

## 8-Axis Motion Controller and Servo Drive in One Unit

Designed to meet today's machine builders' needs and automation tasks, the new Technosoft TMC-3D combines a multi-axis motion controller and a digital servo drive in the same compact unit. Based on the MotionChip™ technology, TMC-3D controls via CAN-bus, up to 8 Technosoft intelligent drives, including itself. Its embedded servo drive is suitable for DC and brushless motors up to 640 W (80 V, 8 A).



3D and 2<sup>1/2</sup>D coordinated motion paths are executed through TMC-3D and other two Technosoft drives, using PVT commands. The controller generates the 3D and 2<sup>1/2</sup>D trajectories and sends the reference to the slaves as PVT points (position, velocity, time). TMC-3D can be one of these drives that perform local 3<sup>rd</sup> order interpolation between PVT points. This unique combination offers a cost effective solution for precise multi-axis applications, where 3D paths can be executed accurately using TMC-3D and other two drives connected via CAN-bus.

The motion programming can be done using PC or PLC motion libraries, or directly at controller level with the EasyMotion Studio software. Complex motion applications can be programmed on TMC-3D using the TML language. EasyMotion Studio automatically generates all the TML instructions, so users don't need to learn or write any TML code. Powerful TML instructions as: motion commands, program flow control, I/O handling, arithmetic and logic operations are executed / controlled by TMC-3D. Its role is primarily a managerial one, with responsibilities that include network or slave management. It can perform predefined actions as: stopping the motion on all slaves in case of a node failure, or commanding different homing procedures and other motion profiles on each slave.

Complete specifications can be found on:  
[http://www.technosoftmotion.com/products/OEM\\_PROD\\_TMC-3D.htm](http://www.technosoftmotion.com/products/OEM_PROD_TMC-3D.htm)

**TECHNOSOFT**  
Buchaux 38  
CH-2022 BEVAIX

Switzerland

Tel : +41 32 732 55 00  
Fax : +41 32 732 55 04  
[sales@technosoftmotion.com](mailto:sales@technosoftmotion.com)  
[www.technosoftmotion.com](http://www.technosoftmotion.com)

