5	7.5	Ethernet	$471.00 / $353.25
SVAC3-S-E220	108-242 VAC	Step & Direction Analog Torque / Velocity Streaming Commands	1.8	3.75	Ethernet	$471.00 / $353.25

Products in the Series *EtherNet/IP Products*

* Closeout priced products are highlighted in green.

* Items with web only pricing are highlighted in yellow.

Model Number	Supply Voltage	Control Modes	Output Current, Continuous (A rms)	Output Current, Peak (A rms)	Communication Ports	1pc./50pc.
	12-70 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$605.00 / $453.75
	12-70 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$495.00 / $371.25
	12-70 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$650.00 / $487.50
	12-70 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$540.00 / $405.00
	12-70 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$706.00 / $529.50
	12-70 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$551.00 / $413.25
ST10-IP-EE	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$710.00 / $532.50
ST10-IP-EN	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$659.00 / $494.25
ST5-IP-EE	24-48 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$655.00 / $491.25
ST5-IP-EN	24-48 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$607.00 / $455.25
STAC5-IP-E120	94-135 VAC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$710.00 / $532.50
STAC5-IP-E220	94-265 VAC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$710.00 / $532.50
STAC5-IP-N120	94-135 VAC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$659.00 / $494.25
STAC5-IP-N220	94-265 VAC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	$659.00 / $494.25
SV7-IP-EE	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	7.0	14.0	Ethernet EtherNet/IP	$597.00 / $447.75
SVAC3-IP-E120	108-132 VAC	Streaming Commands Q Programming EtherNet/IP	3.5	7.5	Ethernet EtherNet/IP	$710.00 / $532.50

SVAC3-IP-E220	108-242 VAC	Streaming Commands Q Programming EtherNet/IP	1.8	3.75	Ethernet EtherNet/IP	$710.00 / $532.50