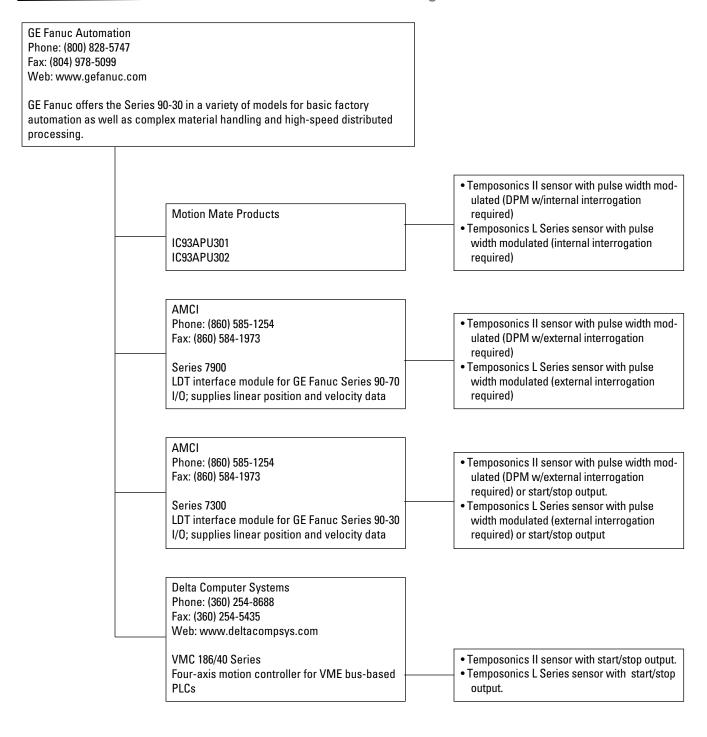# TEMPOSONICS-COMPATIBLE PRODUCTS
(FOR REFERENCE ONLY)

Allen Bradley
Phone: (216) 646-5000
Fax: (216) 646-3733
Web: www.ab.com

SLC Product Line
The SLC 500 product line is ideal for dedicated controller applications. Yet these small, affordable controllers have the ability address future growth, including the ability to communicate with the larger AB programmable controllers

AMCI
Phone: (860) 585-1254
Fax: (860) 584-1973

Series 7500 Plug-in Card
Direct interface between Square D SY/MAX Series I/O and sensors; supplies linear position and velocity data

- Temposonics II sensor with pulse width modulated (DPM w/external interrogation required) or start/stop output.
- Temposonics L Series sensor with pulse width modulated (external interrogation required) or start/stop output
- Temposonics III sensor with SSI output.

Allen Bradley

1746-QS Plug-in Card
Four-axis controller

- Temposonics II sensor with pulse width modulated (DPM w/external interrogation required) or start/stop output.
- Temposonics L Series sensor with pulse width modulated (external interrogation required) or start/stop output

Allen Bradley

1746-QV Plug-in Card
Open-loop velocity control module

- Temposonics II sensor with start/stop output.
- Temposonics L Series sensor with start/stop output

Allen Bradley

1746-NI4 Plug-in Card
Analog input

- Temposonics II sensor with voltage output (APM required)
- Temposonics L Series sensor with 0 to 10 V, 10 to 0 V, or 4 - 20 mA output (Output Codes V0 or A0)
- Temposonics III sensor with 0 to 10 V, 10 to 0 V, or 4 - 20 mA output (Output Codes V0, V1, or A0)

GE Fanuc Automation
Phone: (800) 828-5747
Fax: (804) 978-5099
Web: www.gefanuc.com

GE Fanuc offers the Series 90-30 in a variety of models for basic factory automation as well as complex material handling and high-speed distributed processing.

