AMCI ADVANCED MICRO CONTROLS INC.

Packaging

Plastics

Assembly

Automotive

Steel

Sta

Press

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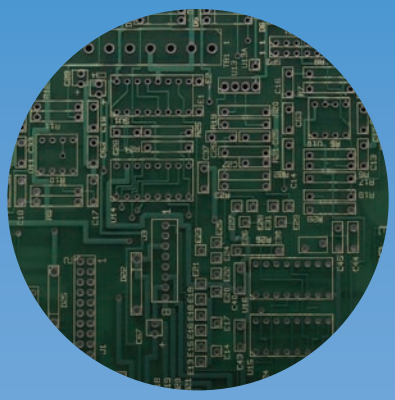
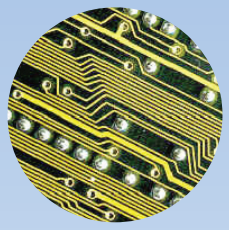




Product Profile

Rockwell Automation
Encompass™
Product Partner
Global

I N N O V A T I O N A N D C U S T O M E R S E R V I C E .

Table of Contents

Page 1. 1642 Resolver Interface Module
Page 2. 3601 Stepper Motor Controller Module
Page 3. 7662 SSI Interface Module
Page 4. 1200 Series Resolver Interface Module
Page 5. 3200 Series Stepper Motor Controller
Page 6. 7200 Series Digital Interface Modules
Page 7. 8213 Programmable Limit Switch Module
Page 8. 5274 Analog Inspection Module
Page 9. 3401 Point I/O Stepper Motor Controller
Page 10. 1500 Series Resolver Interface
Page 11. 7500 Series SSI/LDT Interface Modules
Page 12. 2500/8500 Limit Switch Modules
Page 13. 1700 Series PLC-5 Resolver Interface
Page 14. 2700 Series PLC-5 Programmable Limit Switch Controller
Page 15. 7700 Series PLC-5 SSI and Linear Displacement Interface

AMCI ADVANCED MICRO CONTROLS INC.

Resolver Interface for 1769 I/O

- Multi-channel resolver interface
- Programmable for single or multi-turn resolvers
- Supplies position, tachometer, and fault data
- Brake monitoring and position preset features
- 100% compatible with entire line of AMCI brushless resolvers and resolver transducers

AMCI delivers the first multi-channel **resolver interface** to customers seeking a flexible PLC solution. The 1642 Resolver Interface is configurable for either one or two single-turn resolvers; or one dual resolver multi-turn resolver. This module supplies absolute position, tachometer, and fault diagnostic data to the PLC processor.

For our Stamping Press customers, we've also engineered an additional brake monitoring feature.

SPECIFICATIONS: AMCI Resolver Interface CompactLogix/MicroLogix 1500

Module	**1642** (config. for single-turn)	**1642** (config. for multi-turn)
PLC platform	CompactLogix/MicroLogix 1500	CompactLogix/MicroLogix 1500
Number of channels	(2) channel	(1) channel
Maximum full scale count	4096	737,280
Number of I/O **D = Direct** **B = Backplane** **RB = Relay Board**	 1 in D / 0 out D na na	 na na na
Tachometer resolution	1 RPM	1 RPM
DC Supply requirements 5Vdc	220mA @ 5Vdc	220mA @ 5Vdc
Transducer compatibility	H25 / HT-6 / HT-20 / HT-400 HT-20-(x) / R11X-J10/7	HTT-20 / HTT-400 / HTT-425
Cable requirements	CTL-X	CML-X
Required hardware	na	na
Optional hardware	na	na

ADVANCED MICRO CONTROLS INC.

Stepper Motor Controller for 1769 I/O

- Value driven single-slot module design
- Enhanced motion profiles
- 1 MHz maximum output frequency
- 100% compatible with entire line of AMCI stepper drives and motors

Advanced Micro Controls, Inc. is proud to offer the 3601 Single Axis Stepper Motor Controller. This single-axis stepper motor controller, which features encoder feedback and discrete inputs, can control the velocity and position of a stepper motor.

The 3601 Single Axis Stepper Motor Controller expands our family of PLC Modules and grows an already impressive line of AMCI stepper motion products. For reliable performance, check out our available line of drives & motors.

SPECIFICATIONS: AMCI Stepper Module CompactLogix/MicroLogix 1500

Module	3601
PLC platform	CompactLogix/MicroLogix 1500
Number of axis	(1) one
Maximum output freq.	1MHz
Position range	(+/-) 8,388,607
Available move commands	absolute move / relative move jog move / blended move registration move / encoder follower
Auxilary inputs: 8 to 24 Vdc sinking	• CW limit switch • CCW limit switch • Home limit switch • External input • E-stop input • Capture input
Encoder feedback	A, B, and Z differential inputs
DC supply requirements	0.400A max. @ 5Vdc
Drive compatibility	All AMCI SD series stepper motor drives
Output signals	• 5 Vdc differential line driver (3.5 to 4.0 V typical amplitude) • step and direction or CW/CCW selectable

A CONTINUOUS COMMITMENT TO INNOVATION AND CUSTOMER SERVICE.

