

**MACS5 =  
Motion-Control  
+ EtherCAT slave  
+ EtherCAT master**



Every MACS5 motion control module offers full featured multi-axis positioning, drive synchronization, and CAM control of servo and asynchronous motors.

Integrated interfaces for different types of incremental and absolute feedback systems allow high-speed position evaluation and marker recognition in real-time. High-precision applications profit from the automatic slip compensation possible with dual encoder feedback control. Complex multi-axis synchronization and CAM profiling can refer to one or more master encoder signals.

Each MACS5 module can serve as an EtherCAT slave of a PLC and as an EtherCAT master of a sub-network controlling servo amplifiers, frequency converters, and I/Os. This gives highly modular and very flexible solutions for complex machines tailored to end user requirements. Special MACS5 versions offering up to six integrated servo amplifiers for brush-type and brushless motors are the most compact and cost-effective solution for small devices.

Upgradeable DS402 source code and free programmability makes it possible to adapt the motion and process control functionality of the MACS5 module exactly to the machine or device requirements. The MACS5 can even be used as the stand-alone controller in small devices. For more complex machines, the MACS5 modules can be linked by EtherCAT, CAN, Ethernet, and USB to a PLC or PC network and forward data as a gateway in between different systems and subdevices.

For more than 25 years, zub machine control AG has specialized in the development of motion control modules and servo amplifiers. The company also provides OEM versions with customized hardware, housings, connectors, and software features on request. Not only is zub machine control AG the developer and manufacturer of the units, it is also a full service provider offering engineering and consulting services on all aspects of drive technology.

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