Motion Mate Products

IC93APU301
IC93APU302

- Temposonics II sensor with pulse width modulated (DPM w/internal interrogation required)
- Temposonics L Series sensor with pulse width modulated (internal interrogation required)

AMCI
Phone: (860) 585-1254
Fax: (860) 584-1973

Series 7900
LDT interface module for GE Fanuc Series 90-70 I/O; supplies linear position and velocity data

- Temposonics II sensor with pulse width modulated (DPM w/external interrogation required)
- Temposonics L Series sensor with pulse width modulated (external interrogation required)

AMCI
Phone: (860) 585-1254
Fax: (860) 584-1973

Series 7300
LDT interface module for GE Fanuc Series 90-30 I/O; supplies linear position and velocity data

- Temposonics II sensor with pulse width modulated (DPM w/external interrogation required) or start/stop output.
- Temposonics L Series sensor with pulse width modulated (external interrogation required) or start/stop output

Delta Computer Systems
Phone: (360) 254-8688
Fax: (360) 254-5435
Web: www.deltacompsys.com

VMC 186/40 Series
Four-axis motion controller for VME bus-based PLCs

- Temposonics II sensor with start/stop output.
- Temposonics L Series sensor with start/stop output.

Modicon (AEG Groupe Schneider Automation International S.A.S.)
Phone - N.A. Sales and Service c/o Square D, Palatine, IL: (708) 397-2600
Fax: (708) 397-8814
Web: www.modicon.com

The Modicon 984-381E/-385E/-385D/-480E/-485E/-485K/-685E/-785E/-785D/-785K
PLCs are range PLCs with a modular expandable architecture. They employ
Modicon 800 Series housings, interfaces, and I/O modules. They are supported
by the same ladder logic instruction set as the other 984 models and are pro-
grammed by Modsoft panel software. All have built-in power supply. All are
fully compatible with Modicon 984 PLC instruction set and solve logic at a rate
of 1 - 2.5 ms per thousand nodes of user logic. The984-785E/-785D/-785K PLCs
are 24-bit CPUs; the rest are 16-bit CPUs.

Modicon

B875-111 A/D Input Module
Converts input voltage and/or input current
ranges into binary data. This module can be
configured to accept 8 differential or 16 single-
ended inputs. When selected w/8 differential
inputs, the module is displayed in the I/O map
as **B875-111**; when selected for 16 single-ended
inputs, it is displayed in the I/O map as **B877-
111**.

• Temposonics II sensor with APM
• Temposonics L Series sensor with 0 to 10 V
  or 4 - 20 mA output.

AMCI
Phone: (860) 585-1254
Fax: (860) 584-1973

Series 7800
LDT interface module to Modicon 800 Series
programmable controller systems; supplies lin-
ear position and velocity data

• Temposonics II sensor with pulse width mod-
  ulated (DPM w/external interrogation
  required) or start/stop output.
• Temposonics L Series sensor with pulse
  width modulated (external interrogation
  required) or start/stop output

Delta Computer Systems
Phone: (360) 254-8688
Fax: (8360) 254-5435
Web: www.deltacompsys.com

MMC 188/40 Series
Four-axis motion controller for Modicon 800.

• Temposonics II sensor with start/stop output.
• Temposonics L Series sensor with start/stop
  output

Delta Computer Systems

MMC 120
Two-axis motion controller for Modicon
Quantum PLC.

• Temposonics II sensor with pulse width mod-
  ulated (DPM w/external interrogation
  required) or start/stop output.
• Temposonics L Series sensor with pulse
  width modulated (external interrogation
  required) or start/stop output

Allen Bradley
Phone: (216) 646-5000
Fax: (216) 646-3733
Web: www.ab.com

PLC-5
The midsize PLC-5 line of products included Classic, Enhanced, Ethernet, and VME PLC-5 processors. All provide the processing power an application and communication flexibility you need for focused, distributed control.

(Allen Bradley)
1771-QB Linear Positioning Module
Intelligent I/O module designed specifically for closed-loop hydraulic servo control using a Temposonics sensor.