AMCI ADVANCED MICRO CONTROLS INC.

SSI Interface for 1769 I/O

- Two-channel SSI interface
- Direct interface to most sensors that output SSI
- Onboard diagnostics monitor and report errors
- Licensed by Rockwell Automation's Allen-Bradley for 100% compatibility with CompactLogix and MicroLogix 1500

AMCI's 7662 module provides customers using the Allen-Bradley MicroLogix PLC with a direct interface to most sensors that output SSI data. The resolution of the 7662 module is only limited by the resolution of the corresponding SSI sensor.

For high-resolution rotary applications, the AMCI 7662 paired with the AMCI SSI DuraCoder is an ideal fit. For linear applications, the 7662 module can be used with most Temposonics or Balluff linear sensors when selected with the SSI output. This provides higher resolution and faster throughput than traditional start-stop or PWM style sensors.

Additional features include: position preset, count direction, position scaling, and latch inputs that are used to capture the scaled position data. This module also incorporates fault diagnostics that constantly monitor system integrity and report any errors to the PLC.

SPECIFICATIONS: AMCI SSI Interface CompactLogix/MicroLogix 1500

Module	**7662**
PLC platform	CompactLogix/MicroLogix 1500
Position sensor	SSI
Maximum resolution	Transducer dependent
Number of channels	(2)
Number of I/O	2 in direct
Transducer compatibility	AMCI SSI DuraCoder / Balluff / MTS / SICK / Stegmann / Allen-Bradley 842A Encoder
Velocity update time	160ms or 24ms
DC supply requirements	375mA @ 5Vdc
Cable requirements	sensor dependent
Required hardware	external power supply for sensor and latch inputs
Optional hardware	na

AMCI ADVANCED MICRO CONTROLS INC.

ControlLogix Resolver Interface

- Multi-channel resolver interface for 1756 I/O
- Programmable for single or multi-turn resolvers
- Supplies position, tachometer, and fault data
- 100% compatible with entire line of AMCI brushless resolvers and resolver transducers

AMCI has taken over ten years of experience in the design and manufacturing of **resolver interface** modules for Allen-Bradley PLCs and created two modules for the ControlLogix platform. Available with one or two resolver inputs, these modules supply absolute position, tachometer, and fault diagnostic data for single and multi-turn applications.

The single-channel module, part number 1241, comes standard with a brake monitor input and interfaces to AMCI's extensive line of single resolver transducers. The two-channel module, part number 1242, is our most versatile resolver interface module to date. It combines all of the features of the 1241 module and can be programmed as either a two-channel single-turn resolver interface or a one channel multi-turn resolver interface.

Plus, AMCI's custom add on profiles make it easy to "add" the 1200 series resolver interface module to your Allen-Bradley ControlLogix PLC. No more Generic Module types and you can create custom data tags, simplifying data reference.

SPECIFICATIONS: AMCI Resolver Module for Allen Bradley ControlLogix PLC

Module	**1241**	**1242** (single-turn)	**1242** (multi-turn)
PLC platform	ControlLogix	ControlLogix	ControlLogix
Number of channels	(1) channel	(2) channels	(1) channel
Max. full scale count	8192	8192	737,280
Number of I/O **D = Direct** **B = Backplane** **RB = Relay Board**	 1 in D / 0 out D na na	 1 in D / 0 out D na na	 na na na
Tachometer resolution	1 RPM	1 RPM	1 RPM
DC supply requirements	540 mA max. @ 5Vdc	540 mA max. @ 5Vdc	540 mA max. @ 5Vdc
Transducer compatibility	H25 / HT-6 / HT-20 HT-400 / HT-20-(x) R11X-J10/7	H25 / HT-6 / HT-20 HT-400 / HT-20-(x) R11X-J10/7	HTT-20 / HTT-400 HTT-425
Cable requirements	CTL-X	CTL-X	CML-X
Required hardware	na	na	na
Optional hardware	na	na	na

AMCI ADVANCED MICRO CONTROLS INC.

ControlLogix Stepper Motor Controller

- 2 or 4 axis controller in a single-slot module for 1756 I/O
- Encoder feedback for move verification
- Direct interface with AB ControlLogix PLC
- 100% compatible with entire line of AMCI stepper drives and motors

Advanced Micro Controls, Inc. is proud to welcome Allen-Bradley ControlLogix users to the world of stepper motor control - announcing the AMCI 3200 Series Multi-Axis **Stepper Motor Controller** Module.

Until now, anybody looking for a stepper controller solution to A-B's ContolLogix platform was out of luck...none existed! AMCI has filled the void by offering the 3200 series stepper control module.

