PLC-Based Automation Products

Specialty I/O





Position Sensing



Motion Control





▶ PLC-Based by Design

Programming

Programming is performed by the same software used to configure your host PLC/PAC, eliminating the need to learn new software and/or language foreign to your controls environment. The results are seamless integration, intuitive troubleshooting, and valuable time savings.

- Use your PLCs native software
- No new software to buy or learn
- Tightest integration available



Engineering

PLC-based products require a unique approach to engineering, and AMCI has been building expertise in this area for 30+ years. Our electrical and mechanical engineering staff have developed sophisticated controls for the world's top PLC/PAC controllers, including plug-in module products and networked solutions. Our wholly owned & operated production facilities ensure that AMCI's innovative product designs are recognized for their reliability.

Our design philosophy is simple – customer experience is priority #1. Our PLC-based automation products improve the manufacturing process by simplifying integration, increasing machine performance, and cutting costs, all through smarter engineering.



Quality & Convenience

Cables & Cordsets



AMCI takes the guesswork out of buying cables & cordsets for your position sensing or motion control system. AMCI's Cat 5 cordsets and shielded cables provide reliable, high performance connectivity to our controllers, interfaces, and sensors.

Connectors



AMCI offers high quality mating connectors that simplify your job. We understand that simple issues, like lost or misplaced mating connectors, can undermine the best laid plans. That's why we provide everything needed to reliably install our products.

Accessories



Complete or enhance your AMCI controls system with our line of accessories. Our catalog includes relay boards, gearheads, sensor mounts, and other products that streamline installation and improve performance.

Position Sensing



Rotary Encoders									
Networked SSI		Analog		Incremental	Digital				
NR25 IP67 Rated Up to 30 bits	DC25 IP67 Rated Up to 24 bits	DC25 IP67 Rated Up to 12 bits		DC25 IP67 Rated Up to 4096 cycles/turn	DC25 IP67 Rated Up to 12 bits				
NR60 IP67 Rated Up to 30 bits	ME15 IP67 Rated Up to 10 bits	DC60 IP67 Rated Up to 16 bits							
EtherNet/IP Modbus		DC425 IP67 Rated Up to 16 bits		Long lasting, reliable performanc Supports shaft loads up to 100 lb					
		ME15 IP67 Rated Up to 10 bits	9 9	radial / 50 lbs. NR25 models a	axial. All DC25 and are available in staindditional protection.				

Resolver Transducers										
Single-Turn	Multi-Turn	Redundant	Stainless Steel	Networked						
HT-20 IP67 Rated	HT-20-X IP64 Rated	HTT-20-1 IP64 Rated	H25 IP67 Rated	NR25 IP67 Rated						
H25 IP67 Rated	HTT-20-X IP64 Rated	HTT-400-1 IP64 Rated	HT-20C IP67 Rated	NR60 IP67 Rated						
HT-400 IP64 Rated	HT-400-X IP64 Rated		NR25 IP67 Rated	EtherNet/IP Modbus						
	HTT-400-X IP64 Rated	AMCI offers ove	r 50 different types o	f resolvers including						
	IP67 Rated	AMCI offers over 50 different types of resolvers includin solid shaft and hub shaft versions. Both types incorporate an oversized double row bearing that supports shaft loads up to 100 lbs. radial / 50 lbs. axial.								

Size 11 Resolvers

Control Transmitters Control Transformers

R11X Series
IP67 Rated

R11W Series
IP67 Rated

Over 20 different types available. AMCI can customize any R11 resolver for OEM and large volume end-user customers. Direct replacements for Harowe & Kearfott.

Specialty I/O

▶ Hard to Find Functionality

AMCI's 25+ years of experience developing specialty I/O solutions for the world's largest PLC manufacturers is the backbone of our product development. Our selection of specialty I/O products are unmatched in terms of variety, performance, and user-friendliness. Whether you're using an Allen-Bradley PLC or Siemens PAC, AMCI has the specialized I/O needed to transform standard controllers into high performance automation solutions. Plug-in modules and networked solutions include advanced position sensing, motion control, stamping press automation, and packaging control.