- Temposonics II sensor with pulse width modulated output (DPM w/external interrogation required)
- Temposonics L Series sensor with pulse width modulated output (external interrogation required)

(Allen Bradley) Analog I/O Modules
Perform the the required A/D and D/A conversions to directly interface analog signals to PLC data table values using up to 16-bit resolution.

- Temposonics II sensor with APM (voltage output only)
- Temposonics L Series sensor with 0 to 10 V or 4 - 20 mA output.
- Temposonics III sensor with 0 to 10 V or 4 - 20 mA output.

(Allen Bradley) IMC 120, 121, 123
One to 3-axis motion controller for A/B's PLC-5 (2 and 3 series);supplies linear position and velocity data.

- Temposonics II sensor with start/stop output.
- Temposonics L Series sensor with start/stop output

(Allen Bradley) 1771-VHSC
Single-slot, 4-channel Very High Speed Counter module.
ATTENTION:
This module requires input from an MTS MK292 module

- Temposonics II sensor with pulse width modulated (DPM w/external interrogation required) or start/stop output.
- Temposonics L Series sensor with pulse width modulated (external interrogation required) or start/stop output

Delta Computer Systems
Phone: (360) 254-8688
Fax: (8360) 254-5435
Web: www.deltacompsys.com

VMC 186/40 Series
4-axis motion controller for VME bus-based PLCs

- Temposonics II sensor with start/stop output.
- Temposonics L Series sensor with start/stop output

AMCI
Phone: (860) 585-1254
Fax: (860) 584-1973

Series 7700
Supplies linear position and velocity data

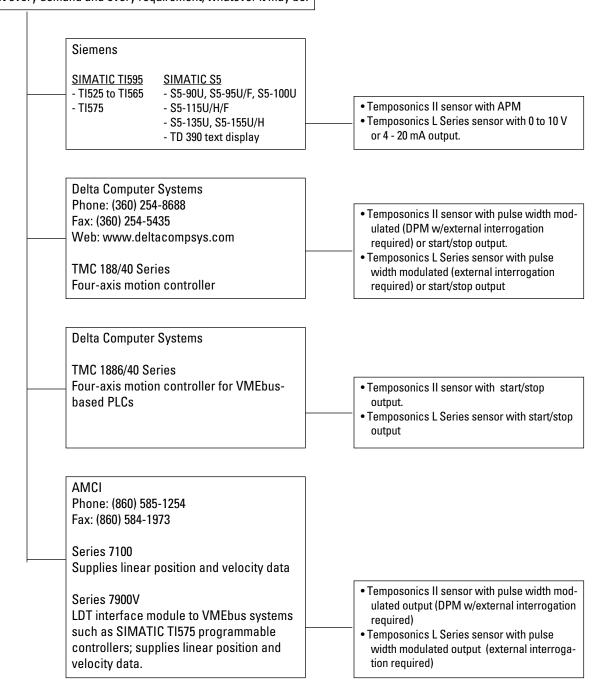Pulse-width modulated with external interrogation or tart/stop

Siemens
Phone: (770) 740-3505
Fax: (770) 740-3598
Web: www.ad.siemens.de/net/html_76/index.htm

SIMATIC Controllers
Offerings range from the mini, compact controller, including the high-performance PLC, up to the host computer. There are SIMATIC controllers to meet every demand and every requirement, whatever it may be.

Siemens

SIMATIC TI595   SIMATIC S5
- TI525 to TI565   - S5-90U, S5-95U/F, S5-100U
- TI575   - S5-115U/H/F
                      - S5-135U, S5-155U/H
                      - TD 390 text display

- Temposonics II sensor with APM
- Temposonics L Series sensor with 0 to 10 V or 4 - 20 mA output.