The 3200 two or four-axis stepper motor controller module can control velocity and position of two or four stepper motors simultaneously (note: 3202 also accepts encoder feedback for position monitoring). A wide range of available stepper motor controller commands and benchmark dependability come standard on these high performance controllers.

Plus, AMCI's custom add on profiles make it easy to "add" the 3200 series stepper motor controller module to your Allen-Bradley ControlLogix PLC. No more Generic Module types and you can create custom data tags, simplifying data reference.

When your application calls for stepper motor control solutions, call on AMCI.

SPECIFICATIONS: AMCI Stepper Module for Allen Bradley ControlLogix PLC

Module	3202	3204
PLC platform	ControlLogix	ControlLogix
Number of channels	(2) channel	(4) channel
Maximum output freq.	1Mhz	1Mhz
Position range	(+/-) 8,388,607	(+/-) 8,388,607
Absolute move commands	• absolute move / relative move • jog move / blended move	• absolute move / relative move • jog move / blended move
Auxilary inputs: 8 to 24 Vdc sinking	• CW limit switch (per channel) • CCW limit switch (per channel) • Home limit switch(per channel) • External input (per channel) • E-stop input (per channel) • Capture input (per channel)	• CW limit switch (per channel) • CCW limit switch (per channel) • Home limit switch(per channel) • E-stop input (per channel)
Encoder feedback	(1) per axis: A, B, and Z differential inputs	na
DC supply requirements	0.510A max. @ 5Vdc	0.560A max. @ 5Vdc
Drive compatibility	All AMCI SD series stepper motors	All AMCI SD series stepper motors
Output signals	• 5 Vdc differential line driver (3.5 to 4.0 V typical amplitude) • step and direction • CW/CCW selectable	• 5 Vdc differential line driver (3.5 to 4.0 V typical amplitude) • step and direction • CW/CCW selectable

AMCI ADVANCED MICRO CONTROLS INC.

ControlLogix Digital Sensor Interface Modules

- Two or four channel sensor interface for 1756 I/O
- Direct interface to SSI encoders and sensors
- Two channel interface for LDT sensors with Start/Stop and PWM output
- Onboard diagnostics monitor and report errors
- Latch input for position capture

The 7200 series of interface modules join the latest in sensor technology with the latest in Rockwell Automation controllers. The 7252 provide a direct connection from more traditional LDT data formats, Start/Stop and PWM, to the ControlLogix PLC. The 7252 provides position, velocity, and sensor status to the ControlLogix backplane. The resolution of system is limited only by the sensor used.

The 7262 and 7264 modules are direct interfaces between the ControlLogix PLC and an endless variety of sensors that output SSI data. The data from the sensor is reported to the PLC as position, velocity, status, and raw SSI data. The 7262 and 7264 along with the AMCI SSI DuraCoder are an ideal fit for high-resolution rotary applications.

SPECIFICATIONS: AMCI SSI & LDT for Allen-Bradley ControlLogix

Module	7252*	7262*	7264
PLC platform	ControlLogix	ControlLogix	ControlLogix
Position Sensor	LDT	SSI	SSI
Maximum Resolution	.001"	Transducer Dependent	Transducer Dependent
Number of Channels	2	2	4
Number of I/O (direct)	2	2	4
Transducer Compatibility	Balluff / Temposonics / Turck / Ametek	AMCI SSI DuraCoder / Balluff / MTS / SICK / Allen Bradley 842A encoders	AMCI SSI DuraCoder / Balluff / MTS / SICK / Allen Bradley 842A encoders
Velocity Update	160ms or 60ms		
DC Supply Requirements	550mA @ 5 Vdc		
Cable Requirements	Sensor Dependent		
Required Hardware	External supply for sensors and latch inputs		
Optional Hardware	na		

*Available March '08

AMCI ADVANCED MICRO CONTROLS INC.

ControlLogix PLS Controller

- Single-slot PLS controller module for 1756 I/O
- Provides up to 16 hi-speed limit switch I/O
- Independent and group operating modes
- 100% compatible with entire line of AMCI brushless resolvers and resolver transducers

The AMCI 8213 Programmable Limit Switch module for Allen-Bradley ControlLogix systems provides up to sixteen programmable high speed limit switch outputs and sixteen inputs that can be used via an external relay board. This one-slot module backplane connection enables fast transfer of information between itself and the ControlLogix processor(s). This allows the 8213's many unique software features to become an integral part of your next packaging machine application.

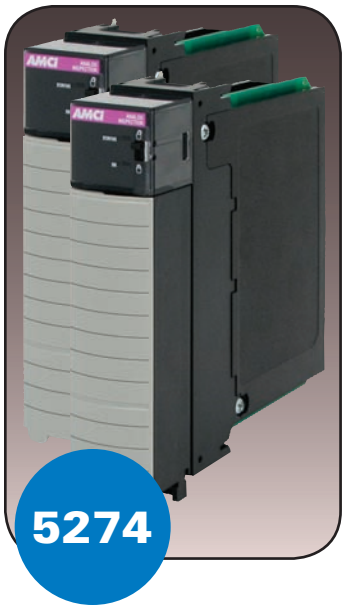
The 8213 module has two modes of operation, Independent Mode and Group Mode, both of which feature speed compensation (Auto Advance). Configured using the Independent Mode, each output is independent of the others and has a corresponding input that is ANDed with the output.