	Plug-In I/O								Distributed I/O			
Position Sensing		Allen-Bradley						GE Fanuc Schneider				
Resolver	✓	✓	✓	✓		✓	✓	\checkmark	✓	✓	✓	✓
SSI	✓	✓	\checkmark	✓		✓	✓	✓	✓		✓	✓
LDT	✓					✓	✓	✓	✓			✓
LVDT/RVDT											✓	
EnDat	✓											
High Speed Counter											✓	
High Speed Analog	\checkmark											
Motion Controllers				1	Y	Y						
Stepper/Servo	\checkmark	✓	\checkmark	✓	✓	✓					✓	✓
PWM					✓							
Drive + Controller											\checkmark	
Packaging & Press						1						
PLS	\checkmark	✓	\checkmark						✓		✓	✓
Brake Monitoring	\checkmark	\checkmark	\checkmark	✓		✓						✓
Die Protection		✓	\checkmark			✓						✓
Tonnage Monitor												✓

EtherNet/IP ControlNet

DeviceNet*

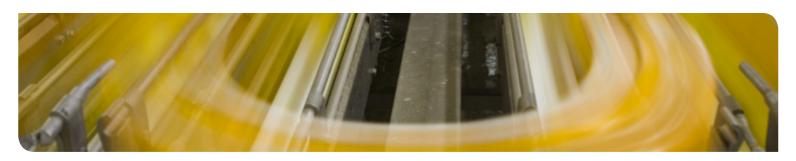


Modbus-RTU





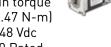
Motion Control



Drive + Controllers SD17060# Up to 6.0 Arms 95-132 Vac Up to 32,767 steps/rev. SD31045# Up to 4.5 Arms 95-264 Vac Up to 32,767 steps/rev ANG1#

Motor + Drives

SMD Series Up to 350 oz-in torque (2.47 N-m) 24-48 Vdc IP50 Rated



Above product is not networked

Integrated Solutions

Motor + Drive + Control Motor + Drive + Control

SMD(23/24)# Series

Up to 350 oz-in torque (2.47 N-m) 24-48 Vdc Optional incremental or absolute encoder Embedded switch IP50 or IP67 Rated

SMD34# Series

Up to 1100 oz-in torque (7.77 N-m) 24-80 Vdc Optional incremental or absolute encoder Embedded switch IP65 or IP67 Rated

Integrated designs that simplify installation. reduce wiring. and save time & money!

E = EtherNet/IP & Modbus-TCP E2 = EtherNet/IP and Modbus-TCP w/Embedded Switch

M = Modbus-RTU

= Network Selection

P = Profibus

Up to 4.0 Arms 24-48 Vdc Up to 32,767 steps/rev

EtherNet/IP





Modbus-RTU

Stepper Drives AC Drives DC Drive

SD7540A

Up to 4.0 Arms 24-75 Vdc Up to 5,000 steps/rev.

SD17040C

Up to 4.0 Arms 95-132 Vac

Up to 50,800 steps/rev.

SD17060B

Up to 6.3 Arms 95-132 Vac Up to 50,800 steps/rev.

SD31045

Up to 4.5 Arms 95-264 Vac

Up to 50,800 steps/rev.



AMCI AC and DC powered microstepping drives feature a compact design, versatile mounting, and simplified set-up. AC powered drives are UL Listed.

Stepper Motors

SM2340

130 oz-in or 240 oz-in (up to 1.69 N-m) Single or double shaft Optional 1000 line encoder

NEMA Size 23

NEMA Size 34

SM34 450, 850. or 1,100 oz-in (up to 7.77 N-m) Single or double shaft Optional 1000 line encoder

AMCI SM Series high performance stepper motors are available with single shaft, double shaft, and an optional rear-mounted encoder. These motors deliver high performance torque, speed, and range.





Advanced Micro Controls Inc. (AMCI) was founded in 1985 on the idea that industrial controls should simplify automation, increase application performance and add reliability to the manufacturing process. These guiding principles inspired the development of our first specialty I/O module more than 25 years ago.

Today, AMCI remains focused on PLC-based position sensing products and motion control technology. A lot has changed at AMCI over the years, except our commitment to supplying you with superior industrial control solutions.



Over twenty-five years ago, we developed the unique technology to interface the resolver sensor directly into the Allen-Bradley PLC-5 with the AMCI 1700 series resolver interface module.

Ask the Experts!

Want to talk with an engineer? Call 860-585-1254.

Visit www.amci.com to learn more about PLCs, encoders and resolvers.

You'll find:

- Videos
- Tech tutorials
- Product data sheets
- Sample programs
- FAQs
- Case studies



AMCI Corporate Headquarters