Delta Computer Systems
Phone: (360) 254-8688
Fax: (360) 254-5435
Web: www.deltacompsys.com

TMC 188/40 Series
Four-axis motion controller

- Temposonics II sensor with pulse width modulated (DPM w/external interrogation required) or start/stop output.
- Temposonics L Series sensor with pulse width modulated (external interrogation required) or start/stop output

Delta Computer Systems

TMC 1886/40 Series
Four-axis motion controller for VMEbus-based PLCs

- Temposonics II sensor with start/stop output.
- Temposonics L Series sensor with start/stop output

AMCI
Phone: (860) 585-1254
Fax: (860) 584-1973

Series 7100
Supplies linear position and velocity data

Series 7900V
LDT interface module to VMEbus systems such as SIMATIC TI575 programmable controllers; supplies linear position and velocity data.

- Temposonics II sensor with pulse width modulated output (DPM w/external interrogation required)
- Temposonics L Series sensor with pulse width modulated output (external interrogation required)

Miscellaneous

AMCI
Phone: (860) 585-1254
Fax: (860) 584-1973

Series 7400
Direct interface between Square D SY/MAX
Series I/O and sensors; supplies linear position
and velocity data

- Temposonics II sensor with pulse width mod-
  ulated (DPM w/external interrogation
  required) or start/stop output.
- Temposonics L Series sensor with pulse
  width modulated (external interrogation
  required) or start/stop output

Delta Computer Systems
Phone: (360) 254-8688
Fax: (360) 254-5435
Web: www.deltacompsys.com

MC 186/40 Series
Four-axis motion controller for Multibus I-
based PLCs such as Reliance Automate

- Temposonics II sensor with start/stop output.
- Temposonics L Series sensor with start/stop
  output

Product Name	Manufacturer	Description	Required Temposonics Output
ANATSC MTA	Millibyte Phone: (541) 967-7653 Fax: (541) 917-3402 Web: www.open.org/ sparks/millibyt.htm	Single-axis Temposonics input/analog output servo control card with generic PC card	Software Selectable
PWMTSC	Millibyte Phone: (541) 967-7653 Fax: (541) 917-3402 Web: www.open.org/ sparks/millibyt.htm	Single-axis Temposonics input/PWM output servo control card with generic PLC interface	Software Selectable
MICRO-DRIVE™ MDSC-SX-3002	Olsen Controls, Inc. Phone: (860) 589-4230 Fax: (860) 584-9802 Web: www.olsencontrols.com	Single-axis servo controller for Olsen Controls digital servo valves and hydraulic cylinders; servo command interface is pulse and direction; entire servo system is digital (no analog signals or potentiometers); servo controller uses 32-bit microcontroller and 1 millisecond update time	Start/Stop: Temposonics LH, LA, II sensors SSI: Temposonics RH sensors
AC650 Servo Controller Card	Paw-Taw-John Services, Inc. Phone: (208) 687-1478 Fax: (208) 687-4148 Web: www.pawtaw.com	Linear positioning servo controller card for hydraulic servo valve control; can be used as a stand alone controller or can be used in multiple axis systems	Pulse Width Modulated
IMC S Class	Allen-Bradley Phone: (216) 646-5000 Fax: (216) 646-3733 Web: www.ab.com	Two- or four-axis controller with up to eight I/O modules; easily connects to PLC environment; program with GML software	Start/Stop
ECA-110 DSP Microcontroller	ARC Electronics Phone: (803) 438-9390 Fax: (803) 438-5764 Email: arcelect@cris.com	Eight-axis digital closed loop controller; 100 digital I/O with full keyboard and display; operator interface: PC and/or hand-held terminal	Start/Stop
ECA-111	ARC Electronics Phone: (803) 438-9390 Fax: (803) 438-5764 Email: arcelect@cris.com	Eight-axis digital closed loop controller; 100 digital I/O with full keyboard and display; operator interface: PC and/or hand-held terminal	Start/Stop