Configured using the Group Mode, the outputs are combined into one of six groups. Each group is assigned an Operating Mode that condition how the outputs fire. This configuration replaces the ladder logic that you would typically have to write for such packaging functions as glue gun control or material sensing. In either mode, the outputs are updated every 100microseconds.

SPECIFICATIONS: AMCI PLS Controller for Allen Bradley ControlLogix PLC

Module	**8213**
PLC platform	ControlLogix
Position sensor	resolver
Number of channels	(1) channel
Turns for full scale	1
Max. full scale count	4096
Number of I/O **D = Direct** **B = Backplane** **RB = Relay Board**	 na 16 out B / 16 in B 16 out RB / 16 in RB
Operating modes **• Independent** **• Group**	 I: outputs function as a cam switch G: outputs combined and conditioned by a single input
Output update time	100us
Tachometer update time	504ms or 120ms
Tachometer resolution	1 RPM
DC supply requirements	450 mA max. @ 5Vdc 55 mA max @ 24Vdc
Transducer compatibility	H25 / HT-6 / HT-20 / HT-400 / HT-20-(x) / R11X-J10/7
Cable requirements	CTL-X
Required hardware	relay boards, relays, and CRP-X cable
Optional hardware	6102 remote display

ControlLogix High Speed Analog Inspection Module



- Four High Speed Analog Inputs for 1756 I/O
- Four Digital Inputs
- Four Digital Outputs
- Six Inspection Modes
- Programmable Inspection Ranges
- Timestamping functionality

AMCI developed the 5274 module to fill the need for a high speed inspection controller. Available analog modules have limited processor speeds that restricted their use in high-speed applications. The 5274 module samples the inputs every 25µs, allowing you to dramatically increase your inspection speeds.

The 5274 module also contributes to process improvement by reporting statistical information, such as measured value, maximum value, minimum value, and average value, of each inspection cycle to the PLC.

SPECIFICATIONS: AMCI Analog Inspection Module for Allen Bradley ControlLogix PLC

Module Part Number	**5274**
PLC platform	ControlLogix
Analog sensor range	Can be programmed to work with sensors that output +/- 10V, 0 to 10V, 0 to 5V, or 0 to 20mA signals
Maximum resolution	14 bit (16384 counts) over the –10.25 to 10.25V span 13 bit (8192 counts) over the 0 to 10.25V span 13 bit (8192 counts) over the 0 to 20mA span 12 bit (4096 counts) over the 0 to 5.125V span
Acquisition time	25us for all channels (maximum time between the detection of a digital input and the measurement of the analog value)
Number of I/O	• 4 Analog Inputs • 4 Digital Inputs (Used to control the sampling operation. One Gate and one Trigger. One of the two remaining inputs can be used as a Counter Input, or the two remaining inputs can be configured as A quad B encoder inputs.) • 4 Digital Outputs (used to respond to the result of an inspection operation)
Inspection modes	• Gate/Trigger • Gate/Quadrature Encoder • Gate/Counter • Gate/Timer • Gate Only • Multigate Only
Number of inspection points	32 points per channel maximum
Backplane DC supply requirements	610mA @5Vdc
Cable requirements	sensor dependent
Required hardware	Removable terminal block 1756-TBCH or 1756-TBS6H. The terminal block is not supplied with the 5274 module.

AMCI ADVANCED MICRO CONTROLS INC.

Point I/O Stepper Motor Controller

- Stepper motion controller for 1734 I/O
- Value driven design
- Enhanced motion profiles
- 1 MHz maximum output step frequency
- 100% compatible with entire line of AMCI stepper drives and motors

OEMs and end users can reduce their total stepper controls cost of ownership and expand system flexibility with the new 3401 POINT I/O modules available from AMCI. These new modules meet Rockwell Automation's performance requirements while also delivering a great value.

This single-axis stepper motor controller features two discrete inputs and can control the velocity and position of a stepper motor. This PLC module is fully compatible with the POINT I/O system.

The 3401 Single Axis Stepper Motor Controller expands our family of PLC Modules and grows an already impressive line of AMCI stepper motion products. For reliable performance, check out our available line of stepper drives & motors.

