

Introducing the Intelligent Drive Module

IDM Series of EtherCAT® DS402 Drives

The Drive to Win

ACS Motion Control, known for high-performance multi-axis motion control solutions, introduces the **Intelligent Drive Module (IDM)** series of EtherCAT® DS402 drives for use with any EtherCAT master controller. Leveraging advanced CPU, DSP, and FPGA technology to achieve industry-leading performance, the IDM series is designed for OEMs with EtherCAT®-based control systems looking to achieve better throughput and accuracy from high-precision motion stages.

The first product in the IDM series is the IDMsM, a 2- or 4-axis drive that provides up to 3.3/10A per axis and accepts a 12-48Vdc drive supply input.



IDMsM

First Product in the IDM Series



CONFIDENCE

Leverage 30+ years
of high-performance
motion control expertise



FLEXIBILITY

Control various motion
stage technologies



PERFORMANCE

Achieve a competitive advantage
with higher throughput and accuracy

For more information, please contact us at sales@acsmotioncontrol.com

Better Throughput | Higher Accuracy | Greater Flexibility | Faster Development

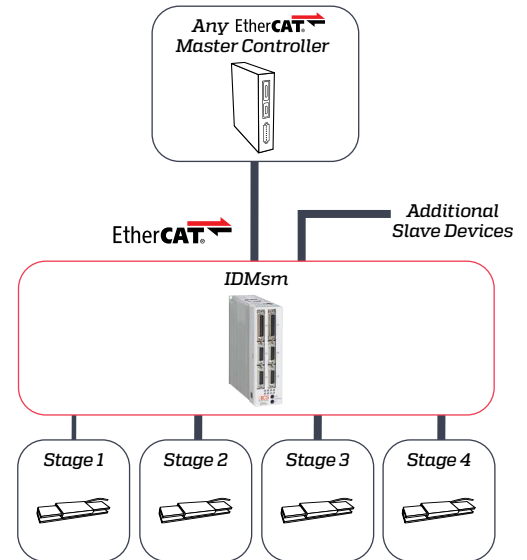
ACS
MOTION CONTROL

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IDMsm Feature Highlights

- Intuitive ACSPL+ Real-Time Programming (Up to 4 simultaneous threads)
- Powerful Tuning and Performance Analysis Software Tools
- Industrial Panel-Mount Enclosure and Connectors
- Advanced servo control algorithms including MIMO Gantry
- Standard DS402 / CiA402 CoE EtherCAT interface
- Max EtherCAT Cycle Rate: 4 kHz
- Number of Drive Axes: 2 or 4
- Max Drive Current: 3.3/10A per axis
- Drive Supply Input: 12-48Vdc
- Supported Motors: brushless, brush, voice coil, stepper (open or closed loop)
- Control Supply Input: 24Vdc, up to 2A
- Total Encoder Channels: 4 (AqB default, SinCos and Absolute optional)
- GP +/-10V Analog I/O: 2 in (12 bit), 2 out (10 bit)
- GP 5/24V Digital I/O: 4 in (shared with MARK), 4 out
- Position Event Generation (PEG) Outputs: 4 (up to 10 MHz)
- SPI Interface (master and slave mode)
- Functional Safety: STO, SS1
- Dimensions: 168 x 158 x 48.3 mm



Ordering Options

	Field	Example selection by user	Optional Values
Number of Axes	1	4	2, 4
Current Rating (Amps peak of sine)	2	C	A=1/3A, B=2/6A, C=3.3/10A
Number of 500 kHz SinCos Encoder Channels	3	2	0, 1, 2, 3, 4
Number of 10 MHz SinCos Encoder Channels	4	0	0, 1, 2, 3, 4
Number of Absolute Encoder Channels	5	1	0, 1, 2, 3, 4
Functional Safety	6	T	N=None, T=STO & SS1
Reserved for future	7	N	N = N/A
Reserved for future	8	N	N = N/A
Reserved for future	9	N	N = N/A
Reserved for future	10	N	N = N/A

Example P/N: IDMsm-4C201-TNNNN **Description:** 4 axis 3.3/10A, 2x SinCos 500kHz encoder, 1x Absolute encoder, STO & SS1

Field	1	2	3	4	5	6	7	8	9	10
P/N IDMsm	4	C	2	0	1	T	N	N	N	N

Supported Incremental Encoders: AqB (up to 50 MHz), SinCos (up to 10 MHz)

Supported Absolute Encoders: EnDat 2.1/2.2, BiSS-A/B/C, SSI, Hiperface DSL, Smart-Abs, Panasonic, Sanyo ABS

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