Product Name	Manufacturer	Description	Required Temposonics Output
TDC Series	Custom Servo Motors Phone: (800) 967-1785 Fax: (507) 354-1611	Choice of one- or two-axis of digital servo control with 22 I/O points; programmable via keyboard or serial port; stores up to eight programs per axis	Pulse Width Modulated with external interrogation
RMC120-Profi	Delta Computer Systems Phone: (360) 254-8688 Fax: (360) 254-5435 Web: www.deltacompsys.com	Two-axis motion controller with Profibus DP, 12 Mbaud communications	Pulse Width Modulated, Start/Stop, (SSI optional)
RMC120-DI/O	Delta Computer Systems Phone: (360) 254-8688 Fax: (360) 254-5435 Web: www.deltacompsys.com	Two-axis motion controller with 18 digital inputs and 8 digital outputs for communications	Pulse Width Modulated, Start/Stop (SSI optional)
RPC-T	Digitron Electronics Phone: (541) 926-8333 Fax: (541) 928-0344 Web: www.digitronelec.com	Single-axis remote servo positioner; one sensor per RPC-T with up to 14 RPC-Ts per serial line; PC programming through serial port	Pulse Width Modulated, Start/Stop or Neuter
E-BAV Series DVC	MMS Technologies Phone: (503) 288-5250 Fax: (503) 288-7494 Web: www.mmstech.com Email: www.marketing 　　　@mmstech.com	Single-axis controller and proportional valve drive; analog or setpoint (15) inputs; all motion controlled by s-curve profile; PC interface; 110V AC operated; operates with Temposonics II sensor with APM	Analog (± 5 volts) Temposonics II sensors only
PMC 6270 Series	Parker Hannifin Company Phone: (216) 366-5100 Fax: (216) 365-6948 Web: www.parker.com	Two-axis servo controller, easy to program via PC or dumb terminal with resident window-based software	Pulse Width Modulated with external interrogation or Start/Stop
PMC-100/EMC-100	Parker Hannifin Company Phone: (216) 366-5100 Fax: (216) 365-6948 Web: www.parker.com	Choice of one- or two-axis of digital servo control with 22 I/O points; programmable via keyboard or serial port; stores up to eight programs per axis	Start/Stop
PMC 10/20 Series	Parker Hannifin Company Phone: (216) 366-5100 Fax: (216) 365-6948 Web: www.parker.com	One- or two-axis digital servo controller; program via 20-key pad with 3 software defined function keys	Start/Stop

Product Name	Manufacturer	Description	Required Temposonics Output
TEMPO-PARALLEL	Rapid Controls Inc. Phone: (605) 348-7688 Fax: (605) 341-5496 Web: www.rapidnet.com/ ~rapidcontrols/	Single-channel Temposonics to parallel counter card; optional analog output	Pulse Width Modulated Start/Stop, or SSI
TEMPO-SERIAL	Rapid Controls Inc. Phone: (605) 348-7688 Fax: (605) 341-5496 Web: www.rapidnet.com/ ~rapidcontrols/	Two-channel Temposonics interface for RS232, 485 or 422	Pulse Width Modulated, Start/Stop, or SSI
CLM	The Rexroth Corporation Phone: (610) 694-8300 Fax: (610) 694-8467 Web: www.rexroth.com	Two- or four-axis NC controller used for electro-hydraulic and servo motor applications	SSI
HNC-100	The Rexroth Corporation Phone: (610) 694-8300 Fax: (610) 694-8467 Web: www.rexroth.com	CNC programmable digital axis controller	Analog and Digital SSI
DLC-100	The Rexroth Corporation Phone: (610) 694-8300 Fax: (610) 694-8467 Web: www.rexroth.com	Single axis digital loop controller for hydraulic actuation of position, velocity, and force	Analog and Digital feedback
B-4040-SCP	S.A.S. Fluid Power, Inc. Phone: (503) 256-5110 Fax: (503) 256-2546	Stand alone single-axis motion controller with eight discrete inputs and eight discrete outputs	Pulse Width Modulated with internal interrogation
B-4040-PCI	S.A.S. Fluid Power, Inc. Phone: (503) 256-5110 Fax: (503) 256-2546	Programmable controller interface single-axis motion controller; parallel communication to PLCs and PCs	Pulse Width Modulated with internal interrogation
SMC-20H	Vickers, Inc. Phone: (810) 695-7000 Fax: (810) 695-7039	Two-axis motion controller; discreet, programmable digital I/O with expansion capability; dual processors; 200 µsec. update time	Pulse Width Modulated