SPECIFICATIONS: AMCI Stepper Module for Allen Bradley POINT I/O

Module	**3401**
PLC platform	POINT I/O
Number of axis	(1) one
Maximum output freq.	1MHz
Position range	(+) 8,388,607
Available move commands	• absolute move / relative move • jog move / blended move
Auxilary inputs: **8 to 24 Vdc sinking**	• Home limit switch • Limit Input: configurable as a CW limit switch, CCW Limit Switch, or E-Stop input
DC supply requirements	85mA max. @ 5Vdc
Drive compatibility	All AMCI SD series stepper motors
Output signals	• 5 Vdc differential line driver (3.5 to 4.0 V typical amplitude) • step and direction or CW/CCW pulses selectable
Required equipment	1734-TB (screw clamp) or the 1734-TBS (spring clamp) mounting base assembly. These parts must be separately ordered from Rockwell Automation.

AMCI ADVANCED MICRO CONTROLS INC.

SLC500 Resolver Interface

1500 SERIES

- Choose 1 or 2 channel resolver interface for 1746 I/O
- Available in single or multi-turn configurations
- Supplies position, tachometer, and fault data
- 100% compatible with entire line of AMCI brushless resolvers and resolver transducer

Available with one or two resolver inputs, these interface modules supply absolute position, tachometer, and fault diagnostic data for single and multi-turn applications. Fully programmable from the SLC processor, these resolver interface modules offer position resolutions of up to 8,192 counts per turn for single turn applications or 4,096 counts per turn over a maximum of 180 turns for multi-turn applications.

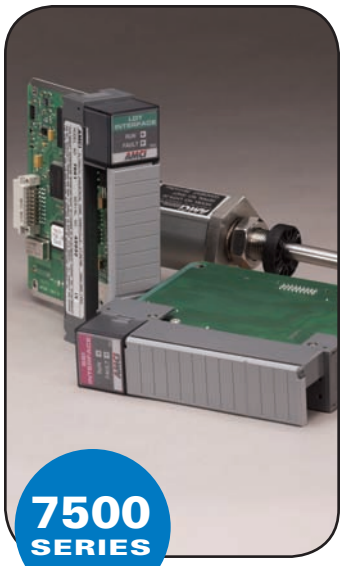
With tens of thousands of modules in use today, product reliability and loyalty are unparalleled.

SPECIFICATIONS: AMCI Resovler Modules for Allen-Bradley SLC500 PLC

Module	1531	1532	1541	1542	1561
PLC platform	SLC500	SLC500	SLC500	SLC500	SLC500
Number of channels	(1) channel	(2) channels	(1) channel	(2) channels	(1) channel
Max. full scale count	1024	1024	8192	8192	737,280
Position update time	200us	400us	200us	400us	400us
Tachometer update time	32ms or 120ms	32ms or 120ms	32ms or 120ms	32ms or 120ms	32ms
Tachometer resolution	1 RPM	1 RPM	1 RPM	1 RPM	1 RPM
DC supply requirements 5 Vdc 24 Vdc	 95mA 55mA	 95mA 55mA	 95mA 55mA	 95mA 55mA	 95mA 55mA
Transducer compatibility	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7	HTT-20 HTT-400 HTT-425
Cable requirements	CTL-X	CTL-X	CTL-X	CTL-X	CML-X

AMCI ADVANCED MICRO CONTROLS INC.

SLC500 SSI and Linear Displacement Interface



- Choose SSI or LDT interface for 1746 I/O
- Direct interface to most sensors that output SSI
- Onboard diagnostics monitor and report errors

The single-slot 7551 Linear Displacement Transducer interface supplies absolute position and velocity data to your programmable logic controller. This module is a direct interface between Balluff, and Temposonics magnetostrictive linear displacement transducers (LDT's) and the Allen-Bradley SLC 500. The 7551 offers programmable position data down to 0.001" resolution. This module also returns velocity data, based on the position scaling in counts per second, and transducer diagnostics.

For customers seeking a direct interface to most sensors that output SSI data, we offer the 7561 module. The resolution of the 7561 is only limited by the resolution of the sensor that is used. The flexibility of the 7561 makes it an ideal solution for both linear and rotary sensor applications. For customers with a high-resolution rotary application, the 7561 along with the SSI DuraCoder provide a perfect fit.

Both Linear Displacement Transducer modules incorporate diagnostics that constantly monitor system integrity and report any errors to the PLC.

SPECIFICATIONS: AMCI SSI/LDT Interfaces for Allen-Bradley SLC500 PLC

Module	7551	7561
PLC platform	SLC500	SLC500
Position sensor	LDT	SSI
Maximum resolution	0.001"/0.1mm	transducer dependent
Number of channels	(1) channel	(1) channel
Transducer compatibility	Balluf / MTS / Ametek / Turck above brands with start - stop or pwm digital outputs	AMCI SSI DuraCoder / Balluff / MTS /SICK / Stegmann Allen-Bradley: 842A Encoder
Velocity update time	32ms/120ms selectable	programmable 1-1000ms
DC supply requirements 5Vdc 24Vdc	 215ma na	 215ma na
Cable requirements	sensor dependent	sensor dependent
Required hardware	external power supply for sensor	external power supply for sensor
Optional hardware	na	na

AMCI ADVANCED MICRO CONTROLS INC.

