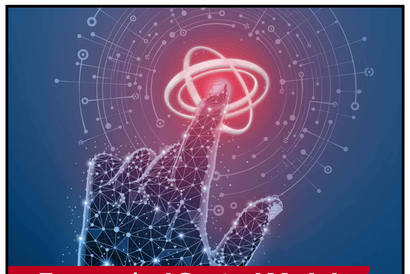
ACS MOTION CONTROL

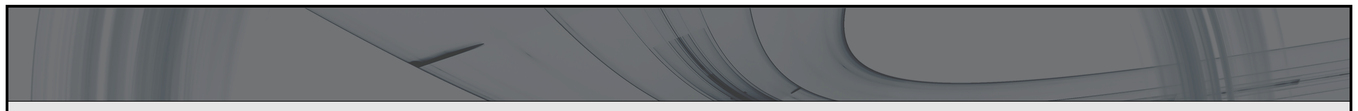
Smarter Motion

35+ Years of Smarter Motion



Economical Control Module (ECM) Series

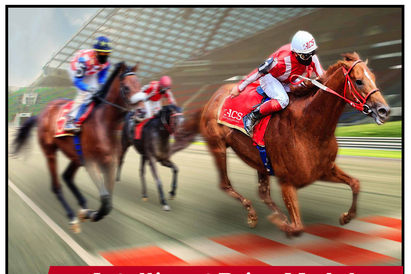
- All-in-one motion controllers with integrated drives
- For cost- and space-sensitive OEM machines up to 4 axes



SPiiPlus Platform

- Flagship EtherCAT-based motion control ecosystem
- For high-tech OEM machines with demanding throughput and accuracy requirements
- Up to 128 axes, 5 kHz max control network rate, 20 kHz servo rate
- Unique algorithms to enhance performance and machine uptime

ServoBoost™ ServoBoost Plus™ LearningBoost™ MotionBoost™



Intelligent Drive Module (IDM) Series

- DS402 EtherCAT drives for high-precision motion stages
- For OEM machines with demanding motion requirements

EtherCAT Conformance tested

Common Software Tools

SPiiPlus ADK Suite

MMI Application Studio
Motion control sytem configuration, application development, and performance optimization

Controller Simulator
Develop host and controller application code rapidly without hardware

Host Application Libraries
APIs for developing high-tech OEM machine UIs

Smarter Motion Tools (SMT)
Define, measure, and verify motion system performance specifications

Advanced Analysis Libraries
APIs for developing advanced data/performance analysis UIs and preventive maintenance features

Host PC/PLC

Ethernet TCP/IP & UDP EtherNet/IP Modbus

MOTION CONTROLLERS WITH DRIVES

ECMSA	ECMSM	ECMMA	ECMDX
12-150 Vdc 15/30 A*	12-48 Vdc 5/10 A	24-150 Vdc 15/30 A*	100-240, 360-440 Vac 15/30 A
1 axis	4 axis	4 axis	2 axis

PLC

Host PC/PLC

Ethernet TCP/IP & UDP EtherNet/IP Modbus

MOTION CONTROLLERS

SPiiPlusSCLT/HP	SPiiPlusES	SPiiPlusEC
PC-Based Soft Controller	Dual EtherCAT master/slave functionality	

EtherCAT

MOTION CONTROLLERS WITH INTEGRATED DRIVES (CONTROL MODULES)

CMNT	CMXA	CMHV	MP4U	MC4U
85-265 Vac 7.5/15 A	85-265 Vac 15/30 A	185-250, 400-525 Vac 15/30 A (480Vac) 20/60 A (230Vac)	100-240 Vac 13.3/40 A	8 built-in drives 85-265 Vac 45/90 A*
2 axis	3 axis	2 axis	NanoPWM™ 8 axis	NanoPWM™ 8 axis

EtherCAT

DRIVES

UDMLC	UDMSD	UDMSM	UDMNT	UDMSA	UDMMA	UDMCB, NPMPC
12-48 Vdc 2.5/5 A (4 axis) 5/10 A (2 axis)	12-48 Vdc 2.5/5 A	12-48 Vdc 5/10 A	12-80 Vdc 10/20 A	12-150 Vdc 15/30 A*	24-150 Vdc 15/30 A*	12-100 Vdc 13.3/40 A
4 axis	4 axis	4 axis	2 axis	1 axis	4 axis	NanoPWM™ 2 axis

DRIVE INTERFACES

PDICL	UDILT/HP
Pulse/Direction command interface	+/-10 V command interface
4 axis	4 axis

I/O & LASER CONTROL

UDMPA, NPMPM	UDMPM	UDMDX	UDMXA	UDMHV	MP4UDC	MC4UDC	IOMNT	IOMPS-ED	IOMPS-EA	LCI
12-100 Vdc 13.3/40 A	85-265 Vac 7.5/15 A	100-240, 360-440 Vac 15/30 A	85-265 Vac 15/30 A	185-250, 400-525 Vac 15/30 A (480Vac), 20/60 A (230Vac)	100-240 Vac 13.3/40 A	85-265 Vac 45/90 A*	32/32 digital (source type)	32/32 digital (sink type)	4/0, 0/4 analog (+/- 10V)	High-speed digital and analog I/O for laser and measurement device control
NanoPWM™ 2 axis	2 axis	2 axis	3 axis	2 axis	NanoPWM™ 8 axis	NanoPWM™ 8 axis				

Host PC/PLC

Non-ACS Controller

EtherCAT

DRIVES

IDMSA	IDMSM	IDMMA	IDMDX
12-150 Vdc 15/30 A*	12-48 Vdc 5/10 A	24-150 Vdc 15/30 A*	100-240, 360-440 Vac 15/30 A
1 axis	4 axis	4 axis	2 axis

EtherCAT Conformance tested

ACS Product Map v1.0

* Max current not available for all configurations / axes

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