Product	Manufacturer	Description	Required Temposonics Output
5601 STD Bus	Digitron Electronics Phone: (541) 926-8333 Fax: (541) 928-0344	STD bus interface; supports up to two sensors	Pulse Width Modulated, with internal or external interrogation
LPTI	Digitron Electronics Phone: (541) 926-8333 Fax: (541) 928-0344	PC/AT bus interface; supports up to four sensors	Pulse Width Modulated with internal or external interrogation, or Start/Stop
MTA	Millibyte Phone: (541) 967-7653 Fax: (541) 917-3402 Web: www.open.org/ sparks/millibyt.htm	PC-AT bus four-axis Temposonics input/analog output card with euro-block termination card	Pulse Width Modulated with internal or external interrogation
MTA-NA	Millibyte Phone: (541) 967-7653 Fax: (541) 917-3402 Web: www.open.org/ sparks/millibyt.htm	PC-AT bus four-axis Temposonics input card with euro-block termination card	Pulse Width Modulated with internal or external interrogation
PC4-TEMPO	Rapid Controls Inc. Phone: (605) 348-7688 Fax: (605) 341-5496 Web: www.rapidnet.com/ ~rapidcontrols/	Two-channel Temposonics interface with PC104 bus interface module	Pulse Width Modulated or Start/Stop
ISA-TEMPO	Rapid Controls Inc. Phone: (605) 348-7688 Fax: (605) 341-5496 Web: www.rapidnet.com/ ~rapidcontrols/	Two-channel Temposonics ISA bus interface module	Pulse Width Modulated, Start/Stop, or Neuter
ISA-BASIC	Rapid Controls Inc. Phone: (605) 348-7688 Fax: (605) 341-5496 Web: www.rapidnet.com/ ~rapidcontrols/	Two-channel smart ISA bus board; optional two CH D/A converter and eight CH A/D converter; SSI cal support	Pulse Width Modulated, Start/Stop, or SSI
5410C-105-1	North Atlantic Instruments Phone: (516) 567-1100 Fax: (516) 567-1823 Web: www.naii.com	VME interface card; supports up to six Tempo II inputs and converts to position and velocity	Neuter (Temposonics II sensors only)
IP-PWI module	SBS Green Spring Computers Phone: (415) 327-1200 Fax: (415) 327-3808 Web: www.greenspring.com Email: sales@greenspring.com	Three-channel single-wide IndustryPack® for transducer interface; can be used on the following buses: ISA, VME, PCI, cPCI, VXI; up to three other functions such as motion control, temperature measurement, serial communications, digital, or video can be provided on the same board	Start/Stop