SLC500 Programmable Limit Switch Controller

SLC PLS

- Single-slot PLS controller module for 1746 I/O
- Provides up to 16 hi-speed limit switch I/O
- Independent and group operating modes
- 100% compatible with entire line of AMCI brushless resolvers and resolver transducers

AMCI has created several versions of the programmable limit switch module. The 2541 provides 6 high speed inputs and 4 outputs directly connected to the module. The 8500 series modules contain up to 16 high speed I/O as well as 16 additional outputs through the module's backplane connection to the PLC. Each module has such necessary features as speed compensation, output ANDing, and output enable/disable. Whether its gluing, sealing, stamping, or assembling, each module has specific features to make programming and implementation quick and easy.

SPECIFICATIONS: AMCI PLS Controllers for Allen-Bradley SLC500 PLC

Module	2541	8511	8512	8513	8523
PLC platform	SLC500	SLC500	SLC500	SLC500	SLC500
Position sensor	resolver	resolver	resolver	resolver	incremental encoder
Number of channels	(1) channel	(1) channel	(1) channel	(1) channel	(1) channel
Max. full scale count	4096	4096	4096	4096	8192
Output update time	100us	100us	100us	100us	100us
Tachometer update time	504ms or 120ms	504ms or 120ms	504ms or 120ms	504ms or 120ms	504ms or 120ms
DC supply requirements 5 Vdc 24 Vdc	 195 mA 35mA	 450mA 55mA	 450mA 55mA	 450mA 55mA	 425mA na
# of I/O D = Direct B = Backplane RB = RelayBoard	 6 out /4 in na na	 na 16 out /16 in na	 na 16 out /16 in 8 out /8 in	 na 16 out /16 in 8 out /8 in	 na 16 out /16 in 8 out /8 in
Operating modes • Independent • Group	 I: outputs function as a cam switch G: outputs combined & conditioned by a single input	 I: outputs function as a cam switch G: outputs combined & conditioned by a single input	 I: outputs function as a cam switch G: outputs combined & conditioned by a single input	 I: outputs function as a cam switch G: outputs combined & conditioned by a single input	 I: outputs function as a cam switch G: outputs combined & conditioned by a single input
Transducer compatibility	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7	incremental DuraCoder or equivalent sensor sensor
Cable requirements	CTL-X	CTL-X	CTL-X and CRP-X	CTL-X and CRP-X	CRP-X and user supplied encoder cable
Required hardware	na	na	relay board and relays	relay board and relays	relay board and relays

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AMCI ADVANCED MICRO CONTROLS INC.

PLC-5 Resolver Interface

- Choose 1 to 4 channel resolver interface for 1771 I/O
- Select Dual or Single Slot modules
- Available in single or multi-turn configurations
- Supplies position, tachometer, and fault data
- 100% compatible with entire line of AMCI brushless resolvers and resolver transducers

AMCI has engineered a simple, efficient interface that provides a direct resolver connection to the 1771 I/O system. This resolver interface reduces costs through easier setup and installation. Designed to interface to AMCI's extensive line of industrial resolvers, an off-the-shelf solution is available for all of your absolute position sensing applications.

Both Dual and Single Slot modules are available for the 1771 I/O system. The Dual Slot Modules are fully programmable from the 1771 processor or from its on-board keypad, and offer position resolutions of up to 8,192 counts per turn for single turn applications, and up to 4096 counts/turn over 180 turns for multi-turn applications. Additional features include programmable count direction and various preset and offset parameters.

The Single Slot Modules offer most of the features of the Dual Slot modules without the on-board keypad. These modules allow you to bring resolver data into your 1771 I/O system when rack space is at a premium.

With tens of thousands of modules in use today, product reliability and loyalty are unparalleled.

