

Applied Motion Products, Inc. 404 Westridge Dr. Watsonville, CA 95076, USA 1-800-525-1609 Tel (831) 761-6555 Fax (831) 761-6544

# SVAC3-IP-E120

#### 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 120 VAC
- Provides motor current up to 3.5 A rms continuous, 7.5 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-E120 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 120 VAC and the drive can output up to 3.5 A rms continuous, 7.5 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-E120 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 <u>Quick Tuner</u><sup>™</sup> and <u>Q Programmer</u><sup>™</sup> software applications.

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

# Specifications

Model Number	SVAC3-IP-E120
Part Number	5000-222
Supply Voltage	108-132 VAC
Supply Voltage Type	AC
Control Modes	<ul><li>Streaming Commands</li><li>Q Programming</li><li>EtherNet/IP</li></ul>
Output Current, Continuous	3.5 A rms
Output Current, Peak	7.5 A rms
Communication Ports	<ul><li>Ethernet</li><li>EtherNet/IP</li></ul>
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
<b>Circuit Protection</b>	<ul> <li>Short circuit</li> <li>Over-voltage</li> <li>Under-voltage</li> <li>Over-temp</li> </ul>

### Software

Software Downloads	<ul> <li>ARM Firmware Downloader</li> <li>DSP Firmware Downloader</li> <li>Q Programmer<sup>™</sup></li> <li>Quick Tuner<sup>™</sup></li> <li>SCL Utility</li> </ul>
Sample Code	<ul> <li>C sharp UDP example.zip</li> <li>VB6 UDP example.zip</li> <li>VB6 TCP example.zip</li> </ul>

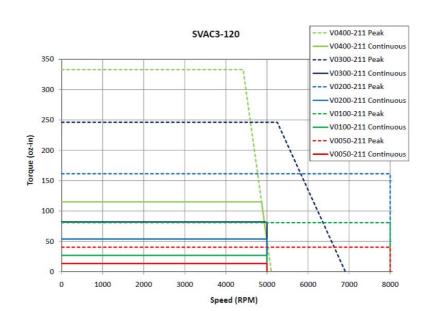
## Downloads

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

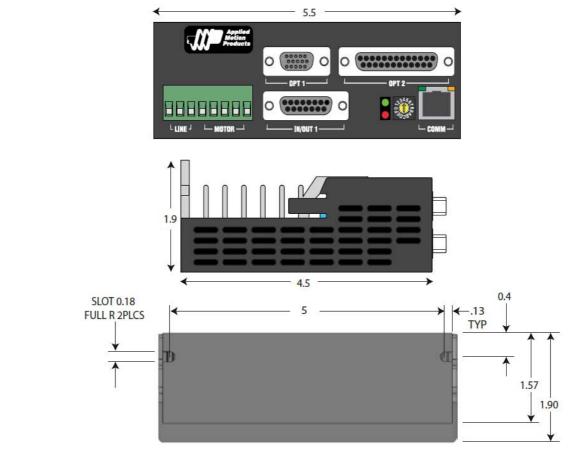
## Pricing

	SVAC3-IP-E120 Part No. 5000-222
1pc.	\$710.00
25pc.	\$610.60
50pc.	\$532.50
100pc.	Contact us for 100+ piece pricing.

# Torque Curves



#### **Mechanical Outline**



## Products in the Series SVAC3 Servo Drives

#### \* Closeout priced products are highlighted in green.

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
<u>SVAC3-Q-E120</u>	108-132 VAC	Streaming Commands Analog Positioning Encoder Following Q Programming	3.5	7.5	Ethernet	\$726.00 / \$544.50
<u>SVAC3-Q-E220</u>	108-242 VAC	Streaming Commands Analog Positioning Encoder Following Q Programming	1.8	3.75	Ethernet	\$726.00 / \$544.50
<u>SVAC3-S-E120</u>	108-132 VAC	Step & Direction Analog Torque / Velocity Streaming Commands	3.5	7.5	Ethernet	\$471.00 / \$353.25
<u>SVAC3-S-E220</u>	108-242 VAC	Step & Direction Analog Torque / Velocity Streaming Commands	1.8	3.75	Ethernet	\$471.00 / \$353.25

\* Items with web only pricing are highlighted in yellow.

## Products in the Series *EtherNet/IP Products*

eout priced prod	ucts are hig	hlighted in green.			nly pricing are h	ighlighted in y
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
<u>ST10-IP-EE</u>	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	\$710.00 / \$532.50
<u>ST10-IP-EN</u>	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	\$659.00 / \$494.25
<u>ST5-IP-EE</u>	24-48 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	NA	NA	Ethernet EtherNet/IP	\$655.00 / \$491.25
<u>ST5-IP-EN</u>	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
	100 242	Streaming Commands			Filesunal	#710.00 /