Product	Manufacturer	Description	Required Temposonics Output
Tempo Tester	ACS Hydraulics Phone: (503) 687-4611 Fax: (503) 687-2858	Rugged, in-line test for isolation of intermittent faults; stand alone testing option available	All Temposonics units, Pulse Width Modulated or Analog (i.e., 0 to 10 Vdc, 0 to -10 Vdc, 4 to 20 mA)
Tempo II Cable Tester	ATS Automation Phone: (604) 273-6080 Fax: (604) 273-6180	Shows status of dual power supply voltages at sensor which confirm state of the cable	Temposonics II with 10-pin threaded style connector
MTI800	Carolina Motion Control Phone: (800) MOTION9 Fax: (800) 262-2792	Multiple (up to eight) transducer programmable limit switch saves/recalls setup configurations by part number for reduced changeover time	Start/Stop
MTI400	Carolina Motion Control Phone: (800) MOTION9 Fax: (800) 262-2792	Multiple (up to four) transducer programmable limit switches; saves/recalls setup configurations by part number for reduced changeover time	Start/Stop
AEC-100	Carolina Motion Control Phone: (800) MOTION9 Fax: (800) 262-2792	Self-checking absolute to encoder converter; converts transducer output to encoder quadrature; re-homing of machine not required; includes zero pulse	Start/Stop
PD-10, PD-12	Carolina Motion Control Phone: (800) MOTION9 Fax: (800) 262-2792	LED display device—indicates magnet position from a single magnetostrictive position sensor. Optional RS232 ports and/or programmable relay outputs are available to initiate automated processes.	Start/Stop or SSI
MILL-ROD Heavy Duty Transducer Enclosure	Dancole Devices International Phone: (800) 267-2974 Fax: (905) 648-7103 Web: www.dancoledevices.com	Extremely rugged stainless steel enclosure for transducers; provides excellent physical protection in harsh environments as well as convenient mounting method	All Temposonics sensors, all outputs
Universal Temposonics Tester (UTT)	IPS Phone: (502) 827-8916 Fax: (502) 827-8931	Microprocessor-based, hand held, battery operated, menu-driven tester; verifies working condition of the sensor	All Temposonics units, all outputs
Smartmount	Unitrol Corporation Phone: (810) 373-2139 Fax: (810) 373-2804	Mounting system for Temposonics sensors for cylinder or surface mounting	N/A

Product	Manufacturer	Description	Required Temposonics Output
TTU-1	Paw-Taw-John Services, Inc Phone: (208) 687-1478 Fax: (208) 687-4148 Web: www.pawtaw.com	Transducer test unit; tests probes in line with system or can be used as a stand alone tester; also act as a driver for servo valves and some proportional valves; hand-held, battery-operated, microprocessor controlled, and menu-driven	Temposonics I, II, LH, LP and L Series sensors all outputs
SSI Display Meter	Rapid Controls Inc. Phone: (605) 348-7688 Fax: (605) 341-5496 Web: www.rapidnet.com/ ~rapidcontrols/	Six-digit display, seven segment LED display; fixed 5 millisecond update time; programmable decimal points, units, and scale; RS232 serial interface; input power: 21.6 to 26.4 Vdc (transducer power supply); three front panel setup switch inputs	Temposonics III SSI output
DPAR-1x	The Rexroth Corporation Phone: (610) 694-8300 Fax: (610) 694-8467 Web: www.rexroth.com	Single-axis digital amplifier for closed loop position of analog feedback devices with force override	Analog
B-3040	S.A.S. Fluid Power, Inc. Phone: (503) 256-5110 Fax: (503) 256-2546	Temposonics II sensor J-box provides diagnostic indicators and field cable termination point for probe and valve with systems using sensors with a DPM	Pulse Width Modulated with internal or external interrogation or Start/Stop
SB-836A	S.A.S. Fluid Power, Inc. Phone: (503) 256-5110 Fax: (503) 256-2546	Recirculation J-box; converts neuter probe signal to pulse width modulated signal; provides diagnostic indicators and field cable termination point for probe and valve	Neuter with internal or external interrogation
DC and Magnetostrictive Transducer Interface Board	Tallyrand Industrial Systems, Inc. Phone: (619) 722-1448 Fax: (619) 966-0160 Web: www.tallyrand.com	Board accepts a DC voltage input from a Temposonics sensor and converts it to both a parallel and incremental encoder output	Analog (Voltage)
AC700 Temposonics Interface Card	Paw-Taw-John Services, Inc. Phone: (208) 687-1478 Fax: (208) 687-4148 Web: www.pawtaw.com	Provides multiple digital interfaces for Temposonics sensors	Pulse Width Modulated via DPM
L1 Card	Paw-Taw-John Services, Inc. Phone: (208) 687-1478 Fax: (208) 687-4148 Web: www.pawtaw.com	Sensor interface to host computer via RS422/RS485 serial communication or 16-bit parallel output. (includes 8 discrete control inputs)	Pulse Width Modulated (via DPM) or start/stop