SPECIFICATIONS: AMCI Resolver Interfaces for Allen-Bradley PLC-5 PLC

Module	**173X** (Dual Slot)	**174X** (Dual Slot)	**176X** (Dual Slot)	**173XH** (Single Slot)	**1761H** (Single Slot)
PLC platform	PLC-5	PLC-5	PLC-5	PLC-5	PLC-5
Position sensor	resolver	resolver	resolver	resolver	resolver
Number of channels	x = 1 to 4	x = 1 to 4	x = 1 to 2	(1) to (2) channels	(1) channel
Max. full scale count	1024	8192	4096/turn	1024	4096/turn
Position update time	1 & 2 ch = 400us 3 & 4 ch = 800us	1 & 2 ch = 400us 3 & 4 ch = 800us	1 & 2 ch = 400us 3 & 4 ch = 800us	400us	400us
Tachometer update time	programmable 32, 60, 120, or 240ms	programmable 32, 60, 120, or 240ms	fixed 32ms	32ms or 120ms (selectable)	32ms
Tachometer resolution	1 rpm (0 - 5000 rpm) or 0.1 rpm (0 - 999.9rpm)	1 rpm (0 - 5000 rpm) or 0.1 rpm (0 - 999.9rpm)	1 RPM	1 RPM	1 RPM
DC supply requirements 5Vdc	900mA	900mA	900mA	415ma @ 5Vdc	350ma @ 5Vdc
Transducer compatibility	H25 / HT-6 HT-20 / HT-400 HT-20-(x) R11X-J10/7	H25 / HT-6 HT-20 / HT-400 HT-20-(x) R11X-J10/7	HTT-20 HTT-400 HTT-425	H25 / HT-6 HT-20 / HT-400 HT-20-(x) R11X-J10/7	HTT-20 HTT-400 HTT-425
Cable requirements	CTL-X	CTL-X	CML-X	CTL-X	CML-X
Optional hardware	IMT interface module : simplify 3 & 4 input wiring	IMT interface module : simplify 3 & 4 input wiring	na	na	na

A CONTINUOUS COMMITMENT TO INNOVATION AND CUSTOMER SERVICE.

PLC-5 Programmable Limit Switch Controller

- Choose one or two resolver inputs
- Direct interface to Allen-Bradley PLC-5 for 1771 I/O
- Onboard diagnostics monitor and report errors
- 100% compatible with entire line of AMCI brushless resolvers and resolver transducers

Industry began using programmable limit switches (PLS) as a direct replacement for mechanical cam switches because they are easier to set up and changes can be made quickly and easily. However interfacing a stand alone PLS to a Programmable Logic Controller (PLC) was difficult. AMCI solved this problem with the development of the 2700 series PLS modules.

These modules accept one or two resolver inputs and control limit switch outputs based on the resolver's position, the programmed on/off setpoints, and programmed speed compensation values. Most of these modules offer eight DC outputs directly from the module's front panel. However, the 2731M master module controls up to 64 external outputs over a high-speed serial interface.

These modules report position, velocity, and output status information to the PLC and are fully programmable either from the sealed keyboard or from the 1771 PLC. These modules also feature transducer and module fault diagnosis that is reported to the PLC.

SPECIFICATIONS: AMCI PLS Controllers for Allen-Bradley PLC-5 PLC

Module	2731	2732	2741	2742	2731M
PLC platform	PLC-5	PLC-5	PLC-5	PLC-5	PLC-5
Position sensor	resolver	resolver	resolver	resolver	resolver
Number of channels	(1) channel	(2) channels	(1) channel	(2) channels	(1) channel
Max. full scale count	1024	1024	4096	4096	1024
Output update time	200us	400us	200us	400us	800us
DC supply requirements 5 Vdc 24 Vdc	 750mA na	 750mA na	 750mA na	 750mA na	 750mA na
# of I/O D = Direct B = Backplane RB = RelayBoard	 8 out D na na	 8 out D na na	 8 out D na na	 8 out D na na	 na na 64 out RB
Transducer compatibility	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7	H25 / HT-6 HT-20 HT-400 HT-20-(x) R11X-J10/7
Cable requirements	CTL-X	CTL-X	CTL-X	CTL-X	CTL-X
Required hardware	na	na	na	na	SIC per 16 outputs and KD-5 relays per output

AMCI ADVANCED MICRO CONTROLS INC.

PLC-5 SSI and Linear Displacement and Interface

- Choose one or two LDT inputs
- Designed for Allen-Bradley PLC-5 – 1771 I/O
- Onboard diagnostics monitor and report errors
- LDT modules Compatible with Balluf / MTS / Ametek / Turck linear displacement transducer sensors with start - stop or pwm digital outputs
- SSI module interfaces to most sensors that output SSI data

The 7761H module offers customers a direct interface to most sensors that output SSI data. Whether the application uses a linear sensor like a Temposonics or Balluff LDT, or a rotary encoder such as the AMCI SSI DuraCoder, the 7661H is the module of choice. Features include position preset, count direction, and position scaling.

The 7751 and 7752 LDT modules are direct interfaces between magnetostrictive linear displacement transducers (LDT's) and the Allen-Bradley 1771 I/O system. These modules interface with digital Start/Stop or PWM transducers. Fully programmable from the backplane or the sealed keypad and display, these modules provide absolute linear position and velocity data. The 7700 offers programmable position data down to 0.001" resolution. MTS and Balluff offer LDT transducers are available in lengths from 2 to 140 inches in a variety of mounting styles.

SPECIFICATIONS: AMCI SSI & LDT Interface for Allen-Bradley PLC-5

Module	7751	7752	7761H
PLC platform	PLC-5	PLC-5	PLC-5
Position sensor	linear displacement transducer with start /stop	linear displacement transducer with start /stop	SSI
Maximum counts	0.001" - 0.1mm	0.001" - 0.1mm	transducer dependent
Number of channels	(1) channel	(2) channels	(1) channel
Transducer compatibility	Balluf / MTS / Ametek / Turck above brands with start - stop or pwm digital outputs	Balluf / MTS / Ametek / Turck above brands with start - stop or pwm digital outputs	AMCI SSI DuraCoder / Balluff / MTS / SICK / Stegmann Allen-Bradley: 842A Encoder
Maximum transducer length	650" / 9,999mm	650" / 9,999mm	transducer dependent
Velocity update time	programmable 32, 60, 120, or 240ms	programmable 32, 60, 120, or 240ms	programmable 1-1,000ms
DC suply requirements	1.45 A max. @ 5Vdc	1.45 A max. @ 5Vdc	260mA @ 5Vdc
Cable requirements	transducer dependent	transducer dependent	transducer dependent
Required hardware	na	na	external power supply for sensor

Brushless Resolver Transducers

AMCI Single-turn and Multi-turn Brushless Resolver Transducers

Available in either single-turn or multi-turn configurations, AMCI's entire line of brushless resolver transducers are designed to withstand today's harsh industrial environments, including high temperature, vacuum, radiation, or shock and vibration

Single-turn Brushless Resolver Transducers

HT-6
Resolver
Transducer

HT-20
Resolver
Transducer

H25
Resolver
Transducer

AB 846
Resolver
Replacement

HT-400
Resolver
Transducer

Multi-turn Brushless Resolver Transducers

HT-20-X
Geared
Resolver
Transducer

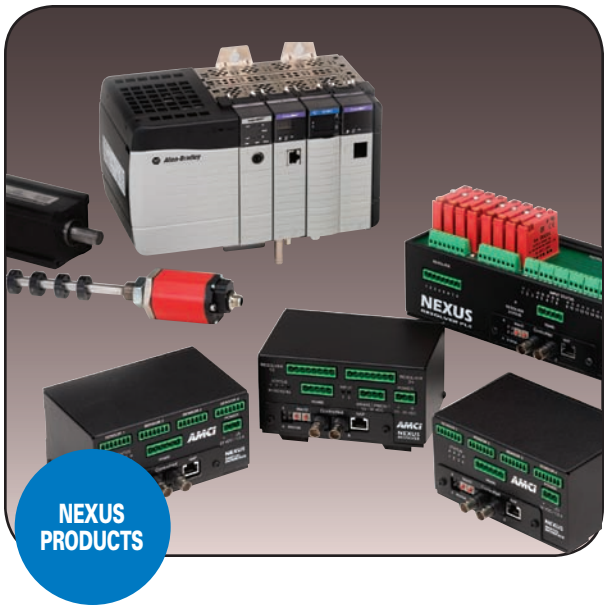
HTT/HMT-20
Resolver
Transducer

HTT-400
Resolver
Transducer

HTT/HMT-425
Resolver
Transducer

Size 11 Resolvers

Industrial Network Automation Products



Network Ready Industrial Interfaces & Controllers:

The advent of networked operating systems in the industrial workplace has advanced the world of automation control. Flexibility and high-speed communications are the dominating factors in successful manufacturing lines. The NEXUS family of products from Advanced Micro Controls, Inc. fills the void between networked systems and a complete automation solution.

AMCI offers this extensive line of network ready industrial interfaces and controllers to customers who understand the benefits of networked technology and the flexibility provided by a distributed I/O system. For more information on any of our networked devices, please select a product from the menu below.

Resolver Interface

4 Channel resolver interface
13 bit resolution for single turn applications
Brake input and remote reset input

PLS Control

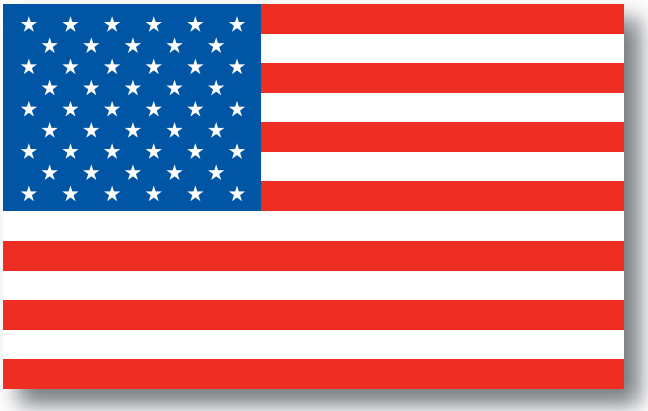
16 PLS outputs/16 control inputs
Interfaces with resolvers or incremental encoders
100us output update

Motion Controller

2 or 4 channel motion control
Drive/Controller package available
Encoder feedback for all channels
Enhanced motion profiles

SSI/LDT Interface

4 channel sensor interface
Ideal for linear or rotary applications
Multi-magnet LDT version available



Proudly Designed and Manufactured in the U.S.A.

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